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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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		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	91,153	86,940	4.8%	65,101	64,830	25,391	21,446	27	35	634	630	0	0
Petroleum Liquids	Utility Scale Facilities	913	1,070	-14.7%	645	700	222	325	8	8	38	37	0	0
Petroleum Coke	Utility Scale Facilities	693	799	-13.2%	583	596	35	116	1	0	74	87	0	0
Natural Gas	Utility Scale Facilities	92,814	93,942	-1.2%	44,780	44,171	40,077	41,736	595	521	7,362	7,514	0	0
Other Gas	Utility Scale Facilities	1,194	1,013	17.8%	17	22	347	330	0	0	830	662	0	0
Nuclear	Utility Scale Facilities	66,618	65,179	2.2%	34,541	33,082	32,077	32,097	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	19,841	18,808	5.5%	18,048	17,599	1,657	1,122	NM	17	120	69	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	33,001	28,819	14.5%	4,192	3,789	26,187	22,336	246	260	2,375	2,435	0	0
... Wind	Utility Scale Facilities	23,320	19,406	20.2%	3,497	3,215	19,803	16,173	13	11	NM	7	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	3,072	2,767	11.0%	214	154	2,824	2,576	31	36	4	2	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	3,560	3,391	5.0%	273	203	998	864	6	2	2,282	2,323	0	0
... Other Biomass	Utility Scale Facilities	1,715	1,891	-9.3%	117	125	1,319	1,452	196	210	83	104	0	0
... Geothermal	Utility Scale Facilities	1,334	1,364	-2.2%	91	93	1,243	1,271	0	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-478	-607	-21.2%	-394	-522	-84	-85	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	1,071	1,111	-3.6%	42	35	538	573	83	85	408	418	0	0
All Energy Sources	Utility Scale Facilities	306,819	297,075	3.3%	167,557	164,301	126,447	119,995	975	927	11,841	11,852	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	1,578	1,257	25.6%	0	0	0	0	503	393	171	139	904	726
Estimated Total Solar Photovoltaic	All Facilities	4,520	3,840	17.7%	213	149	2,694	2,396	534	428	174	140	904	726
Estimated Total Solar	All Facilities	4,651	4,024	15.6%	214	154	2,824	2,576	534	428	174	140	904	726
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	50,897	48,076	5.9%	35,844	35,090	14,817	12,758	7	10	229	218	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,599	1,672	-4.3%	1,166	1,249	379	372	16	11	39	40	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	267	307	-13.0%	234	239	13	46	0	0	19	21	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	684,892	679,004	0.9%	344,124	333,973	293,932	298,069	3,527	2,944	43,309	44,018	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	1,348	1,256	7.3%	290	233	102	99	42	50	913	875	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	174	167	4.7%	4	4	21	14	23	35	126	113	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	71	99	-28.0%	1	0	9	10	1	0	60	89	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	95,169	90,321	5.4%	3,260	2,812	27,266	27,191	6,154	5,773	58,489	54,544	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	52,245	49,331	5.9%	36,134	35,322	14,919	12,857	50	60	1,142	1,093	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,773	1,838	-3.5%	1,170	1,254	400	386	39	46	164	153	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	338	406	-16.7%	235	240	22	56	1	0	79	110	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	780,061	769,325	1.4%	347,385	336,785	321,198	325,260	9,681	8,716	101,798	98,563	0	0
Fuel Stocks (end-of-month)														
Coal (1000 tons)	Utility Scale Facilities	144,086	171,755	-16.1%	117,616	138,091	25,499	32,185	100	168	870	1,311	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	31,369	34,105	-8.0%	20,118	21,192	9,582	10,727	399	523	1,270	1,662	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	1,293	1,101	17.5%	W	W	W	W	W	W	W	W	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for November									
	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	November 2017	November 2016	Percentage Change	November 2017	November 2016	Percentage Change	November 2017	November 2016	Percentage Change
Residential	97,532	93,244	4.6%	12,692	11,886	6.8%	13.01	12.75	2.0%
Commercial	104,796	105,060	-0.3%	11,056	10,840	2.0%	10.55	10.32	2.2%
Industrial	76,180	78,421	-2.9%	5,171	5,225	-1.0%	6.79	6.66	2.0%
Transportation	598	592	1.1%	57	55	4.0%	9.49	9.22	2.9%
All Sectors	279,106	277,317	0.6%	28,976	28,007	3.5%	10.38	10.10	2.8%

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

Table ES1.B. Total Electric Power Industry Summary Statistics, Year-to-Date 2017 and 2016

Net Generation and Consumption of Fuels for January through November														
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	1,101,052	1,120,402	-1.7%	817,849	835,106	275,487	276,602	300	342	7,416	8,352	0	0
Petroleum Liquids	Utility Scale Facilities	10,870	11,842	-8.2%	7,984	8,258	2,403	3,053	92	68	390	463	0	0
Petroleum Coke	Utility Scale Facilities	7,802	10,327	-24.5%	6,157	8,214	914	1,277	7	4	724	832	0	0
Natural Gas	Utility Scale Facilities	1,166,832	1,281,943	-9.0%	567,839	608,447	510,964	582,845	6,889	7,132	81,140	83,519	0	0
Other Gas	Utility Scale Facilities	13,009	11,770	10.5%	139	132	3,667	3,462	0	0	9,203	8,175	0	0
Nuclear	Utility Scale Facilities	731,715	734,032	-0.3%	386,106	387,131	345,609	346,900	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	277,540	245,284	13.2%	255,976	226,988	20,044	16,947	225	196	1,295	1,152	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	353,697	309,050	14.4%	41,841	38,096	282,385	241,793	2,895	2,965	26,577	26,196	0	0
... Wind	Utility Scale Facilities	231,089	203,847	13.4%	33,383	31,176	197,521	172,492	122	117	64	61	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	49,677	33,631	47.7%	3,203	1,856	45,875	31,253	549	496	50	26	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	39,434	37,332	5.6%	3,005	2,729	10,763	9,457	64	63	25,602	25,083	0	0
... Other Biomass	Utility Scale Facilities	18,913	19,869	-4.8%	1,288	1,351	14,605	15,204	2,159	2,288	861	1,026	0	0
... Geothermal	Utility Scale Facilities	14,583	14,372	1.5%	961	985	13,622	13,387	0	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-5,839	-5,933	-1.6%	-4,891	-4,972	-948	-961	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	11,866	12,755	-7.0%	430	385	5,939	6,468	949	983	4,549	4,918	0	0
All Energy Sources	Utility Scale Facilities	3,668,545	3,731,472	-1.7%	2,079,429	2,107,786	1,446,464	1,478,388	11,357	11,691	131,294	133,608	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	22,670	17,645	28.5%	0	0	0	0	7,219	5,771	2,361	1,932	13,090	9,942
Estimated Total Solar Photovoltaic	All Facilities	69,201	47,983	44.2%	3,187	1,783	42,744	28,032	7,768	6,267	2,411	1,958	13,090	9,942
Estimated Total Solar	All Facilities	72,347	51,276	41.1%	3,203	1,856	45,875	31,253	7,768	6,267	2,411	1,958	13,090	9,942
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	605,227	612,524	-1.2%	443,301	449,135	159,293	160,535	87	99	2,546	2,755	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	18,861	20,410	-7.6%	14,061	14,727	4,208	5,094	172	96	420	493	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	3,070	3,918	-21.6%	2,500	3,167	382	536	2	1	186	213	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	8,765,736	9,483,714	-7.6%	4,407,010	4,675,510	3,840,201	4,276,546	41,001	42,757	477,525	488,900	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	13,972	15,071	-7.3%	2,619	2,678	1,203	1,200	458	508	9,692	10,685	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,628	2,099	-22.5%	54	59	187	212	240	219	1,147	1,609	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	853	1,003	-15.0%	10	5	106	103	13	7	725	888	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,047,943	1,053,206	-0.5%	38,252	34,576	306,306	327,850	68,974	74,184	634,412	616,594	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	619,199	627,596	-1.3%	445,920	451,813	160,496	161,735	545	607	12,238	13,440	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	20,489	22,509	-9.0%	14,115	14,786	4,395	5,306	411	315	1,567	2,102	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	3,923	4,921	-20.3%	2,509	3,172	488	639	15	9	911	1,101	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	9,813,679	10,536,919	-6.9%	4,445,262	4,710,087	4,146,507	4,604,397	109,974	116,941	1,111,936	1,105,494	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for January through November									
	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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	Percentage Change
Residential	1,254,626	1,289,777	-2.7%	162,422	162,247	0.1%	12.95	12.58	2.9%
Commercial	1,236,061	1,257,019	-1.7%	132,422	131,437	0.7%	10.71	10.46	2.4%
Industrial	869,137	898,099	-3.2%	60,232	60,827	-1.0%	6.93	6.77	2.4%
Transportation	6,862	6,844	0.3%	666	660	0.9%	9.71	9.64	0.7%
All Sectors	3,366,686	3,451,739	-2.5%	355,742	355,170	0.2%	10.57	10.29	2.7%

YTD = Year to Date

NM = Not meaningful due to large relative standard error.

W = Withheld to avoid disclosure of individual company data.

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

Coal generation and consumption includes anthracite, bituminous, subbituminous, lignite, waste coal, refined coal, synthetic coal, and coal-derived synthesis gas.

Petroleum Liquids includes distillate fuel oil, residual fuel oil, jet fuel, kerosene, propane, and waste oil.

Petroleum Coke includes petroleum coke and synthesis gas derived from petroleum coke.

Natural gas includes a small amount of supplemental gaseous fuels that cannot be identified separately.

Other Gases includes blast furnace gas and other manufactured and waste gases derived from fossil fuels.

Wood and Wood-Derived Fuels include wood, black liquor, and other wood waste.

Other Biomass includes biogenic municipal solid waste, landfill gas, sludge waste, agricultural byproducts, and other biomass.

Coal stocks include anthracite, bituminous, subbituminous, lignite, refined coal, and synthetic coal; waste coal is excluded.

Sales of electricity to ultimate customers and net generation may not correspond exactly for a particular month for a variety of reasons (e.g., sales data may include imported electricity).

Net generation is presented for the calendar month while sales of electricity to ultimate customers and associated revenue accumulate from bills collected for periods of time that vary depending

Table ES2.A. Summary Statistics: Receipts and Cost of Fossil Fuels for the Electric Power Industry by Sector, Physical Units, 2017 and 2016

Total (All Sectors)										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
Coal (1000 tons)	51,520	57,377	38.66	39.83	265	312	582,221	593,408	39.81	40.74
Petroleum Liquids (1000 barrels)	1,512	1,599	74.25	61.94	135	179	13,897	15,484	69.49	56.29
Petroleum Coke (1000 tons)	266	333	W	63.59	7	10	3,022	3,811	W	45.21
Natural Gas (1000 Mcf)	588,140	695,273	3.48	3.12	487	764	7,379,299	9,565,822	3.48	2.89

Electric Utilities										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
Coal (1000 tons)	37,867	41,615	40.29	41.25	185	206	426,151	435,784	40.95	42.09
Petroleum Liquids (1000 barrels)	1,094	1,106	73.45	60.07	93	101	10,315	11,060	69.20	55.32
Petroleum Coke (1000 tons)	252	279	70.93	62.85	6	7	2,937	3,254	60.25	41.69
Natural Gas (1000 Mcf)	281,227	328,019	3.80	3.48	255	414	3,553,136	4,571,137	3.76	3.18

Independent Power Producers										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
Coal (1000 tons)	12,958	15,051	33.17	35.16	64	81	148,092	148,477	35.78	35.76
Petroleum Liquids (1000 barrels)	386	446	76.71	66.40	33	63	3,327	4,040	70.38	58.30
Petroleum Coke (1000 tons)	0	47	--	W	0	2	0	437	--	68.98
Natural Gas (1000 Mcf)	253,222	304,227	3.12	2.67	186	297	3,240,770	4,331,285	3.13	2.53

Commercial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
Coal (1000 tons)	1	10	W	W	1	1	20	47	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)	725	589	W	W	3	3	6,881	7,217	W	W

Industrial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
Coal (1000 tons)	694	701	W	W	15	24	7,958	9,100	W	W
Petroleum Liquids (1000 barrels)	32	47	72.03	63.80	9	15	255	384	69.64	63.43
Petroleum Coke (1000 tons)	14	8	W	W	1	1	85	120	W	W
Natural Gas (1000 Mcf)	52,966	62,438	W	W	43	50	578,512	656,183	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, 2017 and 2016

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	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
Coal	976,444	1,097,110	2.04	2.08	265	312	11,153,789	11,421,172	2.08	2.12
Petroleum Liquids	9,150	9,715	12.27	10.19	135	179	83,560	93,871	11.56	9.28
Petroleum Coke	7,469	9,365	W	2.26	7	10	84,749	106,997	W	1.61
Natural Gas	607,157	718,522	3.37	3.02	487	764	7,626,794	9,889,561	3.37	2.79
Fossil Fuels	1,600,220	1,834,713	W	2.47	652	963	18,948,892	21,511,601	W	2.44

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	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
Coal	721,520	805,502	2.11	2.13	185	206	8,223,723	8,475,431	2.12	2.16
Petroleum Liquids	6,681	6,780	12.02	9.80	93	101	62,433	67,729	11.43	9.03
Petroleum Coke	7,084	7,871	2.52	2.22	6	7	82,393	91,688	2.15	1.48
Natural Gas	290,187	339,777	3.68	3.36	255	414	3,671,238	4,727,082	3.64	3.08
Fossil Fuels	1,025,472	1,159,930	2.63	2.54	368	545	12,039,787	13,361,930	2.63	2.52

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	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
Coal	240,378	276,435	1.79	1.91	64	81	2,762,147	2,749,986	1.92	1.93
Petroleum Liquids	2,269	2,652	13.06	11.16	33	63	19,539	23,773	11.98	9.90
Petroleum Coke	0	1,294	--	W	0	2	0	12,072	--	2.50
Natural Gas	261,523	313,867	3.02	2.59	186	297	3,350,992	4,478,208	3.03	2.45
Fossil Fuels	504,171	594,249	2.41	W	236	361	6,132,679	7,264,039	2.49	W

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	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
Coal	13	237	W	W	1	1	459	1,074	W	W
Petroleum Liquids	0	0	--	--	0	0	0	0	--	--
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	749	613	W	W	3	3	7,107	7,438	W	W
Fossil Fuels	763	850	W	W	3	3	7,566	8,512	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	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
Coal	14,533	14,936	W	W	15	24	167,460	194,681	W	W
Petroleum Liquids	199	283	11.67	10.57	9	15	1,587	2,369	11.18	10.30
Petroleum Coke	386	200	W	W	1	1	2,356	3,237	W	W
Natural Gas	54,697	64,265	W	W	43	50	597,457	676,833	W	W
Fossil Fuels	69,814	79,684	W	W	45	54	768,860	877,120	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.

Table 1.1. Net Generation by Energy Source: Total (All Sectors), 2007-November 2017
(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															
2007	2,016,456	49,505	16,234	896,590	13,453	806,425	247,510	612	104,626	-6,896	12,231	4,156,745	N/A	N/A	N/A
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	13,907	4,076,827	18,812	51,483	54,866
Year 2015															
January	132,451	1,927	1,046	101,687	1,246	74,270	24,138	1,155	21,966	-551	1,120	360,455	746	1,838	1,902
February	126,977	5,221	1,100	91,315	1,025	63,461	22,286	1,484	21,078	-456	985	334,476	816	2,138	2,299
March	108,488	1,061	717	99,423	1,091	64,547	24,281	2,072	21,871	-409	1,051	324,192	1,134	2,920	3,206
April	88,989	919	809	92,806	979	59,784	22,471	2,379	24,115	-214	1,096	294,133	1,264	3,271	3,643
May	104,585	1,017	922	101,516	1,099	65,827	20,125	2,504	23,678	-370	1,185	322,087	1,394	3,553	3,898
June	125,673	1,040	821	121,478	1,118	68,516	20,414	2,558	20,003	-398	1,187	362,409	1,408	3,586	3,966
July	139,100	1,201	1,103	141,119	1,235	71,412	21,014	2,627	20,827	-513	1,293	400,419	1,487	3,734	4,114
August	134,670	1,093	1,040	139,084	1,196	72,415	19,122	2,688	20,134	-626	1,300	392,116	1,468	3,763	4,156
Sept	117,986	1,006	1,028	123,036	1,210	66,476	16,094	2,217	20,430	-544	1,182	350,122	1,330	3,238	3,547
October	96,759	945	827	110,005	906	60,571	16,630	1,910	22,798	-443	1,204	312,112	1,198	2,897	3,107
November	87,227	995	715	102,236	902	60,264	19,338	1,730	26,335	-285	1,197	300,653	982	2,507	2,712
December	89,495	948	749	109,777	1,110	69,634	23,166	1,570	27,032	-281	1,228	324,427	914	2,358	2,484
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	1,054	313,699	1,145	3,145	3,386
March	72,173	874	927	103,890	1,197	66,149	27,390	2,617	28,467	-384	1,104	304,403	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	1,124	292,908	1,703	4,309	4,583
May	81,695	984	974	110,430	1,053	66,576	25,486	3,425	25,286	-321	1,210	316,800	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	1,195	367,796	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	1,239	411,901	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	1,262	409,715	1,942	5,543	5,911
Sept	114,138	946	980	125,603	1,020	65,448	16,368	3,635	22,894	-715	1,181	351,498	1,735	5,007	5,370
October	99,194	937	635	102,898	913	60,733	17,339	3,191	26,558	-561	1,121	312,958	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	1,111	297,075	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	1,152	345,355	1,167	3,500	3,591
Year 2017															
January	115,501	1,206	917	91,410	1,119	73,121	27,858	2,147	27,459	-435	1,087	341,389	1,230	3,287	3,377
February	86,873	955	687	80,510	1,189	64,053	24,543	2,491	28,381	-508	993	290,166	1,397	3,752	3,887
March	89,426	979	709	94,956	1,255	65,093	30,221	4,421	32,825	-521	1,049	320,413	1,986	6,111	6,408
April	81,532	884	404	86,326	1,154	56,743	29,322	4,759	32,116	-439	1,039	293,840	2,211	6,660	6,970
May	92,464	1,001	772	96,782	1,182	61,309	32,181	5,747	29,067	-423	1,076	321,159	2,441	7,786	8,188
June	107,729	1,007	873	116,062	1,208	67,011	30,423	6,230	26,220	-568	1,091	357,286	2,503	8,268	8,733
July	127,984	940	807	144,716	1,259	71,314	25,741	5,482	22,888	-759	1,200	401,572	2,578	7,749	8,061
August	119,880	998	727	139,603	1,320	72,384	21,239	5,379	20,152	-638	1,211	382,255	2,501	7,538	7,879
Sept	98,416	987	678	116,671	1,120	68,073	18,963	5,145	23,676	-606	1,029	334,152	2,239	7,034	7,384
October	90,094	999	535	106,983	1,011	65,995	17,208	4,804	31,307	-463	1,021	319,494	2,006	6,496	6,810
November	91,153	913	693	92,814	1,194	66,618	19,841	3,072	29,929	-478	1,071	306,819	1,578	4,520	4,651
Year to Date															
2015	1,262,903	16,424	10,128	1,223,705	12,007	727,544	225,915	23,323	243,236	-4,811	12,800	3,753,174	13,225	33,447	36,548
2016	1,120,402	11,842	10,327	1,281,943	11,770	734,032	245,284	33,631	275,419	-5,933	12,755	3,731,472	17,645	47,983	51,276
2017	1,101,052	10,870	7,802	1,166,832	13,009	731,715	277,540	49,677	304,019	-5,839	11,866	3,668,545	22,670	69,201	72,347
Rolling 12 Months Ending in November															
2016	1,209,897	12,790	11,077	1,391,720	12,880	803,665	268,450	35,200	302,451	-6,214	13,984	4,055,900	18,559	50,341	53,760
2017	1,219,799	12,036	8,672	1,263,196	14,047	803,377	300,068	52,101	334,179	-6,591	13,018	4,013,900	23,837	72,701	75,938

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 2016 and prior years are final. Values for 2017 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), 2007-November 2017
(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													
2007	34,450	16	596	39,014	6,158	8,304	2,063	14,637	247,510	352,747	N/A	N/A	N/A
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
Year 2015													
January	15,162	1,092	63	3,717	885	582	258	1,362	24,138	47,259	746	1,838	1,902
February	14,922	1,322	161	3,372	792	503	230	1,260	22,286	44,847	816	2,138	2,299
March	15,308	1,786	286	3,457	914	543	255	1,394	24,281	48,224	1,134	2,920	3,206
April	17,867	2,008	372	3,246	915	571	243	1,272	22,471	48,965	1,264	3,271	3,643
May	17,151	2,160	345	3,338	951	609	238	1,390	20,125	46,308	1,394	3,553	3,898
June	13,421	2,178	380	3,496	926	607	251	1,302	20,414	42,975	1,408	3,586	3,966
July	13,675	2,247	380	3,806	1,035	661	293	1,357	21,014	44,469	1,487	3,734	4,114
August	13,080	2,295	392	3,788	982	651	288	1,344	19,122	41,943	1,468	3,763	4,156
Sept	13,972	1,908	309	3,450	931	607	268	1,203	16,094	38,742	1,330	3,238	3,547
October	16,380	1,700	210	3,252	938	617	289	1,323	16,630	41,338	1,198	2,897	3,107
November	19,682	1,525	204	3,418	993	620	290	1,334	19,338	47,403	982	2,507	2,712
December	20,098	1,444	126	3,587	1,029	642	299	1,377	23,166	51,767	914	2,358	2,484
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	20,607	2,057	90	3,589	972	620	271	1,399	27,858	57,463	1,230	3,287	3,377
February	22,088	2,355	136	3,405	866	529	251	1,241	24,543	55,414	1,397	3,752	3,887
March	26,030	4,125	297	3,662	927	552	274	1,380	30,221	67,467	1,986	6,111	6,408
April	25,722	4,449	310	3,373	881	539	243	1,357	29,322	66,197	2,211	6,660	6,970
May	22,606	5,345	402	3,431	907	597	231	1,295	32,181	66,996	2,441	7,786	8,188
June	19,642	5,766	465	3,625	884	582	223	1,265	30,423	62,873	2,503	8,268	8,733
July	15,846	5,171	311	3,922	916	597	239	1,368	25,741	54,111	2,578	7,749	8,061
August	13,147	5,038	341	3,880	925	611	232	1,357	21,239	46,769	2,501	7,538	7,879
Sept	17,291	4,795	349	3,417	878	552	213	1,325	18,963	47,784	2,239	7,034	7,384
October	24,789	4,490	314	3,572	886	553	247	1,261	17,208	53,320	2,006	6,496	6,810
November	23,320	2,941	131	3,560	904	567	244	1,334	19,841	52,842	1,578	4,520	4,651
Year to Date													
2015	170,620	20,222	3,101	38,341	10,262	6,569	2,902	14,541	225,915	492,474	13,225	33,447	36,548
2016	203,847	30,337	3,293	37,332	10,207	6,624	3,037	14,372	245,284	554,334	17,645	47,983	51,276
2017	231,089	46,530	3,147	39,434	9,946	6,299	2,668	14,583	277,540	631,237	22,670	69,201	72,347
Rolling 12 Months Ending in November													
2016	223,945	31,782	3,419	40,919	11,236	7,266	3,336	15,749	268,450	606,102	18,559	50,341	53,760
2017	254,235	48,863	3,237	43,050	10,956	6,939	2,962	16,037	300,068	686,347	23,837	72,701	75,938

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 2016 and prior years are final. Values for 2017 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
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Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.
Estimated small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.2.A. Net Generation by Energy Source: Electric Utilities, 2007-November 2017
(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												
2007	1,490,985	33,325	7,395	313,785	141	427,555	226,734	11	8,943	-5,328	586	2,504,131
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
Year 2015												
January	94,835	1,147	813	46,573	26	39,377	22,523	68	3,130	-460	41	208,073
February	90,828	2,014	879	43,951	24	33,478	21,075	87	2,877	-387	45	194,871
March	78,606	696	502	45,972	21	33,328	22,523	126	3,123	-319	31	184,609
April	66,628	695	565	43,065	20	31,053	20,156	145	3,157	-153	47	165,379
May	79,341	701	691	46,882	20	35,089	18,481	156	3,043	-292	54	184,165
June	93,799	765	604	57,292	17	35,150	18,429	153	2,311	-300	50	208,270
July	104,128	834	898	64,971	15	37,055	19,004	155	2,514	-413	49	229,212
August	100,129	794	827	63,376	21	38,482	17,813	159	2,554	-513	53	223,696
Sept	85,932	690	797	56,266	20	35,034	15,062	130	2,771	-477	49	196,273
October	71,408	682	610	49,533	12	31,886	15,378	114	3,261	-364	42	172,561
November	64,191	718	490	47,590	1	30,751	17,901	103	3,673	-218	48	165,247
December	68,558	650	604	52,345	1	35,997	21,296	98	3,577	-210	49	182,965
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	86,110	888	743	43,988	14	38,425	25,705	148	3,283	-346	37	198,995
February	64,900	709	540	39,009	19	34,403	22,670	172	3,745	-418	31	165,780
March	66,118	779	536	46,089	17	34,693	28,010	279	4,409	-455	35	180,512
April	59,110	665	261	42,093	19	30,217	27,070	300	4,173	-368	38	163,578
May	68,773	729	654	47,959	6	31,728	29,777	363	3,672	-350	35	183,348
June	81,394	719	698	56,423	12	35,022	28,303	377	3,402	-474	38	205,915
July	96,950	671	673	70,860	21	37,874	23,733	354	2,639	-646	43	233,172
August	90,771	722	540	68,465	NM	38,667	19,462	348	2,265	-531	46	220,760
Sept	71,956	705	523	56,654	NM	35,496	17,449	335	2,855	-522	42	185,492
October	66,665	752	405	51,519	10	35,038	15,748	313	4,218	-388	41	174,320
November	65,101	645	583	44,780	17	34,541	18,048	214	3,978	-394	42	167,557
Year to Date												
2015	929,827	9,736	7,674	565,471	197	380,683	208,344	1,396	32,415	-3,895	509	2,132,358
2016	835,106	8,258	8,214	608,447	132	387,131	226,988	1,856	36,241	-4,972	385	2,107,786
2017	817,849	7,984	6,157	567,839	139	386,106	255,976	3,203	38,638	-4,891	430	2,079,429
Rolling 12 Months Ending in November												
2016	903,665	8,907	8,818	660,792	134	423,128	248,284	1,953	39,818	-5,182	434	2,290,751
2017	905,142	8,795	6,824	614,172	NM	423,374	276,775	3,342	43,063	-5,548	466	2,276,566

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 2016 and prior years are final. Values for 2017 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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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, 2007-November 2017
(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												
2007	507,406	13,645	6,942	500,967	3,901	378,869	19,109	601	65,150	-1,569	6,191	1,501,212
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	7,094	1,613,308
Year 2015												
January	36,595	701	128	46,877	368	34,893	1,491	1,066	16,096	-92	560	138,685
February	35,196	3,049	132	40,256	305	29,984	1,104	1,372	15,785	-69	489	127,602
March	28,865	306	141	46,138	306	31,218	1,625	1,911	16,184	-90	527	127,131
April	21,519	170	140	42,762	269	28,732	2,175	2,193	18,393	-62	528	116,818
May	24,330	257	144	47,242	318	30,737	1,515	2,300	18,059	-78	561	125,387
June	30,878	215	138	56,098	282	33,366	1,867	2,359	15,117	-98	574	140,797
July	33,932	314	140	67,295	295	34,357	1,892	2,425	15,512	-101	617	156,677
August	33,522	250	142	66,938	311	33,933	1,216	2,481	14,856	-113	624	154,160
Sept	31,074	273	140	58,525	311	31,442	954	2,047	15,075	-67	571	140,345
October	24,463	216	149	52,489	216	28,685	1,135	1,762	16,981	-79	589	126,607
November	22,171	235	140	46,542	233	29,513	1,301	1,599	20,046	-67	591	122,304
December	20,063	254	67	48,676	302	33,637	1,721	1,448	20,754	-71	607	127,458
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	553	121,953
March	14,363	210	138	45,900	355	31,704	2,100	2,420	22,164	-93	563	119,824
April	17,877	188	97	44,832	311	28,696	1,993	2,662	20,487	-84	568	117,626
May	18,842	233	124	49,574	303	30,046	1,847	3,188	19,608	-64	625	124,326
June	28,585	214	131	59,185	335	30,175	1,410	3,229	17,117	-88	610	140,902
July	34,564	291	136	70,645	324	32,430	1,306	3,690	18,856	-106	624	162,759
August	34,607	309	140	73,317	319	33,599	1,217	3,701	15,341	-115	631	163,066
Sept	30,124	258	113	58,805	323	31,529	996	3,394	17,145	-89	571	143,169
October	25,524	232	141	47,044	228	30,717	1,080	2,965	20,549	-90	562	128,952
November	21,446	325	116	41,736	330	32,097	1,122	2,576	19,760	-85	573	119,995
December	30,661	307	124	41,755	296	34,394	1,591	2,250	23,013	-96	625	134,920
Year 2017												
January	28,593	264	116	38,890	337	34,695	2,007	1,976	21,487	-90	581	128,856
February	21,279	203	92	33,982	317	29,650	1,740	2,291	22,092	-90	515	112,072
March	22,607	155	93	40,859	355	30,400	2,059	4,091	25,753	-66	520	126,824
April	21,810	179	95	36,529	280	26,526	2,102	4,405	25,386	-71	507	117,750
May	23,035	229	41	40,989	340	29,581	2,242	5,314	22,857	-73	546	125,101
June	25,605	246	100	51,506	331	31,988	1,971	5,775	20,207	-93	550	138,186
July	30,301	227	47	65,183	356	33,440	1,867	5,058	17,432	-114	572	154,370
August	28,375	232	113	62,813	366	33,717	1,651	4,963	15,077	-107	582	147,783
Sept	25,775	243	97	52,380	332	32,577	1,402	4,745	18,326	-84	509	136,302
October	22,716	203	84	47,758	306	30,957	1,345	4,432	24,529	-75	519	132,775
November	25,391	222	35	40,077	347	32,077	1,657	2,824	23,364	-84	538	126,447
Year to Date												
2015	322,545	5,987	1,533	571,163	3,214	346,861	16,275	21,514	182,104	-916	6,231	1,476,513
2016	276,602	3,053	1,277	582,845	3,462	346,900	16,947	31,253	210,541	-961	6,468	1,478,388
2017	275,487	2,403	914	510,964	3,667	345,609	20,044	45,875	236,510	-948	5,939	1,446,464
Rolling 12 Months Ending in November												
2016	296,665	3,307	1,344	631,522	3,765	380,537	18,668	32,700	231,295	-1,032	7,075	1,605,846
2017	306,149	2,710	1,038	552,719	3,963	380,003	21,635	48,125	259,523	-1,043	6,564	1,581,385

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 2016 and prior years are final. Values for 2017 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Table 1.2.C. Net Generation by Energy Source: Commercial Sector, 2007-November 2017
(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															
2007	1,371	180	9	4,257	0	0	77	0	1,614	0	764	8,273	N/A	N/A	N/A
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
Year 2015															
January	56	22	1	564	0	0	3	20	225	0	88	981	327	347	347
February	59	72	1	499	0	0	3	23	198	0	77	932	356	379	379
March	52	11	1	560	0	0	3	33	227	0	91	977	479	512	512
April	38	8	1	513	0	0	3	39	231	0	98	931	525	564	564
May	32	10	0	583	0	0	3	46	237	0	101	1,013	574	619	619
June	45	10	0	662	0	0	4	43	232	0	102	1,098	571	614	614
July	44	12	0	769	0	0	3	45	256	0	108	1,238	596	641	641
August	39	12	1	760	0	0	2	46	243	0	104	1,206	575	621	621
Sept	33	7	1	716	0	0	2	37	242	0	106	1,145	515	553	553
October	34	6	1	643	0	0	3	32	234	0	95	1,049	455	488	488
November	35	6	1	583	0	0	3	27	236	0	102	992	367	394	394
December	41	7	1	617	0	0	4	24	242	0	98	1,033	349	373	373
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	14	1	648	0	0	23	22	223	0	86	1,057	406	428	428
February	32	8	1	566	0	0	NM	26	202	0	79	935	460	486	486
March	32	10	1	638	0	0	NM	49	217	0	82	1,053	630	678	678
April	19	6	0	533	0	0	NM	50	206	0	80	920	701	751	751
May	19	7	0	583	0	0	NM	65	225	0	94	1,022	774	839	839
June	23	6	0	645	0	0	NM	71	208	0	83	1,062	781	852	852
July	29	8	0	704	0	0	NM	63	218	0	94	1,137	819	881	881
August	28	9	1	698	0	0	NM	60	217	0	95	1,124	797	857	857
Sept	27	8	1	652	0	0	14	59	201	0	85	1,046	713	772	772
October	24	7	1	628	0	0	NM	53	213	0	89	1,027	636	689	689
November	27	8	1	595	0	0	NM	31	215	0	83	975	503	534	534
Year to Date															
2015	468	176	8	6,853	0	0	31	393	2,562	0	1,072	11,562	5,340	5,733	5,733
2016	342	68	4	7,132	0	0	196	496	2,468	0	983	11,691	5,771	6,267	6,267
2017	300	92	7	6,889	0	0	225	549	2,346	0	949	11,357	7,219	7,768	7,768
Rolling 12 Months Ending in November															
2016	383	75	5	7,749	0	0	201	520	2,710	0	1,081	12,724	6,120	6,640	6,640
2017	342	100	8	7,487	0	0	NM	582	2,574	0	1,034	12,372	7,606	8,189	8,189

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 2016 and prior years are final. Values for 2017 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, 2007-November 2017
(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															
2007	16,694	2,355	1,889	77,580	9,411	0	1,590	0	28,919	0	4,690	143,128	N/A	N/A	N/A
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
Year 2015															
January	964	57	103	7,674	852	0	121	1	2,514	0	430	12,717	80	80	80
February	894	86	88	6,609	696	0	105	1	2,217	0	374	11,071	85	86	86
March	965	49	74	6,753	764	0	130	2	2,337	0	402	11,475	119	121	121
April	804	45	104	6,465	690	0	138	2	2,335	0	423	11,005	129	132	132
May	881	48	87	6,809	761	0	127	2	2,339	0	469	11,522	144	146	146
June	951	49	78	7,426	819	0	114	2	2,343	0	462	12,244	144	146	146
July	995	41	66	8,084	925	0	115	2	2,545	0	518	13,292	150	152	152
August	980	37	70	8,010	864	0	90	2	2,480	0	519	13,054	147	149	149
Sept	947	37	91	7,528	879	0	77	2	2,342	0	456	12,359	135	137	137
October	853	40	67	7,340	678	0	114	2	2,322	0	478	11,894	125	126	126
November	830	36	85	7,521	668	0	133	1	2,380	0	456	12,110	100	102	102
December	832	38	77	8,137	806	0	145	1	2,459	0	475	12,970	93	94	94
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	757	41	57	7,884	768	0	123	NM	2,465	0	383	12,481	135	NM	NM
February	662	35	55	6,954	853	0	112	NM	2,341	0	367	11,380	146	NM	NM
March	669	35	79	7,371	882	0	127	NM	2,445	0	413	12,025	209	NM	NM
April	593	34	48	7,171	854	0	124	NM	2,352	0	413	11,593	226	NM	NM
May	637	35	76	7,251	835	0	135	4	2,314	0	400	11,687	251	255	255
June	706	35	75	7,488	864	0	124	8	2,403	0	419	12,123	254	262	262
July	705	34	87	7,969	883	0	121	7	2,599	0	490	12,893	264	272	272
August	706	34	72	7,627	951	0	109	7	2,592	0	489	12,587	258	265	265
Sept	658	32	56	6,986	787	0	98	6	2,295	0	394	11,312	235	241	241
October	689	37	45	7,077	696	0	102	6	2,348	0	372	11,372	214	220	220
November	634	38	74	7,362	830	0	120	4	2,372	0	408	11,841	171	174	174
Year to Date															
2015	10,064	525	912	80,218	8,595	0	1,265	20	26,155	0	4,988	132,742	1,358	1,378	1,378
2016	8,352	463	832	83,519	8,175	0	1,152	26	26,170	0	4,918	133,608	1,932	1,958	1,958
2017	7,416	390	724	81,140	9,203	0	1,295	50	26,526	0	4,549	131,294	2,361	2,411	2,411
Rolling 12 Months Ending in November															
2016	9,184	501	909	91,657	8,982	0	1,297	27	28,629	0	5,393	146,578	2,026	2,053	2,053
2017	8,167	430	801	88,819	9,923	0	1,411	NM	29,019	0	4,954	143,577	2,488	NM	NM

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 2016 and prior years are final. Values for 2017 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.E. Net Generation by Energy Source: Residential Sector, 2014-November 2017 (Thousand Megawatthours)

	Small Scale Generation
Period	**Estimated Small Scale Solar Photovoltaic Generation**
Annual Totals	
2014	4,947
2015	6,999
2016	10,595
Year 2015	
January	340
February	375
March	536
April	609
May	676
June	693
July	741
August	746
Sept	679
October	618
November	515
December	471
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	690
February	791
March	1,148
April	1,285
May	1,416
June	1,468
July	1,495
August	1,446
Sept	1,291
October	1,156
November	904
Year to Date	
2015	6,527
2016	9,942
2017	13,090
Rolling 12 Months Ending in November	
2016	10,414
2017	13,743

See Glossary for definitions. Values for 2016 and prior years are final. Values for 2017 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, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	7,696	7,894	-2.5%	163	124	7,208	7,469	103	99	222	202
Connecticut	2,703	3,097	-12.7%	7	6	2,623	3,016	31	33	42	41
Maine	933	781	19.5%	0	0	756	622	19	14	158	145
Massachusetts	2,039	1,887	8.1%	26	19	1,950	1,813	42	41	21	13
New Hampshire	1,465	1,598	-8.3%	66	48	1,391	1,541	7	6	1	3
Rhode Island	397	438	-9.3%	0	3	392	430	4	4	0	0
Vermont	160	94	69.7%	64	48	95	45	0	0	0	0
Middle Atlantic	31,664	32,462	-2.5%	2,892	2,672	28,211	29,275	185	158	377	358
New Jersey	5,350	5,517	-3.0%	8	9	5,227	5,409	54	46	62	53
New York	10,153	9,925	2.3%	2,875	2,658	7,109	7,099	99	97	71	71
Pennsylvania	16,161	17,021	-5.0%	9	4	15,876	16,767	32	15	244	235
East North Central	46,772	43,219	8.2%	19,022	17,573	26,628	24,772	134	130	988	745
Illinois	15,289	13,739	11.3%	400	267	14,620	13,234	26	18	242	220
Indiana	8,020	7,447	7.7%	6,568	6,188	994	1,002	22	23	437	234
Michigan	8,445	8,113	4.1%	5,641	5,244	2,615	2,690	66	69	123	109
Ohio	9,472	9,003	5.2%	2,048	2,122	7,362	6,816	11	10	52	54
Wisconsin	5,546	4,917	12.8%	4,366	3,750	1,037	1,031	9	10	134	126
West North Central	27,082	24,365	11.2%	21,252	19,658	5,427	4,350	50	48	354	309
Iowa	4,655	4,220	10.3%	3,298	2,915	1,171	1,139	19	17	168	149
Kansas	4,066	3,285	23.8%	2,606	2,116	1,453	1,165	NM	0	6	3
Minnesota	5,242	4,794	9.3%	4,060	3,779	1,042	884	14	14	125	117
Missouri	5,667	5,322	6.5%	5,272	5,149	376	153	14	16	4	4
Nebraska	2,958	2,611	13.3%	2,406	2,273	515	317	1	1	36	21
North Dakota	3,636	3,164	14.9%	2,977	2,705	645	444	0	0	14	15
South Dakota	858	969	-11.4%	634	721	225	248	NM	0	0	0
South Atlantic	59,292	56,595	4.8%	48,225	47,488	9,351	7,525	82	76	1,635	1,506
Delaware	451	543	-16.9%	2	6	324	433	NM	1	124	103
District of Columbia	4	6	-28.6%	0	0	4	4	0	2	0	0
Florida	17,132	16,418	4.3%	15,644	14,959	1,063	1,034	6	6	419	418
Georgia	9,470	9,317	1.6%	7,912	8,263	1,121	641	NM	1	437	412
Maryland	2,864	2,183	31.2%	2	1	2,801	2,152	37	6	25	24
North Carolina	9,720	8,887	9.4%	8,919	8,173	616	537	15	23	170	154
South Carolina	6,938	7,342	-5.5%	6,486	6,638	286	574	0	0	166	130
Virginia	7,583	6,532	16.1%	5,948	5,429	1,409	863	23	37	203	202
West Virginia	5,130	5,369	-4.5%	3,312	4,020	1,726	1,287	0	0	91	61
East South Central	26,022	25,743	1.1%	21,978	21,653	3,340	3,346	15	9	688	735
Alabama	10,766	10,676	0.8%	7,562	7,265	2,845	3,056	0	0	359	354
Kentucky	5,395	5,428	-0.6%	5,313	5,360	32	20	0	0	51	48
Mississippi	4,413	3,419	29.0%	3,832	3,011	443	254	0	0	138	154
Tennessee	5,448	6,220	-12.4%	5,272	6,017	20	16	15	9	141	178
West South Central	52,009	50,377	3.2%	16,220	15,581	29,769	28,240	57	79	5,964	6,477
Arkansas	4,731	4,012	17.9%	3,694	2,578	886	1,289	1	4	150	141
Louisiana	7,363	7,848	-6.2%	4,113	4,539	752	626	13	12	2,485	2,672
Oklahoma	5,727	6,100	-6.1%	2,751	3,286	2,901	2,740	0	0	75	73
Texas	34,188	32,418	5.5%	5,661	5,178	25,229	23,585	43	63	3,254	3,591
Mountain	27,814	27,644	0.6%	21,442	21,463	6,058	5,888	45	34	269	259
Arizona	7,859	7,192	9.3%	7,079	6,177	768	1,007	12	8	0	0
Colorado	4,247	4,261	-0.3%	3,228	3,157	1,010	1,097	3	2	7	5
Idaho	1,106	857	29.0%	676	444	394	362	4	2	31	49
Montana	2,409	2,725	-11.6%	705	1,165	1,700	1,558	0	0	3	3
Nevada	2,761	3,014	-8.4%	1,902	2,151	830	832	9	9	21	21
New Mexico	2,592	2,867	-9.6%	1,793	2,351	789	509	9	7	0	0
Utah	3,052	3,032	0.7%	2,696	2,731	273	251	8	6	75	44
Wyoming	3,788	3,695	2.5%	3,363	3,287	294	271	0	0	131	137
Pacific Contiguous	27,222	27,394	-0.6%	15,556	17,177	10,102	8,764	250	232	1,314	1,222
California	14,652	13,875	5.6%	5,796	5,714	7,477	6,893	240	224	1,139	1,043
Oregon	4,213	4,540	-7.2%	2,955	3,534	1,200	953	6	5	52	47
Washington	8,357	8,979	-6.9%	6,804	7,929	1,425	917	4	2	124	131
Pacific Noncontiguous	1,245	1,382	-9.9%	808	913	353	366	54	61	31	41
Alaska	460	569	-19.2%	408	506	22	23	25	29	6	11
Hawaii	786	812	-3.3%	400	406	331	343	29	32	25	31
U.S. Total	306,819	297,075	3.3%	167,557	164,301	126,447	119,995	975	927	11,841	11,852

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Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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 November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	92,365	98,825	-6.5%	2,096	2,161	86,546	93,101	1,155	1,179	2,567	2,384
Connecticut	30,752	33,296	-7.6%	74	66	29,866	32,392	345	377	467	461
Maine	10,150	10,609	-4.3%	0	0	8,123	8,737	196	189	1,831	1,684
Massachusetts	28,753	29,480	-2.5%	413	439	27,604	28,344	494	489	242	209
New Hampshire	15,910	17,568	-9.4%	770	854	15,051	16,615	62	68	27	31
Rhode Island	4,897	6,135	-20.2%	3	11	4,839	6,070	55	54	0	0
Vermont	1,903	1,737	9.6%	836	791	1,065	942	3	3	0	0
Middle Atlantic	366,493	390,426	-6.1%	31,512	32,615	328,736	351,699	2,080	1,959	4,165	4,153
New Jersey	67,952	71,344	-4.8%	151	144	66,503	69,971	624	594	674	635
New York	116,903	123,514	-5.4%	31,263	32,399	83,733	89,111	1,098	1,116	808	888
Pennsylvania	181,638	195,567	-7.1%	98	72	178,501	192,617	357	248	2,682	2,631
East North Central	525,787	533,388	-1.4%	223,584	225,686	290,198	297,315	1,679	1,753	10,326	8,634
Illinois	165,758	170,315	-2.7%	5,088	4,762	157,676	162,790	330	322	2,664	2,440
Indiana	90,452	92,137	-1.8%	76,765	78,196	9,047	10,769	242	259	4,398	2,913
Michigan	102,662	103,343	-0.7%	73,618	71,972	27,049	29,383	746	820	1,248	1,168
Ohio	107,906	107,860	0.0%	21,513	24,099	85,539	82,903	248	205	607	653
Wisconsin	59,009	59,734	-1.2%	46,600	46,656	10,887	11,470	112	148	1,410	1,460
West North Central	308,103	295,510	4.3%	251,696	247,673	52,087	43,636	553	600	3,767	3,601
Iowa	51,328	48,901	5.0%	37,872	36,125	11,418	10,781	203	213	1,835	1,782
Kansas	46,653	43,069	8.3%	31,318	30,821	15,292	12,199	NM	0	40	49
Minnesota	53,955	53,750	0.4%	42,196	43,551	10,209	8,756	168	185	1,383	1,259
Missouri	76,932	71,893	7.0%	73,659	69,011	3,068	2,656	162	184	42	42
Nebraska	32,685	33,184	-1.5%	27,861	29,759	4,481	3,095	17	18	326	312
North Dakota	37,058	34,236	8.2%	31,221	30,349	5,698	3,729	0	0	139	157
South Dakota	9,491	10,477	-9.4%	7,570	8,056	1,921	2,421	NM	0	0	0
South Atlantic	733,655	748,027	-1.9%	608,338	621,962	106,372	107,844	1,030	1,194	17,915	17,027
Delaware	7,092	8,335	-14.9%	23	76	5,703	7,060	6	6	1,359	1,193
District of Columbia	61	70	-12.8%	0	0	42	48	19	22	0	0
Florida	220,779	220,405	0.2%	202,978	199,601	12,951	15,843	69	78	4,781	4,883
Georgia	118,361	122,925	-3.7%	100,020	106,631	13,636	11,953	6	7	4,698	4,333
Maryland	30,932	34,428	-10.2%	12	7	30,214	33,751	449	426	258	243
North Carolina	119,192	119,889	-0.6%	105,933	108,764	11,280	9,166	189	242	1,791	1,717
South Carolina	85,471	88,892	-3.8%	80,724	83,698	2,896	3,551	1	2	1,848	1,640
Virginia	85,234	84,620	0.7%	67,831	69,552	14,927	12,422	290	411	2,185	2,236
West Virginia	66,533	68,464	-2.8%	50,816	53,633	14,722	14,051	0	0	995	780
East South Central	319,847	334,478	-4.4%	274,349	282,484	37,232	43,661	171	169	8,094	8,163
Alabama	127,434	130,556	-2.4%	92,455	89,478	31,072	37,190	0	0	3,906	3,888
Kentucky	66,076	73,060	-9.6%	65,172	71,979	360	518	0	0	544	562
Mississippi	55,804	58,545	-4.7%	48,511	50,998	5,548	5,770	3	0	1,742	1,777
Tennessee	70,533	72,317	-2.5%	68,211	70,029	252	183	168	169	1,903	1,936
West South Central	628,924	644,429	-2.4%	204,252	222,141	356,916	349,793	788	914	66,969	71,581
Arkansas	55,937	55,275	1.2%	41,365	39,486	13,008	14,308	6	41	1,559	1,440
Louisiana	88,493	98,797	-10.4%	51,539	59,570	9,692	9,418	123	158	27,138	29,651
Oklahoma	70,287	72,259	-2.7%	36,078	41,568	33,463	29,877	0	0	746	815
Texas	414,208	418,098	-0.9%	75,270	81,517	300,753	296,190	659	716	37,525	39,674
Mountain	329,425	332,575	-0.9%	256,148	258,688	69,854	70,134	537	544	2,887	3,209
Arizona	97,529	100,597	-3.0%	83,037	82,409	14,340	18,030	152	158	0	0
Colorado	49,644	49,474	0.3%	38,127	38,356	11,413	11,023	38	28	67	66
Idaho	14,593	14,560	0.2%	9,379	9,431	4,696	4,540	47	47	471	542
Montana	25,562	24,938	2.5%	10,309	9,584	15,225	15,327	0	0	28	27
Nevada	35,070	36,825	-4.8%	24,826	27,383	9,855	9,066	117	118	272	259
New Mexico	31,058	29,703	4.6%	22,991	22,576	7,961	7,016	104	110	1	1
Utah	33,378	34,506	-3.3%	28,971	30,920	3,547	2,483	79	83	781	1,020
Wyoming	42,590	41,973	1.5%	38,507	38,030	2,816	2,650	0	0	1,267	1,293
Pacific Contiguous	349,470	338,988	3.1%	217,854	204,515	114,676	117,327	2,704	2,717	14,236	14,430
California	191,019	181,494	5.2%	84,772	74,279	91,309	92,061	2,606	2,621	12,332	12,533
Oregon	53,125	54,157	-1.9%	40,404	40,474	12,104	13,096	68	63	550	524
Washington	105,327	103,337	1.9%	92,679	89,761	11,264	12,170	30	33	1,354	1,373
Pacific Noncontiguous	14,474	14,826	-2.4%	9,601	9,862	3,846	3,877	659	662	369	425
Alaska	5,412	5,705	-5.1%	4,777	5,084	219	232	313	291	101	98
Hawaii	9,063	9,121	-0.6%	4,823	4,778	3,627	3,646	345	371	267	327
U.S. Total	3,668,545	3,731,472	-1.7%	2,079,429	2,107,786	1,446,464	1,478,388	11,357	11,691	131,294	133,608

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Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	16	57	-72.9%	11	2	4	54	0	0	NM	1
Connecticut	-1	-1	15.7%	0	0	-1	-1	0	0	0	0
Maine	6	5	14.3%	0	0	5	4	0	0	NM	1
Massachusetts	0	51	-100.0%	0	0	0	51	0	0	0	0
New Hampshire	11	2	401.6%	11	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	3,942	3,846	2.5%	0	0	3,912	3,800	0	0	30	46
New Jersey	88	86	2.8%	0	0	88	86	0	0	0	0
New York	44	23	93.2%	0	0	33	0	0	0	11	23
Pennsylvania	3,810	3,737	1.9%	0	0	3,791	3,714	0	0	19	23
East North Central	21,607	18,570	16.4%	13,229	12,100	8,188	6,297	5	7	185	165
Illinois	5,068	3,284	54.3%	300	205	4,621	2,948	NM	2	145	128
Indiana	5,532	4,854	14.0%	5,330	4,621	199	227	4	5	0	0
Michigan	3,100	3,077	0.8%	3,059	3,038	38	36	0	0	NM	3
Ohio	4,792	4,741	1.1%	1,461	1,654	3,331	3,086	0	0	NM	1
Wisconsin	3,115	2,615	19.1%	3,080	2,582	0	0	0	0	35	33
West North Central	14,691	13,343	10.1%	14,467	13,147	0	0	7	15	216	181
Iowa	1,805	1,525	18.4%	1,671	1,409	0	0	6	5	128	110
Kansas	1,375	1,666	-17.5%	1,375	1,666	0	0	0	0	0	0
Minnesota	2,312	2,062	12.1%	2,269	2,021	0	0	0	0	43	41
Missouri	4,976	4,030	23.5%	4,974	4,021	0	0	2	9	0	0
Nebraska	1,714	1,756	-2.3%	1,678	1,735	0	0	0	0	36	21
North Dakota	2,307	2,119	8.9%	2,298	2,108	0	0	0	0	NM	10
South Dakota	201	187	7.8%	201	187	0	0	0	0	0	0
South Atlantic	12,976	14,437	-10.1%	10,781	12,565	2,133	1,794	6	4	56	74
Delaware	35	-2	NM	0	0	35	-2	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,392	2,825	-15.3%	2,387	2,791	0	28	0	0	NM	6
Georgia	1,849	2,243	-17.6%	1,834	2,227	0	0	0	0	NM	16
Maryland	586	648	-9.5%	0	0	580	641	0	0	7	7
North Carolina	1,751	1,876	-6.7%	1,724	1,844	9	11	5	4	13	17
South Carolina	1,045	1,168	-10.5%	1,043	1,164	0	0	0	0	2	5
Virginia	632	631	0.2%	576	585	41	23	1	0	15	23
West Virginia	4,686	5,047	-7.2%	3,216	3,954	1,469	1,093	0	0	0	0
East South Central	8,088	9,888	-18.2%	7,885	9,576	148	253	0	0	55	59
Alabama	2,071	2,721	-23.9%	2,067	2,718	0	0	0	0	NM	3
Kentucky	4,061	4,629	-12.3%	4,061	4,629	0	0	0	0	0	0
Mississippi	406	396	2.5%	258	143	148	253	0	0	0	0
Tennessee	1,550	2,142	-27.6%	1,499	2,086	0	0	0	0	51	56
West South Central	15,099	12,788	18.1%	6,630	5,543	8,441	7,211	0	0	29	34
Arkansas	2,050	1,542	33.0%	1,601	1,109	444	429	0	0	5	4
Louisiana	788	585	34.6%	422	370	366	215	0	0	0	0
Oklahoma	1,316	1,448	-9.1%	1,152	1,281	140	136	0	0	24	30
Texas	10,946	9,214	18.8%	3,455	2,783	7,491	6,431	0	0	0	0
Mountain	13,727	13,369	2.7%	12,075	11,876	1,618	1,453	0	0	35	40
Arizona	2,751	2,180	26.2%	2,751	2,180	0	0	0	0	0	0
Colorado	2,389	2,535	-5.8%	2,388	2,535	0	0	0	0	1	1
Idaho	NM	3	NM	0	0	0	0	0	0	NM	3
Montana	1,428	1,314	8.6%	0	26	1,427	1,288	0	0	1	1
Nevada	89	65	36.0%	-3	-4	92	69	0	0	0	0
New Mexico	1,481	1,885	-21.4%	1,481	1,885	0	0	0	0	0	0
Utah	2,415	2,219	8.8%	2,377	2,182	38	37	0	0	0	0
Wyoming	3,173	3,167	0.2%	3,082	3,072	61	59	0	0	30	36
Pacific Contiguous	840	469	79.1%	0	0	812	440	0	0	28	29
California	26	25	0.6%	0	0	0	0	0	0	26	25
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	814	443	83.6%	0	0	812	440	0	0	2	4
Pacific Noncontiguous	168	174	-3.3%	NM	20	135	143	8	9	0	1
Alaska	NM	46	NM	NM	20	16	17	8	9	0	0
Hawaii	119	127	-6.6%	0	0	119	127	0	0	0	1
U.S. Total	91,153	86,940	4.8%	65,101	64,830	25,391	21,446	27	35	634	630

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 2017 are preliminary. Values for 2016 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 November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	1,476	1,979	-25.4%	178	267	1,282	1,703	0	0	NM	9
Connecticut	94	89	5.6%	0	0	94	89	0	0	0	0
Maine	68	61	12.4%	0	0	52	52	0	0	NM	9
Massachusetts	1,136	1,562	-27.3%	0	0	1,136	1,562	0	0	0	0
New Hampshire	178	267	-33.3%	178	267	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	43,944	51,966	-15.4%	0	0	43,464	51,306	0	0	480	660
New Jersey	1,088	1,195	-9.0%	0	0	1,088	1,195	0	0	0	0
New York	680	1,684	-59.6%	0	0	455	1,377	0	0	225	307
Pennsylvania	42,177	49,087	-14.1%	0	0	41,922	48,734	0	0	255	353
East North Central	252,387	248,419	1.6%	152,887	149,685	97,405	96,722	60	75	2,036	1,937
Illinois	53,052	53,434	-0.7%	3,658	3,076	47,772	48,991	28	17	1,594	1,349
Indiana	65,348	65,485	-0.2%	62,979	62,290	2,337	3,146	32	43	0	6
Michigan	39,013	37,064	5.3%	38,562	36,569	408	406	0	15	43	74
Ohio	62,512	62,017	0.8%	15,614	17,726	46,887	44,179	0	0	11	112
Wisconsin	32,461	30,420	6.7%	32,074	30,024	0	0	0	0	387	396
West North Central	169,463	165,415	2.4%	167,033	163,036	1	0	96	124	2,333	2,256
Iowa	23,452	22,847	2.6%	21,945	21,263	0	0	75	78	1,432	1,506
Kansas	17,494	20,829	-16.0%	17,494	20,829	0	0	0	0	0	0
Minnesota	21,069	20,791	1.3%	20,583	20,448	0	0	1	2	485	341
Missouri	61,610	55,138	11.7%	61,589	55,094	1	0	20	44	0	0
Nebraska	19,534	19,778	-1.2%	19,207	19,467	0	0	0	0	326	311
North Dakota	24,466	24,173	1.2%	24,376	24,075	0	0	0	0	90	98
South Dakota	1,838	1,859	-1.1%	1,838	1,859	0	0	0	0	0	0
South Atlantic	192,875	217,008	-11.1%	171,679	189,588	20,456	26,307	47	46	693	1,068
Delaware	296	469	-36.9%	0	0	296	469	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	35,067	35,982	-2.5%	34,833	35,088	109	733	0	0	126	162
Georgia	29,973	34,967	-14.3%	29,825	34,771	0	0	0	0	148	196
Maryland	7,591	12,758	-40.5%	0	0	7,524	12,691	0	0	67	67
North Carolina	31,582	34,327	-8.0%	31,290	33,949	99	153	38	39	155	187
South Carolina	16,693	19,124	-12.7%	16,672	19,025	0	0	0	0	22	99
Virginia	9,875	14,874	-33.6%	9,268	14,068	423	554	9	7	175	245
West Virginia	61,797	64,506	-4.2%	49,791	52,687	12,006	11,707	0	0	0	112
East South Central	110,358	125,532	-12.1%	107,649	121,985	2,032	2,665	0	0	678	882
Alabama	28,705	31,459	-8.8%	28,665	31,389	0	0	0	0	40	70
Kentucky	52,549	60,738	-13.5%	52,549	60,738	0	0	0	0	0	0
Mississippi	4,325	4,926	-12.2%	2,294	2,261	2,032	2,665	0	0	0	0
Tennessee	24,779	28,410	-12.8%	24,141	27,597	0	0	0	0	638	813
West South Central	174,277	157,264	10.8%	83,590	78,923	90,380	77,960	0	0	307	382
Arkansas	23,700	20,903	13.4%	20,625	16,715	3,035	4,143	0	0	40	45
Louisiana	11,264	10,696	5.3%	6,557	7,176	4,707	3,521	0	0	0	0
Oklahoma	16,154	16,960	-4.8%	14,351	14,895	1,536	1,728	0	0	267	337
Texas	123,159	108,704	13.3%	42,056	40,136	81,102	68,568	0	0	0	0
Mountain	147,916	145,198	1.9%	132,902	129,821	14,430	14,541	0	0	585	836
Arizona	28,929	27,347	5.8%	28,929	27,347	0	0	0	0	0	0
Colorado	26,769	27,010	-0.9%	26,761	26,981	0	21	0	0	8	7
Idaho	24	26	-8.6%	0	0	0	0	0	0	24	26
Montana	12,741	12,935	-1.5%	225	233	12,512	12,697	0	0	5	5
Nevada	1,792	2,094	-14.4%	905	1,285	887	810	0	0	0	0
New Mexico	17,215	16,417	4.9%	17,215	16,417	0	0	0	0	0	0
Utah	23,886	23,311	2.5%	23,295	22,506	375	367	0	0	217	437
Wyoming	36,561	36,058	1.4%	35,572	35,051	657	646	0	0	331	360
Pacific Contiguous	6,589	5,706	15.5%	1,688	1,530	4,612	3,856	0	0	289	320
California	264	291	-9.3%	0	0	0	0	0	0	264	291
Oregon	1,688	1,530	10.4%	1,688	1,530	0	0	0	0	0	0
Washington	4,637	3,885	19.3%	0	0	4,612	3,856	0	0	25	29
Pacific Noncontiguous	1,767	1,916	-7.8%	243	272	1,426	1,543	98	97	0	4
Alaska	507	544	-6.8%	243	272	167	175	98	97	0	0
Hawaii	1,260	1,372	-8.2%	0	0	1,260	1,368	0	0	0	4
U.S. Total	1,101,052	1,120,402	-1.7%	817,849	835,106	275,487	276,602	300	342	7,416	8,352

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

Table 1.5.A. Utility Scale Facility Net Generation from Petroleum Liquids by State, by Sector, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	28	176	-84.3%	2	5	22	164	3	6	1	1
Connecticut	2	2	-11.3%	1	0	1	2	NM	0	0	0
Maine	7	1	523.4%	0	0	6	0	0	0	1	1
Massachusetts	13	160	-92.1%	NM	0	11	155	NM	4	0	0
New Hampshire	3	3	37.0%	1	0	1	1	2	1	0	0
Rhode Island	NM	9	NM	0	3	NM	6	0	0	0	0
Vermont	NM	1	NM	NM	1	0	0	0	0	0	0
Middle Atlantic	45	34	31.5%	14	3	26	24	NM	1	4	6
New Jersey	NM	1	NM	NM	0	NM	1	0	0	0	0
New York	23	11	117.6%	14	3	6	3	NM	1	3	4
Pennsylvania	20	23	-9.6%	0	0	20	21	0	0	NM	2
East North Central	54	44	22.7%	27	25	23	17	NM	0	4	2
Illinois	3	4	-40.7%	NM	1	2	4	NM	0	0	0
Indiana	15	8	83.9%	11	7	0	0	0	0	4	1
Michigan	8	9	-11.3%	8	8	0	0	0	0	NM	0
Ohio	26	23	17.0%	5	9	21	14	0	0	0	0
Wisconsin	2	0	NM	2	0	0	0	0	0	NM	0
West North Central	43	29	51.2%	42	28	NM	0	0	0	0	0
Iowa	20	11	75.3%	20	11	NM	0	0	0	0	0
Kansas	10	6	64.2%	10	6	0	0	0	0	0	0
Minnesota	3	1	176.6%	2	1	NM	0	NM	0	0	0
Missouri	7	8	-5.3%	7	8	0	0	0	0	0	0
Nebraska	NM	0	NM	NM	0	0	0	0	0	0	0
North Dakota	3	3	-12.7%	2	3	0	0	0	0	0	0
South Dakota	NM	0	NM	NM	0	0	0	NM	0	0	0
South Atlantic	104	118	-11.5%	73	110	22	1	3	0	7	6
Delaware	NM	1	NM	1	1	NM	0	0	0	0	0
District of Columbia	0	0	-100.0%	0	0	0	0	0	0	0	0
Florida	18	78	-76.6%	17	75	0	0	0	0	NM	2
Georgia	10	6	56.9%	5	3	NM	2	0	0	NM	1
Maryland	9	-5	-302.8%	1	0	8	-5	0	0	0	0
North Carolina	24	10	152.9%	23	8	NM	1	0	0	NM	1
South Carolina	5	8	-30.5%	5	6	0	0	0	0	0	2
Virginia	23	11	112.9%	11	8	9	3	2	0	NM	0
West Virginia	11	9	20.5%	11	9	0	0	0	0	0	0
East South Central	21	24	-12.9%	20	23	NM	0	0	0	NM	1
Alabama	NM	2	NM	1	1	NM	0	0	0	NM	1
Kentucky	9	7	18.5%	9	7	0	0	0	0	0	0
Mississippi	NM	0	NM	NM	0	0	0	0	0	0	0
Tennessee	10	14	-27.8%	10	14	0	0	0	0	0	0
West South Central	13	14	-8.2%	10	10	3	4	0	0	0	1
Arkansas	3	7	-63.4%	3	6	0	1	0	0	0	0
Louisiana	2	1	95.5%	2	1	0	0	0	0	0	0
Oklahoma	3	1	169.0%	3	1	0	0	0	0	0	0
Texas	6	5	15.5%	3	2	3	3	0	0	0	0
Mountain	14	17	-17.4%	14	16	1	1	0	0	0	0
Arizona	5	5	-2.3%	5	5	0	0	0	0	0	0
Colorado	1	1	-54.7%	1	1	0	0	0	0	0	0
Idaho	0	0	-71.3%	0	0	0	0	0	0	0	0
Montana	1	1	-42.7%	NM	0	0	1	0	0	0	0
Nevada	0	0	41.7%	0	0	0	0	0	0	0	0
New Mexico	4	2	65.4%	4	2	0	0	0	0	0	0
Utah	2	2	28.6%	2	2	0	0	0	0	0	0
Wyoming	2	5	-70.6%	2	5	0	0	0	0	0	0
Pacific Contiguous	4	4	15.2%	3	3	1	0	0	0	NM	1
California	3	3	9.8%	3	2	0	0	NM	0	NM	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	1	1	27.9%	0	0	1	0	0	0	NM	1
Pacific Noncontiguous	586	610	-4.0%	441	478	124	112	1	0	20	21
Alaska	67	95	-30.1%	63	90	0	0	1	0	3	6
Hawaii	519	515	0.9%	378	388	124	112	0	0	17	15
U.S. Total	913	1,070	-14.7%	645	700	222	325	8	8	38	37

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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 November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	261	611	-57.3%	35	51	180	512	37	39	8	10
Connecticut	40	76	-47.4%	6	5	33	67	1	2	0	2
Maine	46	104	-56.0%	0	0	37	95	2	2	7	7
Massachusetts	130	368	-64.6%	8	14	102	337	20	18	1	1
New Hampshire	29	35	-17.7%	15	18	NM	2	12	15	0	0
Rhode Island	12	24	-48.7%	3	11	NM	11	2	1	0	0
Vermont	3	3	-2.9%	3	3	0	0	0	0	0	0
Middle Atlantic	531	895	-40.7%	149	297	331	546	12	11	39	41
New Jersey	31	62	-49.7%	0	1	31	61	0	1	NM	0
New York	300	581	-48.3%	149	296	109	242	8	9	34	34
Pennsylvania	200	253	-20.8%	0	1	192	243	4	2	4	7
East North Central	477	490	-2.6%	298	295	157	174	4	5	18	17
Illinois	45	63	-29.3%	8	9	36	54	NM	1	0	0
Indiana	113	103	9.9%	99	92	0	0	0	1	14	10
Michigan	104	112	-7.2%	100	108	0	0	3	2	2	2
Ohio	185	186	-0.7%	61	65	121	118	0	1	2	3
Wisconsin	30	25	20.3%	30	21	0	3	0	0	NM	1
West North Central	421	332	27.0%	414	323	5	6	1	2	1	2
Iowa	231	204	13.0%	230	203	1	1	0	0	0	0
Kansas	55	24	126.3%	55	24	0	0	0	0	0	0
Minnesota	38	28	37.6%	31	20	5	5	1	1	1	1
Missouri	54	65	-16.8%	54	65	0	0	0	0	0	0
Nebraska	7	-17	-140.0%	7	-17	0	0	0	0	0	0
North Dakota	32	25	31.2%	32	24	0	0	0	0	0	0
South Dakota	4	3	65.8%	4	3	0	0	NM	0	0	0
South Atlantic	1,586	2,016	-21.3%	1,245	1,512	252	417	29	5	59	81
Delaware	30	59	-50.2%	1	8	29	51	0	0	0	0
District of Columbia	0	1	-100.0%	0	0	0	0	0	1	0	0
Florida	588	730	-19.5%	568	700	3	7	0	0	17	24
Georgia	97	110	-11.7%	59	57	13	23	2	2	22	28
Maryland	100	155	-35.4%	2	-2	95	153	1	1	2	2
North Carolina	197	223	-11.3%	179	183	10	32	0	0	8	7
South Carolina	79	105	-24.6%	71	88	1	2	0	0	7	15
Virginia	385	523	-26.4%	256	373	100	144	26	1	3	5
West Virginia	109	109	-0.2%	108	105	1	4	0	0	0	0
East South Central	241	257	-6.3%	223	233	4	5	0	0	14	19
Alabama	35	42	-17.8%	20	23	3	5	0	0	11	14
Kentucky	89	83	7.8%	89	83	0	0	0	0	0	0
Mississippi	10	16	-39.6%	8	13	0	0	0	0	2	3
Tennessee	107	116	-7.6%	105	114	0	0	0	0	1	2
West South Central	137	140	-1.7%	76	90	57	43	1	1	4	5
Arkansas	44	36	20.7%	18	25	24	8	0	0	2	3
Louisiana	9	13	-35.0%	9	12	0	2	0	0	0	0
Oklahoma	14	16	-15.9%	13	16	0	0	0	0	1	1
Texas	71	74	-3.5%	36	38	33	33	1	1	1	2
Mountain	193	210	-7.9%	176	179	17	19	0	0	0	11
Arizona	51	48	4.7%	51	48	0	0	0	0	0	0
Colorado	8	6	20.4%	8	6	0	0	0	0	0	0
Idaho	0	0	-89.2%	0	0	0	0	0	0	0	0
Montana	12	16	-21.1%	NM	0	12	15	0	0	0	0
Nevada	8	11	-20.9%	5	8	3	3	0	0	0	0
New Mexico	41	46	-10.7%	41	46	0	0	0	0	0	0
Utah	36	29	24.3%	34	27	1	1	0	0	0	0
Wyoming	38	54	-30.6%	38	43	0	0	0	0	0	11
Pacific Contiguous	73	109	-32.7%	43	36	14	14	1	1	15	59
California	43	87	-50.8%	32	30	3	5	0	0	7	51
Oregon	10	3	189.9%	10	3	0	0	0	0	0	0
Washington	21	19	11.1%	2	2	11	9	0	0	8	7
Pacific Noncontiguous	6,948	6,783	2.4%	5,325	5,242	1,386	1,317	7	5	230	219
Alaska	813	702	15.9%	765	659	0	0	4	2	44	41
Hawaii	6,135	6,081	0.9%	4,561	4,583	1,386	1,317	2	3	186	178
U.S. Total	10,870	11,842	-8.2%	7,984	8,258	2,403	3,053	92	68	390	463

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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, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
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	17	NM	0	0	0	0	0	0	NM	17
New Jersey	7	7	-1.6%	0	0	0	0	0	0	7	7
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	10	NM	0	0	0	0	0	0	NM	10
East North Central	107	137	-22.4%	90	45	0	76	0	0	17	17
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	90	51	76.9%	73	36	0	0	0	0	17	15
Ohio	0	76	-100.0%	0	0	0	76	0	0	0	1
Wisconsin	17	10	62.3%	17	9	0	0	0	0	0	1
West North Central	6	10	-41.0%	0	0	0	0	1	0	5	9
Iowa	6	10	-41.0%	0	0	0	0	1	0	5	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	85	42	102.2%	60	35	0	0	0	0	NM	7
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	60	35	69.6%	60	35	0	0	0	0	0	0
Georgia	NM	7	NM	0	0	0	0	0	0	NM	7
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	79	-100.0%	0	79	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	79	-100.0%	0	79	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	448	466	-3.9%	434	437	0	0	0	0	14	29
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	439	458	-4.2%	434	437	0	0	0	0	5	21
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	NM	8	NM	0	0	0	0	0	0	NM	8
Mountain	35	40	-11.9%	0	0	35	40	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	35	40	-11.9%	0	0	35	40	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	7	-100.0%	0	0	0	0	0	0	0	7
California	0	7	-100.0%	0	0	0	0	0	0	0	7
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	693	799	-13.2%	583	596	35	116	1	0	74	87

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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 November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 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	137	140	-2.4%	0	0	0	1	0	0	137	140
New Jersey	69	59	16.3%	0	0	0	0	0	0	69	59
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	68	81	-16.1%	0	0	0	1	0	0	68	81
East North Central	1,547	2,142	-27.8%	897	1,094	510	875	0	0	141	173
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	497	-100.0%	0	497	0	0	0	0	0	0
Michigan	942	650	44.8%	801	519	0	3	0	0	141	129
Ohio	510	881	-42.2%	0	0	510	872	0	0	0	9
Wisconsin	96	113	-15.7%	96	78	0	0	0	0	0	35
West North Central	35	33	6.1%	0	0	0	0	7	4	28	29
Iowa	35	33	6.1%	0	0	0	0	7	4	28	29
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	989	2,039	-51.5%	846	1,952	0	0	0	0	143	87
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	846	1,952	-56.7%	846	1,952	0	0	0	0	0	0
Georgia	143	87	64.4%	0	0	0	0	0	0	143	87
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	427	1,051	-59.4%	427	1,051	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	427	1,051	-59.4%	427	1,051	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	4,262	4,443	-4.1%	3,987	4,116	0	0	0	0	275	327
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	4,167	4,337	-3.9%	3,987	4,116	0	0	0	0	181	221
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	95	106	-10.5%	0	0	0	0	0	0	95	106
Mountain	404	401	0.8%	0	0	404	401	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	404	401	0.8%	0	0	404	401	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	76	-100.0%	0	0	0	0	0	0	0	76
California	0	76	-100.0%	0	0	0	0	0	0	0	76
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	7,802	10,327	-24.5%	6,157	8,214	914	1,277	7	4	724	832

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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, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	3,518	3,422	2.8%	NM	6	3,342	3,267	74	73	91	75
Connecticut	1,480	1,455	1.7%	5	4	1,402	1,376	31	33	42	41
Maine	155	181	-14.3%	0	0	NM	161	2	1	27	19
Massachusetts	1,269	941	34.9%	NM	2	1,206	894	36	33	20	13
New Hampshire	254	437	-41.8%	0	0	252	432	1	2	1	3
Rhode Island	360	408	-11.8%	0	0	356	405	4	3	0	0
Vermont	0	0	-57.4%	0	0	0	0	0	0	0	0
Middle Atlantic	10,105	11,765	-14.1%	739	748	9,102	10,782	88	79	175	157
New Jersey	2,388	2,696	-11.4%	NM	17	2,323	2,647	18	12	32	21
New York	3,255	3,568	-8.8%	723	730	2,440	2,756	58	58	34	24
Pennsylvania	4,462	5,502	-18.9%	0	1	4,340	5,379	12	10	109	112
East North Central	8,251	8,169	1.0%	3,393	3,310	4,482	4,605	100	88	276	166
Illinois	825	1,044	-20.9%	NM	54	650	925	24	15	59	50
Indiana	1,572	1,829	-14.1%	1,155	1,488	270	278	14	15	133	49
Michigan	2,059	2,136	-3.6%	616	573	1,354	1,493	47	43	43	27
Ohio	2,733	2,303	18.7%	551	426	2,159	1,855	9	9	14	12
Wisconsin	1,062	857	23.9%	980	769	49	54	5	7	28	27
West North Central	1,460	1,249	16.8%	1,197	1,101	184	88	23	19	56	41
Iowa	263	123	113.0%	222	93	0	0	9	6	32	24
Kansas	192	138	39.1%	187	135	0	0	0	0	6	3
Minnesota	536	472	13.4%	443	410	73	49	7	6	13	8
Missouri	311	254	22.4%	189	205	NM	39	7	7	4	4
Nebraska	36	64	-43.7%	36	64	0	0	0	0	0	0
North Dakota	77	118	-34.3%	76	115	0	0	0	0	1	2
South Dakota	44	79	-44.5%	44	79	0	0	0	0	0	0
South Atlantic	24,769	22,261	11.3%	20,138	18,804	4,226	3,086	40	10	366	361
Delaware	360	514	-30.1%	1	4	280	427	0	0	79	84
District of Columbia	0	2	-92.5%	0	0	0	0	0	2	0	0
Florida	11,479	10,432	10.0%	10,677	9,631	683	680	2	2	116	118
Georgia	3,864	3,499	10.4%	2,903	2,992	917	467	0	0	43	41
Maryland	670	52	NM	0	0	627	42	35	4	8	6
North Carolina	3,156	2,955	6.8%	3,006	2,736	137	211	2	1	11	7
South Carolina	1,268	1,601	-20.8%	1,018	1,064	239	533	0	0	11	4
Virginia	3,847	3,128	23.0%	2,520	2,367	1,269	705	1	1	56	56
West Virginia	127	78	62.6%	12	10	73	22	0	0	42	46
East South Central	9,235	8,250	11.9%	5,919	5,034	3,126	3,040	15	9	175	167
Alabama	4,243	4,343	-2.3%	1,343	1,240	2,814	3,022	0	0	86	81
Kentucky	882	471	87.1%	830	438	30	19	0	0	22	15
Mississippi	3,403	2,912	16.9%	3,087	2,881	280	0	0	0	36	31
Tennessee	706	524	34.7%	658	475	2	0	15	9	31	41
West South Central	20,386	23,936	-14.8%	5,433	6,992	9,745	11,277	48	71	5,160	5,597
Arkansas	881	1,520	-42.0%	431	648	426	845	0	3	24	24
Louisiana	4,035	4,747	-15.0%	1,699	2,197	272	347	13	12	2,051	2,190
Oklahoma	2,027	2,860	-29.1%	1,243	1,826	761	1,021	0	0	23	13
Texas	13,443	14,809	-9.2%	2,060	2,320	8,287	9,064	35	56	3,061	3,370
Mountain	5,660	5,777	-2.0%	4,338	4,360	1,123	1,279	37	24	161	114
Arizona	1,679	1,580	6.2%	1,183	840	485	734	11	7	0	0
Colorado	856	733	16.9%	736	610	118	122	1	0	2	1
Idaho	204	115	77.4%	131	23	63	81	3	1	7	10
Montana	32	28	13.6%	27	22	4	5	0	0	1	0
Nevada	1,938	2,177	-11.0%	1,728	1,967	183	184	5	5	21	21
New Mexico	548	572	-4.1%	280	423	259	142	NM	7	0	0
Utah	332	500	-33.6%	243	462	12	11	7	4	71	22
Wyoming	71	72	-1.2%	11	13	0	0	0	0	60	60
Pacific Contiguous	9,218	8,858	4.1%	3,403	3,567	4,746	4,312	170	148	898	831
California	7,256	7,150	1.5%	2,348	2,481	3,861	3,707	164	144	882	818
Oregon	1,166	1,125	3.7%	485	644	670	472	3	3	7	6
Washington	796	583	36.4%	570	442	214	133	2	1	9	7
Pacific Noncontiguous	213	254	-16.3%	210	249	0	0	0	0	3	5
Alaska	213	254	-16.3%	210	249	0	0	0	0	3	5
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	92,814	93,942	-1.2%	44,780	44,171	40,077	41,736	595	521	7,362	7,514

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

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

by State, by Sector, Year-to-Date through November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	43,546	49,954	-12.8%	250	313	41,393	47,756	846	888	1,057	996
Connecticut	14,094	16,549	-14.8%	43	43	13,241	15,673	344	375	467	459
Maine	1,926	3,372	-42.9%	0	0	1,570	3,045	27	27	329	300
Massachusetts	19,593	19,696	-0.5%	175	234	18,765	18,837	418	418	234	206
New Hampshire	3,388	4,442	-23.7%	31	36	3,321	4,354	9	21	27	31
Rhode Island	4,543	5,893	-22.9%	0	0	4,497	5,846	46	46	0	0
Vermont	1	2	-18.1%	1	1	0	0	1	1	0	0
Middle Atlantic	132,624	156,110	-15.0%	9,080	11,641	120,733	141,629	971	999	1,840	1,841
New Jersey	33,278	40,897	-18.6%	206	254	32,558	40,148	179	175	335	321
New York	44,509	52,654	-15.5%	8,867	11,377	34,670	40,249	669	714	304	314
Pennsylvania	54,836	62,559	-12.3%	7	11	53,505	61,232	123	110	1,201	1,207
East North Central	90,544	103,419	-12.4%	38,187	44,817	48,415	55,558	1,264	1,318	2,677	1,727
Illinois	13,070	16,433	-20.5%	1,353	1,596	10,769	13,899	296	299	652	639
Indiana	16,443	18,267	-10.0%	12,870	14,620	2,234	3,036	174	177	1,166	435
Michigan	23,717	27,387	-13.4%	7,677	9,480	15,113	17,089	499	535	429	284
Ohio	25,180	26,695	-5.7%	5,491	6,042	19,295	20,376	234	192	160	86
Wisconsin	12,132	14,636	-17.1%	10,796	13,079	1,003	1,158	62	115	271	283
West North Central	18,237	21,316	-14.4%	15,203	17,602	2,246	2,961	258	282	529	470
Iowa	3,083	2,830	8.9%	2,670	2,562	NM	0	79	83	334	185
Kansas	2,475	1,909	29.6%	2,439	1,860	0	0	0	0	36	49
Minnesota	6,489	8,543	-24.0%	5,320	6,882	968	1,381	89	102	112	177
Missouri	4,008	5,587	-28.3%	2,600	3,872	1,279	1,580	89	95	40	40
Nebraska	645	521	23.9%	644	519	0	0	1	1	0	1
North Dakota	842	1,039	-18.9%	835	1,020	0	0	0	0	7	19
South Dakota	694	888	-21.8%	694	888	0	0	0	0	0	0
South Atlantic	305,966	300,055	2.0%	249,408	243,427	51,855	52,491	492	475	4,211	3,662
Delaware	6,204	7,442	-16.6%	15	61	5,286	6,455	0	0	903	925
District of Columbia	19	21	-9.6%	0	0	0	0	19	21	0	0
Florida	149,675	147,720	1.3%	139,500	134,892	8,820	11,468	23	31	1,332	1,329
Georgia	48,687	49,032	-0.7%	37,024	38,011	11,083	10,616	0	0	579	405
Maryland	6,066	5,346	13.5%	0	0	5,553	4,869	430	404	82	73
North Carolina	35,942	36,139	-0.5%	31,294	31,331	4,516	4,699	11	10	121	99
South Carolina	15,168	15,401	-1.5%	12,692	12,229	2,357	3,118	0	1	119	53
Virginia	42,687	37,786	13.0%	28,728	26,765	13,342	10,436	8	8	609	576
West Virginia	1,517	1,169	29.8%	154	137	897	830	0	0	466	202
East South Central	109,027	117,439	-7.2%	72,320	74,862	34,449	40,514	165	167	2,094	1,897
Alabama	48,093	53,321	-9.8%	16,416	15,433	30,659	36,919	0	0	1,018	969
Kentucky	8,465	7,553	12.1%	7,893	6,825	344	497	0	0	228	231
Mississippi	42,991	46,289	-7.1%	39,161	42,813	3,433	3,096	3	0	394	380
Tennessee	9,478	10,276	-7.8%	8,849	9,791	12	2	162	167	454	317
West South Central	284,726	325,595	-12.6%	82,291	102,363	144,154	160,785	706	833	57,575	61,615
Arkansas	15,820	17,221	-8.1%	5,785	6,942	9,774	9,993	0	37	261	249
Louisiana	53,018	61,897	-14.3%	27,189	32,719	3,786	4,781	123	158	21,920	24,240
Oklahoma	29,061	34,238	-15.1%	17,823	22,896	11,012	11,186	0	0	226	156
Texas	186,827	212,238	-12.0%	31,494	39,805	119,582	134,824	583	638	35,169	36,970
Mountain	81,091	92,837	-12.7%	61,550	68,205	17,737	22,897	395	411	1,409	1,325
Arizona	27,476	32,953	-16.6%	17,673	18,507	9,672	14,309	132	136	0	0
Colorado	11,562	11,740	-1.5%	9,755	9,969	1,787	1,751	1	2	18	18
Idaho	2,580	3,080	-16.2%	1,425	1,664	1,008	1,254	36	37	110	125
Montana	428	446	-4.0%	327	354	98	88	0	0	3	4
Nevada	24,592	26,690	-7.9%	22,305	24,358	1,963	2,016	55	60	269	257
New Mexico	8,394	9,168	-8.5%	5,272	5,752	3,020	3,309	101	107	1	1
Utah	5,350	8,049	-33.5%	4,655	7,434	188	169	70	68	438	378
Wyoming	709	710	-0.1%	139	167	1	1	0	0	569	542
Pacific Contiguous	98,801	112,447	-12.1%	37,339	42,504	49,981	58,255	1,790	1,759	9,692	9,929
California	80,237	88,960	-9.8%	27,474	29,948	41,488	47,515	1,737	1,707	9,538	9,790
Oregon	10,473	13,507	-22.5%	4,407	6,637	5,960	6,776	38	34	68	61
Washington	8,092	9,980	-18.9%	5,459	5,919	2,533	3,964	15	18	86	78
Pacific Noncontiguous	2,272	2,771	-18.0%	2,213	2,713	0	0	2	1	57	57
Alaska	2,272	2,771	-18.0%	2,213	2,713	0	0	2	1	57	57
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,166,832	1,281,943	-9.0%	567,839	608,447	510,964	582,845	6,889	7,132	81,140	83,519

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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 1.8.A. Utility Scale Facility Net Generation from Other Gases by State, by Sector, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	73	59	23.5%	0	0	0	1	0	0	73	59
New Jersey	17	19	-10.0%	0	0	0	0	0	0	17	19
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	56	41	38.8%	0	0	0	1	0	0	56	40
East North Central	503	380	32.5%	17	22	192	166	0	0	294	192
Illinois	13	18	-31.4%	0	0	0	0	0	0	13	18
Indiana	273	159	71.2%	NM	0	0	0	0	0	271	159
Michigan	144	161	-10.7%	15	21	128	140	0	0	0	0
Ohio	73	41	80.2%	0	0	64	27	0	0	10	14
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	4	3	67.0%	0	0	0	0	0	0	4	3
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	3	67.0%	0	0	0	0	0	0	4	3
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	47	21	124.7%	0	0	0	0	0	0	47	21
Delaware	44	18	143.2%	0	0	0	0	0	0	44	18
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	-14.9%	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	3	3	7.1%	0	0	0	0	0	0	3	3
East South Central	0	4	-97.6%	0	0	0	0	0	0	0	4
Alabama	0	3	-100.0%	0	0	0	0	0	0	0	3
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	1	-93.3%	0	0	0	0	0	0	0	1
West South Central	370	367	0.9%	0	0	126	135	0	0	244	232
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	161	146	10.3%	0	0	0	0	0	0	161	146
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	209	221	-5.3%	0	0	126	135	0	0	83	86
Mountain	36	42	-15.1%	0	0	0	1	0	0	36	41
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	1	-100.0%	0	0	0	1	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	1	5	-85.2%	0	0	0	0	0	0	1	5
Wyoming	35	36	-2.6%	0	0	0	0	0	0	35	36
Pacific Contiguous	156	135	15.5%	0	0	29	27	0	0	128	109
California	128	109	17.6%	0	0	0	0	0	0	128	109
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	29	27	6.8%	0	0	29	27	0	0	0	0
Pacific Noncontiguous	5	3	60.0%	0	0	0	0	0	0	5	3
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	5	3	60.0%	0	0	0	0	0	0	5	3
U.S. Total	1,194	1,013	17.8%	17	22	347	330	0	0	830	662

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Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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 November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 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	757	637	18.7%	0	0	0	1	0	0	757	636
New Jersey	200	188	6.5%	0	0	0	0	0	0	200	188
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	556	449	23.8%	0	0	0	1	0	0	556	449
East North Central	5,345	4,420	20.9%	139	132	1,994	1,883	0	0	3,212	2,405
Illinois	166	190	-12.4%	0	0	0	6	0	0	166	184
Indiana	2,906	2,075	40.1%	15	9	0	0	0	0	2,892	2,066
Michigan	1,488	1,478	0.7%	124	123	1,363	1,355	0	0	0	0
Ohio	785	678	15.9%	0	0	631	523	0	0	154	155
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	38	35	9.1%	0	0	0	0	0	0	38	35
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	35	9.1%	0	0	0	0	0	0	38	35
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	478	280	70.4%	0	0	0	0	0	0	478	280
Delaware	442	253	74.3%	0	0	0	0	0	0	442	253
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	5	5	3.5%	0	0	0	0	0	0	5	5
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	31	22	40.1%	0	0	0	0	0	0	31	22
East South Central	23	36	-36.7%	0	0	0	0	0	0	23	36
Alabama	11	22	-49.2%	0	0	0	0	0	0	11	22
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	11	14	-16.9%	0	0	0	0	0	0	11	14
West South Central	4,343	4,246	2.3%	0	0	1,337	1,206	0	0	3,006	3,040
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,989	1,932	3.0%	0	0	0	0	0	0	1,989	1,932
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	2,353	2,315	1.7%	0	0	1,337	1,206	0	0	1,017	1,109
Mountain	356	377	-5.7%	0	0	14	8	0	0	342	369
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	7	90.7%	0	0	14	7	0	0	0	0
Nevada	0	1	-100.0%	0	0	0	1	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	15	48	-69.9%	0	0	0	0	0	0	15	48
Wyoming	327	321	2.1%	0	0	0	0	0	0	327	321
Pacific Contiguous	1,623	1,691	-4.0%	0	0	322	364	0	0	1,301	1,327
California	1,301	1,327	-1.9%	0	0	0	0	0	0	1,301	1,327
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	322	364	-11.6%	0	0	322	364	0	0	0	0
Pacific Noncontiguous	47	47	-0.5%	0	0	0	0	0	0	47	47
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	47	47	-0.5%	0	0	0	0	0	0	47	47
U.S. Total	13,009	11,770	10.5%	139	132	3,667	3,462	0	0	9,203	8,175

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

Table 1.9.A. Utility Scale Facility Net Generation from Nuclear Energy by State, by Sector, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	2,460	2,892	-14.9%	0	0	2,460	2,892	0	0	0	0
Connecticut	1,070	1,502	-28.8%	0	0	1,070	1,502	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	489	488	0.1%	0	0	489	488	0	0	0	0
New Hampshire	902	901	0.1%	0	0	902	901	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	13,374	12,970	3.1%	0	0	13,374	12,970	0	0	0	0
New Jersey	2,664	2,529	5.3%	0	0	2,664	2,529	0	0	0	0
New York	3,689	3,440	7.2%	0	0	3,689	3,440	0	0	0	0
Pennsylvania	7,022	7,001	0.3%	0	0	7,022	7,001	0	0	0	0
East North Central	12,861	12,585	2.2%	1,648	1,350	11,213	11,234	0	0	0	0
Illinois	8,194	8,203	-0.1%	0	0	8,194	8,203	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	2,237	1,930	15.9%	1,648	1,350	590	580	0	0	0	0
Ohio	1,578	1,582	-0.2%	0	0	1,578	1,582	0	0	0	0
Wisconsin	852	869	-2.0%	0	0	852	869	0	0	0	0
West North Central	2,860	2,936	-2.6%	2,420	2,518	440	418	0	0	0	0
Iowa	440	418	5.3%	0	0	440	418	0	0	0	0
Kansas	884	245	260.2%	884	245	0	0	0	0	0	0
Minnesota	980	993	-1.3%	980	993	0	0	0	0	0	0
Missouri	-12	884	-101.3%	-12	884	0	0	0	0	0	0
Nebraska	567	396	43.2%	567	396	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	17,401	16,898	3.0%	16,105	15,618	1,296	1,280	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,433	2,402	1.3%	2,433	2,402	0	0	0	0	0	0
Georgia	3,002	2,983	0.6%	3,002	2,983	0	0	0	0	0	0
Maryland	1,296	1,280	1.2%	0	0	1,296	1,280	0	0	0	0
North Carolina	3,776	3,447	9.5%	3,776	3,447	0	0	0	0	0	0
South Carolina	4,226	4,349	-2.8%	4,226	4,349	0	0	0	0	0	0
Virginia	2,668	2,437	9.5%	2,668	2,437	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	6,368	6,252	1.9%	6,368	6,252	0	0	0	0	0	0
Alabama	3,371	3,086	9.2%	3,371	3,086	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	486	-13	NM	486	-13	0	0	0	0	0	0
Tennessee	2,512	3,179	-21.0%	2,512	3,179	0	0	0	0	0	0
West South Central	6,190	5,545	11.6%	2,896	2,242	3,293	3,304	0	0	0	0
Arkansas	1,340	709	89.0%	1,340	709	0	0	0	0	0	0
Louisiana	1,556	1,533	1.5%	1,556	1,533	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	3,293	3,304	-0.3%	0	0	3,293	3,304	0	0	0	0
Mountain	2,633	2,661	-1.0%	2,633	2,661	0	0	0	0	0	0
Arizona	2,633	2,661	-1.0%	2,633	2,661	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	2,471	2,441	1.2%	2,471	2,441	0	0	0	0	0	0
California	1,629	1,622	0.4%	1,629	1,622	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	842	819	2.7%	842	819	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	66,618	65,179	2.2%	34,541	33,082	32,077	32,097	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 2017 are preliminary. Values for 2016 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

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

by State, by Sector, Year-to-Date through November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	28,543	29,892	-4.5%	0	0	28,543	29,892	0	0	0	0
Connecticut	14,941	15,022	-0.5%	0	0	14,941	15,022	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	4,541	5,039	-9.9%	0	0	4,541	5,039	0	0	0	0
New Hampshire	9,061	9,831	-7.8%	0	0	9,061	9,831	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	144,990	140,388	3.3%	0	0	144,990	140,388	0	0	0	0
New Jersey	30,902	26,867	15.0%	0	0	30,902	26,867	0	0	0	0
New York	38,508	38,017	1.3%	0	0	38,508	38,017	0	0	0	0
Pennsylvania	75,580	75,504	0.1%	0	0	75,580	75,504	0	0	0	0
East North Central	142,599	143,479	-0.6%	23,839	22,845	118,760	120,634	0	0	0	0
Illinois	88,463	89,747	-1.4%	0	0	88,463	89,747	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	29,325	29,285	0.1%	23,839	22,845	5,486	6,440	0	0	0	0
Ohio	16,063	15,193	5.7%	0	0	16,063	15,193	0	0	0	0
Wisconsin	8,748	9,255	-5.5%	0	0	8,748	9,255	0	0	0	0
West North Central	41,375	41,376	0.0%	36,614	37,132	4,760	4,243	0	0	0	0
Iowa	4,760	4,243	12.2%	0	0	4,760	4,243	0	0	0	0
Kansas	9,736	7,333	32.8%	9,736	7,333	0	0	0	0	0	0
Minnesota	12,592	12,544	0.4%	12,592	12,544	0	0	0	0	0	0
Missouri	7,975	8,506	-6.2%	7,975	8,506	0	0	0	0	0	0
Nebraska	6,311	8,749	-27.9%	6,311	8,749	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	186,934	188,144	-0.6%	173,170	174,679	13,763	13,465	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	26,391	26,573	-0.7%	26,391	26,573	0	0	0	0	0	0
Georgia	31,106	31,402	-0.9%	31,106	31,402	0	0	0	0	0	0
Maryland	13,763	13,465	2.2%	0	0	13,763	13,465	0	0	0	0
North Carolina	38,487	38,905	-1.1%	38,487	38,905	0	0	0	0	0	0
South Carolina	49,318	50,803	-2.9%	49,318	50,803	0	0	0	0	0	0
Virginia	27,868	26,996	3.2%	27,868	26,996	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	74,545	68,974	8.1%	74,545	68,974	0	0	0	0	0	0
Alabama	38,792	36,096	7.5%	38,792	36,096	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	7,048	5,911	19.2%	7,048	5,911	0	0	0	0	0	0
Tennessee	28,705	26,967	6.4%	28,705	26,967	0	0	0	0	0	0
West South Central	59,892	66,197	-9.5%	25,101	27,920	34,791	38,277	0	0	0	0
Arkansas	11,304	12,372	-8.6%	11,304	12,372	0	0	0	0	0	0
Louisiana	13,797	15,548	-11.3%	13,797	15,548	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	34,791	38,277	-9.1%	0	0	34,791	38,277	0	0	0	0
Mountain	29,356	29,394	-0.1%	29,356	29,394	0	0	0	0	0	0
Arizona	29,356	29,394	-0.1%	29,356	29,394	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	23,481	26,187	-10.3%	23,481	26,187	0	0	0	0	0	0
California	16,220	17,214	-5.8%	16,220	17,214	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	7,261	8,973	-19.1%	7,261	8,973	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	731,715	734,032	-0.3%	386,106	387,131	345,609	346,900	0	0	0	0

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

Table 1.10.A. Utility Scale Facility Net Generation from Hydroelectric (Conventional) Power by State, by Sector, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	583	347	68.1%	76	37	474	291	0	0	33	18
Connecticut	20	14	47.9%	2	1	18	13	0	0	0	0
Maine	287	192	49.5%	0	0	254	174	0	0	33	18
Massachusetts	68	55	24.6%	13	11	54	43	0	0	1	0
New Hampshire	106	60	76.2%	26	16	80	44	0	0	0	0
Rhode Island	0	0	69.2%	0	0	0	0	0	0	0	0
Vermont	102	26	284.8%	35	9	67	17	0	0	0	0
Middle Atlantic	2,750	2,371	16.0%	2,175	1,955	568	411	1	0	6	5
New Jersey	NM	1	NM	0	0	NM	1	0	0	0	0
New York	2,524	2,255	11.9%	2,166	1,952	351	298	1	0	6	5
Pennsylvania	224	115	94.8%	9	3	215	112	0	0	0	0
East North Central	384	471	-18.5%	328	408	39	44	0	0	16	19
Illinois	12	11	14.0%	4	4	8	6	0	0	0	0
Indiana	40	45	-10.6%	40	45	0	0	0	0	0	0
Michigan	102	67	51.5%	93	62	NM	5	0	0	NM	1
Ohio	47	56	-15.1%	30	36	17	20	0	0	0	0
Wisconsin	182	293	-37.7%	161	262	NM	13	0	0	14	18
West North Central	765	719	6.4%	736	691	16	19	0	0	13	9
Iowa	58	59	-1.6%	57	58	0	1	0	0	0	0
Kansas	1	2	-37.5%	0	0	1	2	0	0	0	0
Minnesota	82	91	-10.0%	55	66	NM	17	0	0	13	9
Missouri	113	32	247.3%	113	32	0	0	0	0	0	0
Nebraska	100	55	83.1%	100	55	0	0	0	0	0	0
North Dakota	128	119	7.8%	128	119	0	0	0	0	0	0
South Dakota	282	361	-21.8%	282	361	0	0	0	0	0	0
South Atlantic	1,268	587	116.1%	1,011	470	208	102	1	0	48	14
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	16	7	137.5%	16	7	0	0	0	0	0	0
Georgia	241	178	35.5%	240	177	NM	0	0	0	1	1
Maryland	161	60	169.1%	0	0	161	60	0	0	0	0
North Carolina	373	132	181.9%	367	130	NM	1	1	0	NM	0
South Carolina	208	76	173.5%	203	74	NM	2	0	0	0	0
Virginia	117	37	216.0%	111	35	6	2	0	0	0	0
West Virginia	152	97	57.0%	73	47	32	37	0	0	47	13
East South Central	1,805	723	149.7%	1,804	722	NM	1	0	0	0	0
Alabama	778	220	254.2%	778	220	0	0	0	0	0	0
Kentucky	400	195	105.6%	399	194	NM	1	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	626	308	103.0%	626	308	0	0	0	0	0	0
West South Central	796	270	195.2%	680	211	115	59	NM	0	0	0
Arkansas	324	108	201.3%	320	106	NM	1	0	0	0	0
Louisiana	108	56	91.1%	0	0	108	56	0	0	0	0
Oklahoma	239	46	422.4%	239	46	0	0	0	0	0	0
Texas	124	60	108.0%	121	58	2	1	NM	0	0	0
Mountain	2,173	2,313	-6.1%	2,088	2,267	84	46	0	0	0	0
Arizona	487	467	4.3%	487	467	0	0	0	0	0	0
Colorado	113	6	NM	98	5	NM	1	0	0	0	0
Idaho	599	444	34.8%	544	420	54	24	0	0	0	0
Montana	665	1,112	-40.2%	656	1,096	NM	16	0	0	0	0
Nevada	177	187	-5.5%	172	183	NM	4	0	0	0	0
New Mexico	NM	11	NM	NM	11	0	0	0	0	0	0
Utah	52	58	-10.5%	51	58	1	1	0	0	0	0
Wyoming	65	28	132.0%	65	28	0	0	0	0	0	0
Pacific Contiguous	9,197	10,846	-15.2%	9,049	10,700	149	145	0	1	0	0
California	1,789	1,660	7.8%	1,689	1,577	100	82	0	1	0	0
Oregon	2,422	2,864	-15.4%	2,403	2,841	18	23	0	0	0	0
Washington	4,987	6,321	-21.1%	4,956	6,282	30	40	0	0	0	0
Pacific Noncontiguous	119	162	-26.5%	101	138	3	4	NM	15	NM	3
Alaska	112	152	-26.4%	100	137	0	0	NM	15	0	0
Hawaii	7	9	-28.8%	1	2	3	4	0	0	NM	3
U.S. Total	19,841	18,808	5.5%	18,048	17,599	1,657	1,122	NM	17	120	69

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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 November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	6,373	5,612	13.6%	848	728	5,173	4,585	4	3	348	296
Connecticut	243	204	19.1%	22	15	221	189	0	0	0	0
Maine	3,056	2,772	10.2%	0	0	2,713	2,477	0	0	343	295
Massachusetts	764	631	21.1%	159	125	595	502	4	3	5	1
New Hampshire	1,192	1,028	16.0%	279	250	913	778	0	0	0	0
Rhode Island	2	2	11.1%	0	0	2	2	0	0	0	0
Vermont	1,116	975	14.5%	387	337	729	637	0	0	0	0
Middle Atlantic	29,085	26,740	8.8%	22,725	21,210	6,290	5,474	6	4	64	52
New Jersey	25	9	187.4%	0	0	25	9	0	0	0	0
New York	26,533	24,610	7.8%	22,634	21,150	3,829	3,403	6	4	64	52
Pennsylvania	2,527	2,122	19.1%	91	60	2,436	2,062	0	0	0	0
East North Central	5,137	5,016	2.4%	4,478	4,376	477	452	1	1	181	186
Illinois	120	122	-1.7%	38	47	81	74	1	1	0	0
Indiana	429	396	8.2%	429	396	0	0	0	0	0	0
Michigan	1,477	1,448	2.1%	1,351	1,326	101	98	0	0	26	24
Ohio	508	462	10.1%	326	295	182	166	0	0	0	0
Wisconsin	2,602	2,587	0.6%	2,334	2,311	113	114	0	0	155	163
West North Central	10,795	10,185	6.0%	10,409	9,837	237	231	0	0	148	117
Iowa	834	852	-2.1%	827	844	7	7	0	0	0	0
Kansas	27	28	-6.6%	0	0	27	28	0	0	0	0
Minnesota	1,151	1,086	5.9%	798	774	204	195	0	0	148	117
Missouri	1,299	1,231	5.5%	1,299	1,231	0	0	0	0	0	0
Nebraska	1,459	796	83.3%	1,459	796	0	0	0	0	0	0
North Dakota	1,875	1,765	6.2%	1,875	1,765	0	0	0	0	0	0
South Dakota	4,152	4,427	-6.2%	4,152	4,427	0	0	0	0	0	0
South Atlantic	15,059	13,850	8.7%	12,108	11,637	2,421	1,731	11	15	518	467
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	180	164	9.6%	180	164	0	0	0	0	0	0
Georgia	2,930	3,172	-7.6%	2,910	3,150	7	7	0	0	13	15
Maryland	1,892	1,254	50.9%	0	0	1,892	1,254	0	0	0	0
North Carolina	4,384	4,257	3.0%	4,324	4,202	43	42	10	13	NM	0
South Carolina	2,541	2,142	18.6%	2,492	2,090	48	50	1	2	0	0
Virginia	1,509	1,402	7.6%	1,439	1,326	69	68	0	0	0	8
West Virginia	1,623	1,459	11.3%	763	705	362	310	0	0	497	444
East South Central	19,670	15,911	23.6%	19,660	15,902	NM	9	0	0	0	0
Alabama	8,537	6,537	30.6%	8,537	6,537	0	0	0	0	0	0
Kentucky	4,086	3,151	29.7%	4,077	3,142	NM	9	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	7,047	6,223	13.2%	7,047	6,223	0	0	0	0	0	0
West South Central	8,903	8,321	7.0%	7,694	7,207	1,203	1,114	NM	0	0	0
Arkansas	3,658	3,435	6.5%	3,610	3,392	48	43	0	0	0	0
Louisiana	1,125	1,040	8.2%	0	0	1,125	1,040	0	0	0	0
Oklahoma	2,639	2,533	4.2%	2,639	2,533	0	0	0	0	0	0
Texas	1,481	1,313	12.7%	1,444	1,282	30	31	NM	0	0	0
Mountain	30,305	29,271	3.5%	29,060	28,105	1,231	1,155	13	11	0	0
Arizona	6,483	6,573	-1.4%	6,483	6,573	0	0	0	0	0	0
Colorado	1,867	1,759	6.2%	1,615	1,560	239	187	13	11	0	0
Idaho	8,736	8,541	2.3%	7,944	7,756	792	785	0	0	0	0
Montana	9,688	8,918	8.6%	9,554	8,793	134	125	0	0	0	0
Nevada	1,593	1,704	-6.5%	1,544	1,665	49	39	0	0	0	0
New Mexico	230	136	69.7%	230	136	0	0	0	0	0	0
Utah	753	697	8.1%	744	687	10	9	0	0	0	0
Wyoming	953	944	1.0%	946	935	8	9	0	0	0	0
Pacific Contiguous	150,517	128,808	16.9%	147,519	126,631	2,985	2,166	13	11	0	0
California	40,836	26,646	53.3%	38,544	25,125	2,279	1,509	13	11	0	0
Oregon	33,476	31,296	7.0%	33,209	31,045	267	251	0	0	0	0
Washington	76,205	70,866	7.5%	75,767	70,461	439	405	0	0	0	0
Pacific Noncontiguous	1,696	1,571	7.9%	1,473	1,355	17	31	171	151	34	34
Alaska	1,636	1,491	9.7%	1,465	1,340	0	0	171	151	0	0
Hawaii	60	80	-24.9%	9	15	17	31	0	0	34	34
U.S. Total	277,540	245,284	13.2%	255,976	226,988	20,044	16,947	225	196	1,295	1,152

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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, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	980	882	11.0%	64	74	814	699	18	14	84	95
Connecticut	81	74	8.9%	0	0	81	74	0	0	0	0
Maine	447	367	21.8%	0	0	355	266	8	6	84	95
Massachusetts	175	163	7.8%	NM	6	165	152	4	4	0	0
New Hampshire	184	192	-3.8%	29	29	151	160	4	3	0	0
Rhode Island	34	20	70.8%	0	0	34	19	1	1	0	0
Vermont	58	66	-13.5%	29	38	28	28	0	0	0	0
Middle Atlantic	1,246	1,298	-3.9%	5	6	1,115	1,180	56	48	70	64
New Jersey	145	142	2.3%	5	6	116	113	24	23	NM	0
New York	567	578	-1.8%	0	0	530	543	20	20	17	16
Pennsylvania	534	578	-7.6%	0	0	468	524	13	5	53	48
East North Central	2,994	2,831	5.8%	353	363	2,481	2,312	17	20	143	135
Illinois	1,151	1,139	1.1%	3	3	1,148	1,135	NM	0	0	0
Indiana	564	531	6.1%	30	27	526	496	2	2	6	6
Michigan	746	706	5.6%	193	204	488	428	10	14	56	61
Ohio	221	187	18.5%	NM	2	192	159	1	1	26	25
Wisconsin	312	268	16.3%	126	127	127	95	4	3	54	44
West North Central	7,221	6,042	19.5%	2,375	2,157	4,775	3,813	16	11	55	61
Iowa	2,064	2,075	-0.5%	1,328	1,344	730	721	4	5	3	5
Kansas	1,603	1,227	30.6%	150	64	1,452	1,163	NM	0	0	0
Minnesota	1,295	1,140	13.7%	297	274	943	806	NM	5	51	55
Missouri	274	118	133.2%	NM	3	266	114	5	0	0	0
Nebraska	539	340	58.4%	23	23	515	317	1	1	0	0
North Dakota	1,114	800	39.3%	468	356	645	444	0	0	NM	0
South Dakota	331	342	-3.3%	106	94	225	248	0	0	0	0
South Atlantic	2,493	2,108	18.2%	262	119	1,306	1,075	25	44	900	870
Delaware	9	11	-20.5%	NM	1	7	9	NM	1	NM	1
District of Columbia	4	4	-4.7%	0	0	4	4	0	0	0	0
Florida	477	397	20.1%	54	18	270	211	4	4	149	164
Georgia	558	529	5.4%	16	16	202	172	NM	1	339	340
Maryland	115	118	-2.9%	NM	1	102	105	2	2	10	11
North Carolina	592	433	36.8%	23	7	442	294	8	18	119	114
South Carolina	221	193	14.2%	28	39	43	38	0	0	150	117
Virginia	366	287	27.6%	140	38	84	106	10	19	132	123
West Virginia	151	135	11.5%	0	0	151	135	0	0	0	0
East South Central	532	562	-5.3%	12	8	65	52	NM	0	455	502
Alabama	302	302	0.0%	NM	0	32	34	0	0	268	267
Kentucky	38	42	-9.4%	9	8	0	1	0	0	29	33
Mississippi	117	124	-5.4%	0	0	15	1	0	0	102	123
Tennessee	76	95	-20.2%	0	0	18	16	NM	0	57	79
West South Central	8,621	6,873	25.4%	144	153	8,031	6,241	8	8	438	471
Arkansas	132	126	5.2%	NM	0	11	12	1	0	120	113
Louisiana	225	256	-12.2%	0	0	7	7	0	0	218	249
Oklahoma	2,144	1,750	22.6%	121	138	1,996	1,582	0	0	27	29
Texas	6,119	4,741	29.1%	22	15	6,018	4,639	7	8	73	80
Mountain	3,520	3,390	3.8%	328	303	3,166	3,044	8	10	18	33
Arizona	320	307	4.5%	36	32	283	273	NM	2	0	0
Colorado	904	1,000	-9.6%	26	24	876	974	NM	2	0	0
Idaho	294	290	1.6%	NM	1	277	257	1	1	16	31
Montana	220	206	6.8%	23	21	195	184	0	0	2	2
Nevada	555	583	-4.8%	2	4	550	575	NM	4	0	0
New Mexico	543	397	36.9%	13	30	530	367	NM	0	0	0
Utah	246	226	8.8%	23	23	223	202	1	1	0	0
Wyoming	436	381	14.4%	204	169	232	212	0	0	0	0
Pacific Contiguous	5,270	4,679	12.6%	634	587	4,344	3,813	79	84	212	196
California	3,763	3,352	12.3%	131	151	3,501	3,086	75	80	56	35
Oregon	622	548	13.4%	66	49	508	455	3	3	44	42
Washington	885	779	13.6%	437	386	335	272	2	1	112	119
Pacific Noncontiguous	125	154	-18.8%	15	19	91	107	19	20	0	8
Alaska	20	22	-8.2%	NM	11	NM	6	4	4	0	0
Hawaii	105	133	-20.5%	5	8	85	101	15	16	0	8
U.S. Total	33,001	28,819	14.5%	4,192	3,789	26,187	22,336	246	260	2,375	2,435

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 2017 are preliminary. Values for 2016 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

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

by State, by Sector, Year-to-Date through November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	10,899	9,526	14.4%	784	802	8,911	7,589	188	171	1,015	964
Connecticut	843	820	2.8%	3	2	839	817	0	0	0	0
Maine	4,693	3,954	18.7%	0	0	3,594	2,910	86	82	1,014	963
Massachusetts	2,223	1,859	19.5%	70	67	2,100	1,742	52	49	2	1
New Hampshire	2,018	1,920	5.1%	267	283	1,710	1,604	42	32	0	0
Rhode Island	340	217	56.6%	0	0	333	211	7	6	0	0
Vermont	782	757	3.4%	445	449	336	305	2	2	0	0
Middle Atlantic	13,377	12,553	6.6%	90	78	11,824	11,165	675	587	788	722
New Jersey	1,979	1,704	16.1%	90	78	1,565	1,331	313	289	10	5
New York	5,936	5,573	6.5%	0	0	5,539	5,190	216	201	181	182
Pennsylvania	5,463	5,276	3.5%	0	0	4,720	4,644	145	96	597	535
East North Central	27,577	25,677	7.4%	3,475	3,158	22,402	20,778	212	205	1,489	1,537
Illinois	10,607	9,932	6.8%	32	33	10,571	9,895	NM	4	0	0
Indiana	4,934	4,969	-0.7%	373	293	4,476	4,588	19	19	66	69
Michigan	6,984	6,332	10.3%	1,791	1,684	4,476	3,873	125	137	592	638
Ohio	2,162	1,791	20.7%	23	21	1,856	1,481	13	12	270	277
Wisconsin	2,891	2,652	9.0%	1,257	1,127	1,023	941	50	33	561	552
West North Central	67,227	56,189	19.6%	21,728	19,333	44,701	36,066	159	158	639	632
Iowa	18,930	17,879	5.9%	12,199	11,253	6,651	6,529	41	47	39	50
Kansas	16,862	12,945	30.3%	1,594	774	15,266	12,171	NM	0	0	0
Minnesota	12,254	10,388	18.0%	2,718	2,718	8,897	7,046	46	49	593	574
Missouri	1,882	1,162	62.0%	37	39	1,788	1,075	53	45	3	3
Nebraska	4,730	3,357	40.9%	233	245	4,481	3,095	16	17	0	0
North Dakota	9,766	7,158	36.4%	4,064	3,424	5,698	3,729	0	0	5	5
South Dakota	2,803	3,301	-15.1%	882	880	1,921	2,421	0	0	0	0
South Atlantic	29,104	23,166	25.6%	3,126	2,027	15,702	11,240	336	465	9,941	9,434
Delaware	121	112	8.1%	7	6	93	85	6	6	14	15
District of Columbia	42	48	-12.6%	0	0	42	48	0	0	0	0
Florida	5,215	4,410	18.2%	659	231	2,682	2,307	46	46	1,828	1,825
Georgia	6,491	4,912	32.2%	259	92	2,533	1,307	NM	6	3,695	3,508
Maryland	1,227	1,151	6.5%	9	9	1,093	1,020	18	21	107	101
North Carolina	8,073	5,419	49.0%	357	195	6,355	3,896	130	180	1,230	1,149
South Carolina	2,548	2,189	16.4%	395	377	485	377	0	0	1,669	1,435
Virginia	3,933	3,715	5.9%	1,439	1,117	965	989	132	207	1,398	1,401
West Virginia	1,455	1,210	20.2%	0	0	1,455	1,210	0	0	0	0
East South Central	6,134	5,872	4.5%	125	93	739	469	6	3	5,264	5,307
Alabama	3,262	3,079	5.9%	26	0	410	266	0	0	2,826	2,813
Kentucky	422	437	-3.5%	99	93	6	12	0	0	316	331
Mississippi	1,427	1,399	2.0%	0	0	83	9	0	0	1,344	1,390
Tennessee	1,023	956	6.9%	0	0	239	181	6	3	778	772
West South Central	91,371	76,840	18.9%	1,603	1,563	84,886	70,300	76	81	4,805	4,897
Arkansas	1,387	1,265	9.6%	NM	1	127	121	6	4	1,251	1,139
Louisiana	2,557	2,656	-3.7%	0	0	74	74	0	0	2,483	2,581
Oklahoma	22,486	18,564	21.1%	1,362	1,306	20,873	16,943	0	0	251	315
Texas	64,941	54,355	19.5%	239	255	63,811	53,161	70	76	820	862
Mountain	39,534	34,410	14.9%	3,404	3,134	35,701	30,798	129	122	300	355
Arizona	5,264	4,212	25.0%	575	470	4,668	3,720	21	22	0	0
Colorado	9,686	9,181	5.5%	287	109	9,373	9,053	23	16	3	3
Idaho	3,192	2,853	11.9%	10	10	2,896	2,501	11	10	275	331
Montana	1,968	1,915	2.8%	203	204	1,745	1,693	0	0	19	18
Nevada	7,056	6,306	11.9%	38	48	6,953	6,198	63	57	2	2
New Mexico	5,178	3,935	31.6%	234	225	4,942	3,708	NM	2	0	0
Utah	3,226	2,181	47.9%	243	234	2,974	1,932	9	15	0	0
Wyoming	3,963	3,827	3.6%	1,813	1,834	2,150	1,993	0	0	0	0
Pacific Contiguous	67,061	63,372	5.8%	7,321	7,730	56,504	52,413	901	946	2,335	2,284
California	50,885	46,393	9.7%	2,043	2,062	47,368	42,867	856	902	618	562
Oregon	7,443	7,784	-4.4%	1,090	1,260	5,841	6,031	30	29	482	464
Washington	8,733	9,195	-5.0%	4,187	4,408	3,295	3,515	15	14	1,236	1,258
Pacific Noncontiguous	1,412	1,446	-2.3%	184	179	1,014	976	213	227	NM	64
Alaska	186	198	-6.2%	95	102	53	57	38	40	NM	0
Hawaii	1,226	1,247	-1.7%	89	77	961	919	175	188	0	63
U.S. Total	353,697	309,050	14.4%	41,841	38,096	282,385	241,793	2,895	2,965	26,577	26,196

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 1.12.A. Utility Scale Facility Net Generation from Hydroelectric (Pumped Storage) Power by State, by Sector, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	-41	-37	11.5%	0	0	-41	-37	0	0	0	0
Connecticut	0	1	-100.0%	0	0	0	1	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-41	-38	7.5%	0	0	-41	-38	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	-85	-88	-3.8%	-41	-40	-44	-48	0	0	0	0
New Jersey	-13	-13	-0.3%	-13	-13	0	0	0	0	0	0
New York	-28	-26	5.5%	-28	-26	0	0	0	0	0	0
Pennsylvania	-44	-48	-9.8%	0	0	-44	-48	0	0	0	0
East North Central	-63	-48	33.0%	-63	-48	0	0	0	0	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	-63	-48	33.0%	-63	-48	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	-5	-4	1.2%	-5	-4	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	-5	-4	1.2%	-5	-4	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	-204	-233	-12.3%	-204	-233	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	-89	-135	-34.3%	-89	-135	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	-37	-58	-35.2%	-37	-58	0	0	0	0	0	0
Virginia	-78	-40	95.2%	-78	-40	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-34	-45	-25.7%	-34	-45	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	-34	-45	-25.7%	-34	-45	0	0	0	0	0	0
West South Central	-7	-6	20.4%	-7	-6	0	0	0	0	0	0
Arkansas	0	0	35.1%	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-7	-6	21.0%	-7	-6	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-37	-26	41.1%	-37	-26	0	0	0	0	0	0
Arizona	-16	-8	109.5%	-16	-8	0	0	0	0	0	0
Colorado	-21	-18	12.5%	-21	-18	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	-3	-120	-97.4%	-3	-120	0	0	0	0	0	0
California	-3	-120	-97.8%	-3	-120	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	-1	0	60.3%	-1	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	-478	-607	-21.2%	-394	-522	-84	-85	0	0	0	0

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Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

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

by State, by Sector, Year-to-Date through November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	-398	-453	-12.0%	0	0	-398	-453	0	0	0	0
Connecticut	-2	3	-168.6%	0	0	-2	3	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-396	-456	-13.1%	0	0	-396	-456	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	-1,082	-1,121	-3.5%	-532	-612	-549	-508	0	0	0	0
New Jersey	-146	-189	-22.6%	-146	-189	0	0	0	0	0	0
New York	-386	-424	-8.8%	-386	-424	0	0	0	0	0	0
Pennsylvania	-549	-508	8.1%	0	0	-549	-508	0	0	0	0
East North Central	-626	-694	-9.8%	-626	-694	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	-626	-694	-9.8%	-626	-694	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	101	195	-48.4%	101	195	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	101	195	-48.4%	101	195	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	-3,245	-2,859	13.5%	-3,245	-2,859	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	-1,163	-851	36.6%	-1,163	-851	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	-915	-913	0.2%	-915	-913	0	0	0	0	0	0
Virginia	-1,167	-1,094	6.7%	-1,167	-1,094	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-637	-662	-3.7%	-637	-662	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	-637	-662	-3.7%	-637	-662	0	0	0	0	0	0
West South Central	-90	-40	122.6%	-90	-40	0	0	0	0	0	0
Arkansas	20	39	-47.6%	20	39	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-110	-79	39.4%	-110	-79	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-328	-202	62.6%	-328	-202	0	0	0	0	0	0
Arizona	-29	68	-142.3%	-29	68	0	0	0	0	0	0
Colorado	-299	-270	10.8%	-299	-270	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	466	-99	-570.7%	466	-99	0	0	0	0	0	0
California	463	-97	-575.9%	463	-97	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	3	-2	-280.8%	3	-2	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	-5,839	-5,933	-1.6%	-4,891	-4,972	-948	-961	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 2017 are preliminary. Values for 2016 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 1.13.A. Utility Scale Facility Net Generation from Other Energy Sources by State, by Sector, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	153	155	-1.2%	0	0	133	138	8	6	12	11
Connecticut	51	49	5.4%	0	0	51	49	0	0	0	0
Maine	31	34	-10.3%	0	0	11	17	8	6	12	11
Massachusetts	67	68	-1.5%	0	0	67	68	0	0	0	0
New Hampshire	4	4	1.7%	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	201	191	5.2%	0	0	157	156	39	29	6	6
New Jersey	51	51	0.8%	0	0	33	34	13	11	6	6
New York	80	78	2.8%	0	0	61	59	19	18	0	0
Pennsylvania	70	63	11.7%	0	0	63	63	7	0	0	0
East North Central	75	81	-6.8%	1	-3	9	21	11	14	54	49
Illinois	24	36	-34.1%	0	0	-2	12	0	0	26	24
Indiana	25	21	19.8%	0	0	0	0	2	1	23	19
Michigan	22	24	-6.1%	0	0	11	9	9	13	2	2
Ohio	0	-4	-107.8%	0	-5	0	-1	0	0	1	1
Wisconsin	4	4	-8.9%	1	2	0	0	0	0	NM	3
West North Central	37	39	-4.0%	19	19	11	12	3	3	5	5
Iowa	0	0	-100.0%	0	0	0	0	0	0	0	0
Kansas	0	0	NM	0	0	0	0	0	0	0	0
Minnesota	32	34	-6.5%	14	15	11	12	3	3	4	4
Missouri	1	0	267.2%	1	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	NM	4	NM	NM	4	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	355	357	-0.5%	0	0	161	187	8	17	185	153
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	256	242	5.9%	0	0	109	114	0	0	147	128
Georgia	11	7	58.3%	0	0	0	0	0	0	11	7
Maryland	28	29	-4.9%	0	0	28	29	0	0	0	0
North Carolina	49	34	44.1%	0	0	23	19	0	0	26	15
South Carolina	2	4	-39.1%	0	0	1	1	0	0	2	3
Virginia	8	42	-79.7%	0	0	0	25	8	17	0	0
West Virginia	0	-1	-144.3%	0	0	0	-1	0	0	0	0
East South Central	6	6	1.0%	5	4	0	0	0	0	NM	1
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	5	4	13.3%	5	4	0	0	0	0	0	0
Mississippi	0	1	-100.0%	0	0	0	0	0	0	0	1
Tennessee	NM	1	NM	0	0	0	0	0	0	NM	1
West South Central	93	124	-24.8%	0	0	14	10	0	0	79	114
Arkansas	NM	0	NM	0	0	0	0	0	0	NM	0
Louisiana	50	66	-25.0%	0	0	0	0	0	0	50	66
Oklahoma	6	2	245.2%	0	0	5	1	0	0	0	0
Texas	37	56	-33.0%	0	0	9	8	0	0	28	47
Mountain	52	61	-15.0%	2	6	30	24	0	0	19	30
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	5	4	11.2%	0	0	1	1	0	0	3	3
Idaho	6	5	24.6%	0	0	0	0	0	0	6	5
Montana	29	23	24.0%	0	0	29	23	0	0	0	0
Nevada	3	2	52.8%	3	2	0	0	0	0	0	0
New Mexico	0	0	-362.9%	0	0	0	0	0	0	0	0
Utah	3	21	-84.6%	0	5	0	0	0	0	3	16
Wyoming	6	6	13.5%	0	0	0	0	0	0	6	6
Pacific Contiguous	69	74	-6.8%	0	0	22	26	0	0	47	49
California	61	66	-6.9%	0	0	14	18	0	0	47	49
Oregon	3	3	12.5%	0	0	4	3	0	0	0	0
Washington	4	5	-15.9%	0	0	5	5	0	0	0	0
Pacific Noncontiguous	30	24	20.7%	15	9	0	0	14	16	0	0
Alaska	0	0	-11.7%	0	0	0	0	0	0	0	0
Hawaii	30	25	20.5%	16	9	0	0	14	16	0	0
U.S. Total	1,071	1,111	-3.6%	42	35	538	573	83	85	408	418

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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 November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	1,665	1,704	-2.3%	0	0	1,462	1,517	81	78	122	109
Connecticut	499	533	-6.3%	0	0	499	533	0	0	0	0
Maine	360	345	4.2%	0	0	157	158	81	78	122	109
Massachusetts	761	781	-2.5%	0	0	761	781	0	0	0	0
New Hampshire	45	45	-0.8%	0	0	45	45	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	2,130	2,117	0.6%	0	0	1,653	1,698	416	358	61	62
New Jersey	527	552	-4.6%	0	0	334	361	132	129	61	62
New York	823	820	0.4%	0	0	624	633	199	188	0	0
Pennsylvania	780	745	4.8%	0	0	695	704	85	41	0	0
East North Central	800	1,020	-21.6%	12	-23	79	240	138	149	572	653
Illinois	235	393	-40.3%	0	0	-17	125	0	0	252	268
Indiana	279	345	-19.1%	0	0	0	0	18	18	262	327
Michigan	236	281	-15.8%	0	11	102	120	120	131	15	18
Ohio	0	-45	-99.2%	-3	-50	-6	-6	0	0	8	11
Wisconsin	50	45	11.0%	15	16	0	0	0	0	36	29
West North Central	411	434	-5.2%	195	215	135	128	31	30	50	61
Iowa	2	12	-80.3%	0	0	0	0	0	0	2	12
Kansas	4	0	NM	0	0	0	0	0	0	4	0
Minnesota	362	372	-2.6%	153	165	135	128	31	30	43	48
Missouri	4	9	-58.2%	4	9	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	39	41	-5.8%	39	41	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	3,909	4,328	-9.7%	0	0	1,922	2,193	115	188	1,872	1,947
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	2,811	2,868	-2.0%	0	0	1,337	1,328	0	0	1,474	1,539
Georgia	97	94	2.6%	0	0	0	0	0	0	97	94
Maryland	293	298	-1.7%	0	0	293	298	0	0	0	0
North Carolina	527	620	-15.0%	0	0	257	344	0	0	269	276
South Carolina	38	41	-6.4%	0	0	6	4	0	0	33	37
Virginia	143	418	-65.9%	0	0	27	230	115	188	0	0
West Virginia	0	-11	-104.3%	0	0	0	-11	0	0	0	0
East South Central	59	69	-14.1%	37	46	0	0	0	0	22	23
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	37	46	-18.9%	37	46	0	0	0	0	0	0
Mississippi	2	5	-61.4%	0	0	0	0	0	0	2	5
Tennessee	20	18	10.9%	0	0	0	0	0	0	20	18
West South Central	1,103	1,424	-22.5%	0	0	108	109	0	0	995	1,315
Arkansas	4	4	-2.9%	0	0	0	0	0	0	4	4
Louisiana	566	678	-16.5%	0	0	0	0	0	0	566	678
Oklahoma	42	26	62.6%	0	0	41	20	0	0	1	6
Texas	490	716	-31.5%	0	0	67	90	0	0	424	626
Mountain	598	678	-11.8%	28	51	319	314	0	0	251	314
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	52	49	6.5%	0	0	14	10	0	0	38	38
Idaho	62	59	4.0%	0	0	0	0	0	0	62	59
Montana	305	299	2.1%	0	0	305	299	0	0	0	0
Nevada	29	19	49.2%	29	19	0	0	0	0	0	0
New Mexico	-1	0	-317.3%	-1	0	0	0	0	0	0	0
Utah	112	192	-41.5%	0	31	0	4	0	0	112	156
Wyoming	40	60	-33.9%	0	0	0	0	0	0	40	60
Pacific Contiguous	858	690	24.3%	-4	-4	258	259	0	0	604	436
California	771	598	29.0%	-3	-4	170	165	0	0	604	436
Oregon	36	37	-3.7%	0	0	36	37	0	0	0	0
Washington	51	56	-7.4%	0	0	52	56	0	0	0	0
Pacific Noncontiguous	332	292	13.9%	162	101	2	11	168	180	0	0
Alaska	-3	-2	16.1%	-3	-2	0	0	0	0	0	0
Hawaii	335	294	13.9%	164	103	2	11	168	180	0	0
U.S. Total	11,866	12,755	-7.0%	430	385	5,939	6,468	949	983	4,549	4,918

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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, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	323	241	34.2%	21	17	299	222	3	2	0	0
Connecticut	NM	1	NM	0	0	NM	1	0	0	0	0
Maine	223	163	36.9%	0	0	223	163	0	0	0	0
Massachusetts	21	19	8.3%	NM	5	13	12	2	2	0	0
New Hampshire	38	35	8.8%	0	0	38	35	0	0	0	0
Rhode Island	16	3	392.5%	0	0	15	3	1	1	0	0
Vermont	25	20	26.2%	15	12	NM	8	0	0	0	0
Middle Atlantic	684	743	-7.9%	0	0	684	743	0	0	0	0
New Jersey	NM	2	NM	0	0	NM	2	0	0	0	0
New York	362	371	-2.4%	0	0	362	371	0	0	0	0
Pennsylvania	320	370	-13.3%	0	0	320	370	0	0	0	0
East North Central	2,463	2,340	5.3%	269	298	2,187	2,035	NM	1	NM	6
Illinois	1,107	1,095	1.1%	NM	1	1,106	1,094	NM	0	0	0
Indiana	509	477	6.7%	0	0	509	477	0	0	0	0
Michigan	525	498	5.4%	187	203	338	295	0	0	0	0
Ohio	157	123	27.8%	NM	1	150	116	0	0	NM	5
Wisconsin	165	147	12.3%	80	93	84	53	0	0	1	1
West North Central	6,956	5,816	19.6%	2,327	2,111	4,624	3,702	NM	3	0	0
Iowa	2,045	2,050	-0.3%	1,325	1,341	720	709	0	0	0	0
Kansas	1,598	1,222	30.7%	150	64	1,447	1,158	NM	0	0	0
Minnesota	1,082	958	12.9%	261	236	818	719	NM	3	0	0
Missouri	257	108	138.1%	0	0	257	108	0	0	0	0
Nebraska	530	336	57.9%	17	20	513	316	0	0	0	0
North Dakota	1,113	800	39.2%	468	356	645	444	0	0	0	0
South Dakota	331	342	-3.3%	106	94	225	248	0	0	0	0
South Atlantic	229	190	20.5%	0	0	229	190	1	1	0	0
Delaware	1	1	2.4%	0	0	0	0	1	1	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	49	54	-9.3%	0	0	49	54	0	0	0	0
North Carolina	28	0	--	0	0	28	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	151	135	11.5%	0	0	151	135	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	7,975	6,235	27.9%	143	153	7,828	6,079	4	4	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	2,116	1,719	23.1%	121	138	1,994	1,581	0	0	0	0
Texas	5,859	4,516	29.7%	22	15	5,834	4,498	4	4	0	0
Mountain	2,361	2,181	8.2%	253	214	2,108	1,967	NM	0	0	0
Arizona	43	44	-2.4%	0	0	43	44	0	0	0	0
Colorado	836	929	-10.0%	26	24	809	904	0	0	0	0
Idaho	233	234	-0.8%	0	0	233	234	0	0	0	0
Montana	216	205	5.8%	23	21	193	184	0	0	0	0
Nevada	28	23	18.9%	0	0	28	23	0	0	0	0
New Mexico	480	305	57.3%	0	0	480	305	NM	0	0	0
Utah	90	60	50.2%	0	0	90	60	0	0	0	0
Wyoming	436	381	14.4%	204	169	232	212	0	0	0	0
Pacific Contiguous	2,257	1,573	43.5%	474	411	1,782	1,161	0	0	0	0
California	1,038	528	96.5%	20	24	1,018	505	0	0	0	0
Oregon	500	439	14.0%	61	43	439	395	0	0	0	0
Washington	719	606	18.7%	394	344	325	261	0	0	0	0
Pacific Noncontiguous	69	83	-17.0%	NM	11	59	72	0	0	0	0
Alaska	16	17	-9.6%	NM	11	NM	6	0	0	0	0
Hawaii	53	66	-19.0%	0	0	53	66	0	0	0	0
U.S. Total	23,320	19,406	20.2%	3,497	3,215	19,803	16,173	13	11	NM	7

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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 November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	2,996	2,308	29.8%	204	219	2,765	2,065	26	24	2	1
Connecticut	NM	11	NM	0	0	NM	11	0	0	0	0
Maine	2,013	1,441	39.7%	0	0	2,013	1,441	0	0	0	0
Massachusetts	202	193	4.7%	51	53	130	120	19	18	2	1
New Hampshire	382	384	-0.5%	0	0	382	384	0	0	0	0
Rhode Island	137	16	770.4%	0	0	130	10	7	6	0	0
Vermont	251	264	-4.8%	152	166	99	99	0	0	0	0
Middle Atlantic	6,754	6,438	4.9%	0	0	6,753	6,437	0	0	1	1
New Jersey	18	18	0.3%	0	0	18	18	0	0	0	0
New York	3,653	3,402	7.4%	0	0	3,652	3,401	0	0	1	1
Pennsylvania	3,082	3,018	2.1%	0	0	3,082	3,018	0	0	0	0
East North Central	21,637	20,258	6.8%	2,570	2,536	19,005	17,665	8	7	54	51
Illinois	10,102	9,459	6.8%	11	11	10,087	9,443	NM	4	0	0
Indiana	4,209	4,362	-3.5%	0	0	4,209	4,361	1	1	0	0
Michigan	4,554	4,055	12.3%	1,715	1,676	2,839	2,379	0	0	0	0
Ohio	1,390	1,068	30.1%	NM	9	1,331	1,012	3	2	47	44
Wisconsin	1,382	1,315	5.1%	835	839	540	469	0	0	7	6
West North Central	64,166	53,914	19.0%	21,204	18,811	42,930	35,074	32	29	0	0
Iowa	18,747	17,650	6.2%	12,172	11,233	6,572	6,414	4	4	0	0
Kansas	16,807	12,889	30.4%	1,594	774	15,210	12,115	NM	0	0	0
Minnesota	9,728	8,657	12.4%	2,331	2,331	7,372	6,300	25	25	0	0
Missouri	1,695	1,004	68.8%	0	0	1,695	1,004	0	0	0	0
Nebraska	4,626	3,261	41.9%	162	169	4,464	3,091	0	0	0	0
North Dakota	9,762	7,153	36.5%	4,064	3,424	5,698	3,729	0	0	0	0
South Dakota	2,801	3,300	-15.1%	882	880	1,919	2,421	0	0	0	0
South Atlantic	2,346	1,666	40.8%	0	0	2,341	1,661	5	4	0	0
Delaware	5	4	0.4%	0	0	0	0	5	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	463	451	2.8%	0	0	463	451	0	0	0	0
North Carolina	423	0	--	0	0	423	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	1,455	1,210	20.2%	0	0	1,455	1,210	0	0	0	0
East South Central	30	34	-13.1%	0	0	30	34	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	30	34	-13.1%	0	0	30	34	0	0	0	0
West South Central	83,766	70,389	19.0%	1,592	1,538	82,136	68,808	38	44	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	22,217	18,231	21.9%	1,357	1,301	20,860	16,930	0	0	0	0
Texas	61,549	52,158	18.0%	235	237	61,276	51,878	38	44	0	0
Mountain	22,638	21,303	6.3%	2,301	2,146	20,326	19,150	NM	4	3	3
Arizona	552	493	12.0%	0	0	552	493	0	0	0	0
Colorado	8,655	8,548	1.3%	285	109	8,361	8,434	NM	1	3	3
Idaho	2,238	2,279	-1.8%	0	0	2,238	2,279	0	0	0	0
Montana	1,930	1,897	1.8%	203	204	1,727	1,693	0	0	0	0
Nevada	337	309	9.1%	0	0	337	309	0	0	0	0
New Mexico	4,099	3,229	26.9%	0	0	4,096	3,227	NM	2	0	0
Utah	865	722	19.8%	0	0	865	722	0	0	0	0
Wyoming	3,963	3,827	3.6%	1,813	1,834	2,150	1,993	0	0	0	0
Pacific Contiguous	26,019	26,780	-2.8%	5,417	5,825	20,592	20,944	5	6	5	5
California	13,035	12,744	2.3%	698	664	12,327	12,070	5	6	5	5
Oregon	6,103	6,668	-8.5%	1,026	1,193	5,077	5,474	0	0	0	0
Washington	6,882	7,369	-6.6%	3,694	3,968	3,188	3,401	0	0	0	0
Pacific Noncontiguous	739	757	-2.3%	95	102	644	655	0	0	0	0
Alaska	148	158	-6.7%	95	102	53	57	0	0	0	0
Hawaii	591	598	-1.2%	0	0	591	598	0	0	0	0
U.S. Total	231,089	203,847	13.4%	33,383	31,176	197,521	172,492	122	117	64	61

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

Table 1.15.A. Utility Scale Facility Net Generation from Biomass by State, by Sector, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	584	585	-0.2%	39	55	447	424	15	11	84	95
Connecticut	76	71	7.2%	0	0	76	71	0	0	0	0
Maine	224	205	9.4%	0	0	132	103	8	6	84	95
Massachusetts	95	95	0.1%	0	0	93	93	2	2	0	0
New Hampshire	147	157	-6.6%	29	29	114	125	4	3	0	0
Rhode Island	18	16	11.9%	0	0	18	16	0	0	0	0
Vermont	25	42	-40.6%	11	26	NM	16	0	0	0	0
Middle Atlantic	480	479	0.3%	0	0	364	379	47	37	69	63
New Jersey	79	79	0.0%	0	0	64	66	15	13	0	0
New York	192	197	-2.4%	0	0	155	162	20	19	17	15
Pennsylvania	209	203	3.0%	0	0	144	151	12	5	52	48
East North Central	494	462	6.9%	71	60	271	254	16	19	136	129
Illinois	41	39	3.1%	2	2	39	37	0	0	0	0
Indiana	35	36	-0.4%	23	24	4	4	2	2	6	6
Michigan	216	207	4.1%	0	0	150	133	10	14	56	61
Ohio	57	59	-2.4%	NM	0	36	38	1	1	20	20
Wisconsin	145	121	19.7%	46	33	41	41	4	3	54	43
West North Central	210	222	-5.4%	47	46	97	107	12	8	55	61
Iowa	18	24	-25.6%	NM	2	10	12	3	5	3	5
Kansas	5	5	-6.6%	0	0	5	5	0	0	0	0
Minnesota	166	181	-8.5%	35	37	78	86	2	3	51	55
Missouri	12	7	81.6%	NM	3	4	4	5	0	0	0
Nebraska	8	4	95.3%	7	3	0	0	1	1	0	0
North Dakota	NM	0	NM	0	0	0	0	0	0	NM	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	1,669	1,571	6.3%	161	84	591	581	17	36	900	870
Delaware	5	6	-4.4%	0	0	4	4	0	0	NM	1
District of Columbia	4	4	-4.7%	0	0	4	4	0	0	0	0
Florida	405	383	5.9%	7	8	244	207	4	4	149	164
Georgia	433	408	6.3%	0	0	95	67	0	0	339	340
Maryland	47	50	-6.0%	0	0	35	37	2	1	10	11
North Carolina	225	250	-10.2%	0	0	104	125	NM	12	119	114
South Carolina	213	193	10.5%	28	39	35	38	0	0	150	117
Virginia	336	277	21.3%	126	38	69	97	10	19	132	123
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	493	539	-8.5%	7	7	30	30	0	0	455	502
Alabama	290	288	0.5%	0	0	22	21	0	0	268	267
Kentucky	36	41	-11.8%	7	7	0	1	0	0	29	33
Mississippi	102	124	-17.0%	0	0	NM	1	0	0	102	123
Tennessee	64	86	-25.1%	0	0	7	7	0	0	57	79
West South Central	504	570	-11.7%	0	0	62	95	4	4	438	471
Arkansas	131	123	5.9%	0	0	10	10	1	0	120	113
Louisiana	225	256	-12.2%	0	0	7	7	0	0	218	249
Oklahoma	28	30	-7.0%	0	0	NM	1	0	0	27	29
Texas	120	160	-25.3%	0	0	44	77	3	4	73	80
Mountain	76	94	-19.2%	NM	1	56	58	2	2	17	33
Arizona	NM	19	NM	0	0	NM	19	0	0	0	0
Colorado	14	15	-9.0%	0	0	14	15	0	0	0	0
Idaho	29	45	-34.9%	NM	1	12	12	1	1	16	31
Montana	2	2	3.8%	0	0	0	0	0	0	2	2
Nevada	5	5	5.7%	0	0	5	5	0	0	0	0
New Mexico	1	1	-2.0%	0	0	1	1	0	0	0	0
Utah	6	7	-14.2%	0	0	5	6	1	1	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	744	724	2.8%	61	70	401	384	72	75	210	195
California	490	465	5.3%	13	23	356	337	68	71	53	34
Oregon	88	85	3.1%	5	5	36	36	3	3	44	42
Washington	166	173	-3.9%	43	42	10	11	2	1	112	119
Pacific Noncontiguous	21	38	-44.3%	2	4	0	5	19	20	0	8
Alaska	4	4	-2.4%	0	0	0	0	4	4	0	0
Hawaii	17	34	-49.4%	2	4	0	5	15	16	0	8
U.S. Total	5,274	5,282	-0.2%	390	328	2,318	2,316	202	213	2,365	2,427

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

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

by State, by Sector, Year-to-Date through November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	6,771	6,556	3.3%	508	564	5,094	4,888	156	142	1,014	963
Connecticut	777	786	-1.1%	0	0	777	786	0	0	0	0
Maine	2,671	2,513	6.3%	0	0	1,571	1,469	86	82	1,014	963
Massachusetts	1,093	1,097	-0.4%	0	0	1,067	1,071	26	26	0	0
New Hampshire	1,637	1,536	6.6%	267	283	1,328	1,221	42	32	0	0
Rhode Island	185	187	-1.4%	0	0	185	187	0	0	0	0
Vermont	409	437	-6.6%	241	281	166	155	2	2	0	0
Middle Atlantic	5,228	5,125	2.0%	0	0	3,958	3,976	503	442	768	707
New Jersey	853	895	-4.8%	0	0	698	743	155	152	0	0
New York	2,082	2,043	1.9%	0	0	1,691	1,665	210	199	180	180
Pennsylvania	2,294	2,187	4.9%	0	0	1,569	1,569	137	91	588	527
East North Central	5,328	5,090	4.7%	701	573	2,992	2,838	201	195	1,434	1,484
Illinois	453	427	6.0%	19	20	434	407	0	0	0	0
Indiana	387	397	-2.4%	257	263	46	47	18	19	66	69
Michigan	2,355	2,269	3.8%	0	0	1,638	1,494	125	137	592	638
Ohio	650	662	-1.7%	4	3	417	420	7	8	222	230
Wisconsin	1,483	1,335	11.1%	421	287	457	469	50	33	554	546
West North Central	2,297	2,232	2.9%	508	519	1,023	953	126	128	639	632
Iowa	175	229	-23.5%	20	20	79	115	38	43	39	50
Kansas	52	54	-3.1%	0	0	52	54	0	0	0	0
Minnesota	1,846	1,723	7.1%	383	386	850	739	21	24	593	574
Missouri	132	127	3.5%	35	36	43	45	52	43	3	3
Nebraska	87	93	-6.3%	71	76	0	0	16	17	0	0
North Dakota	5	5	-12.1%	0	0	0	0	0	0	5	5
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	18,019	17,156	5.0%	1,762	1,572	6,121	5,817	196	332	9,941	9,434
Delaware	60	62	-2.8%	0	0	46	47	0	0	14	15
District of Columbia	42	48	-12.6%	0	0	42	48	0	0	0	0
Florida	4,487	4,197	6.9%	74	80	2,542	2,249	43	43	1,828	1,825
Georgia	4,461	4,164	7.1%	0	0	765	653	0	3	3,695	3,508
Maryland	498	501	-0.6%	0	0	380	386	11	14	107	101
North Carolina	2,400	2,295	4.6%	0	0	1,160	1,082	10	65	1,230	1,149
South Carolina	2,463	2,185	12.7%	395	377	400	373	0	0	1,669	1,435
Virginia	3,607	3,703	-2.6%	1,293	1,115	785	980	132	207	1,398	1,401
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	5,685	5,728	-0.8%	82	82	339	339	0	0	5,264	5,307
Alabama	3,076	3,054	0.7%	0	0	249	241	0	0	2,826	2,813
Kentucky	404	426	-5.2%	82	82	6	12	0	0	316	331
Mississippi	1,353	1,399	-3.3%	0	0	9	9	0	0	1,344	1,390
Tennessee	852	848	0.4%	0	0	74	76	0	0	778	772
West South Central	5,601	5,757	-2.7%	0	19	760	806	36	35	4,805	4,897
Arkansas	1,359	1,242	9.4%	0	0	102	98	6	4	1,251	1,139
Louisiana	2,557	2,656	-3.7%	0	0	74	74	0	0	2,483	2,581
Oklahoma	265	328	-19.4%	0	0	13	13	0	0	251	315
Texas	1,421	1,532	-7.2%	0	19	571	620	30	31	820	862
Mountain	950	988	-3.8%	10	10	626	603	20	25	295	350
Arizona	219	195	12.4%	0	0	219	195	0	0	0	0
Colorado	152	147	3.6%	0	0	152	147	0	0	0	0
Idaho	422	485	-12.9%	10	10	126	133	11	10	275	331
Montana	19	18	5.7%	0	0	0	0	0	0	19	18
Nevada	55	50	8.7%	0	0	55	50	0	0	0	0
New Mexico	16	16	-0.2%	0	0	16	16	0	0	0	0
Utah	67	77	-12.4%	0	0	58	62	9	15	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	8,205	8,193	0.1%	674	705	4,455	4,393	773	825	2,304	2,271
California	5,406	5,450	-0.8%	124	208	3,968	3,911	728	781	586	549
Oregon	948	917	3.3%	57	57	379	367	30	29	482	464
Washington	1,851	1,825	1.4%	493	439	107	114	15	14	1,236	1,258
Pacific Noncontiguous	262	375	-30.1%	49	36	0	48	213	227	NM	64
Alaska	38	40	-4.1%	0	0	0	0	38	40	NM	0
Hawaii	224	335	-33.2%	49	36	0	48	175	188	0	63
U.S. Total	58,347	57,201	2.0%	4,293	4,080	25,368	24,661	2,223	2,351	26,463	26,108

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

Table 1.16.A. Utility Scale Facility Net Generation from Geothermal by State, by Sector, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
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	332	350	-4.9%	23	23	309	327	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	6	6	-10.6%	0	0	6	6	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	286	298	-4.1%	0	0	286	298	0	0	0	0
New Mexico	1	1	-29.1%	0	0	1	1	0	0	0	0
Utah	40	44	-8.9%	23	23	17	22	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	980	988	-0.8%	68	70	912	918	0	0	0	0
California	963	970	-0.6%	68	70	895	899	0	0	0	0
Oregon	17	19	-10.0%	0	0	17	18	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	21	26	-17.1%	0	0	21	26	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	21	26	-17.1%	0	0	21	26	0	0	0	0
U.S. Total	1,334	1,364	-2.2%	91	93	1,243	1,271	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 2017 are preliminary. Values for 2016 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

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

by State, by Sector, Year-to-Date through November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 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	3,549	3,547	0.1%	243	234	3,306	3,313	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	62	65	-5.3%	0	0	62	65	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	3,053	3,030	0.8%	0	0	3,053	3,030	0	0	0	0
New Mexico	11	13	-11.5%	0	0	11	13	0	0	0	0
Utah	423	439	-3.7%	243	234	179	205	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	10,804	10,594	2.0%	718	751	10,085	9,843	0	0	0	0
California	10,627	10,432	1.9%	717	747	9,911	9,684	0	0	0	0
Oregon	176	162	8.8%	2	4	175	158	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	230	231	-0.6%	0	0	230	231	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	230	231	-0.6%	0	0	230	231	0	0	0	0
U.S. Total	14,583	14,372	1.5%	961	985	13,622	13,387	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 2017 are preliminary. Values for 2016 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 1.17.A. Net Generation from Solar Photovoltaic by State, by Sector, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	196	154	27.4%	72	56	124	98	4	2	68	54	NM	55	NM	1	71	54	5	5	0	0	5	5	48	39
Connecticut	27	21	26.9%	4	2	23	19	0	0	3	2	9	8	0	0	9	8	1	1	0	0	1	1	13	11
Maine	NM	2	NM	NM	0	2	2	0	0	NM	0	1	1	0	0	1	1	0	0	0	0	0	0	1	1
Massachusetts	144	117	23.5%	59	48	85	69	NM	1	58	47	NM	44	NM	1	56	43	4	3	0	0	4	3	25	22
New Hampshire	5	3	47.0%	0	0	5	3	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	3	2
Rhode Island	NM	3	NM	NM	1	4	2	0	0	NM	1	2	1	0	0	2	1	0	0	0	0	0	0	2	1
Vermont	13	8	54.4%	8	5	5	4	NM	1	5	4	2	1	0	0	2	1	NM	0	0	0	NM	0	3	2
Middle Atlantic	267	225	18.7%	82	76	185	149	5	6	66	58	93	80	10	11	83	70	NM	10	NM	1	11	9	91	71
New Jersey	164	145	13.5%	64	61	100	84	5	6	50	44	61	56	9	10	52	46	NM	6	NM	0	7	5	42	33
New York	77	58	32.0%	13	10	64	48	0	0	13	9	NM	17	NM	0	24	17	1	1	0	0	1	1	40	31
Pennsylvania	26	22	18.0%	5	5	21	17	0	0	NM	4	NM	7	NM	0	8	6	NM	4	NM	1	3	3	10	7
East North Central	57	42	35.7%	37	29	20	13	13	5	23	23	NM	8	NM	0	12	8	1	NM	0	0	1	NM	7	5
Illinois	7	6	18.6%	3	4	4	2	0	0	3	4	3	1	0	0	3	1	NM	NM	0	0	NM	NM	1	1
Indiana	22	20	10.4%	19	19	2	1	7	3	12	15	1	0	0	0	1	0	0	NM	0	0	0	NM	1	1
Michigan	9	4	164.8%	6	1	4	2	6	1	0	0	2	1	0	0	2	1	NM	NM	0	0	NM	NM	1	1
Ohio	14	11	29.7%	7	5	7	6	NM	1	6	4	NM	4	NM	0	5	4	0	0	0	0	0	0	2	1
Wisconsin	NM	2	NM	NM	0	3	2	0	0	NM	0	1	1	0	0	1	1	1	NM	0	0	1	NM	1	1
West North Central	79	22	265.5%	55	4	24	17	NM	1	54	4	12	9	0	0	12	9	1	0	0	0	1	0	11	8
Iowa	NM	4	NM	NM	0	6	4	NM	0	NM	0	4	2	0	0	4	2	0	0	0	0	0	0	2	1
Kansas	NM	1	NM	NM	0	1	1	0	0	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Minnesota	51	3	NM	48	1	3	2	NM	0	48	1	1	1	0	0	1	1	0	0	0	0	0	0	2	1
Missouri	18	13	31.6%	5	3	13	11	0	0	5	2	7	6	0	0	6	6	0	0	0	0	0	0	6	5
Nebraska	NM	1	NM	NM	0	0	0	0	0	NM	0	0	NM	0	0	0	NM	0	NM	0	0	0	NM	0	0
North Dakota	0	0	8.4%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	NM	0	NM	NM	0	0	0	0	0	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Atlantic	720	434	65.8%	592	343	128	91	99	31	486	305	47	40	8	7	40	33	18	14	0	0	18	14	70	45
Delaware	NM	10	NM	NM	5	6	5	NM	1	NM	4	NM	2	NM	0	2	2	0	0	0	0	0	0	4	3
District of Columbia	4	3	36.6%	0	0	4	3	0	0	0	0	2	1	0	0	2	1	0	0	0	0	0	0	1	1
Florida	96	27	258.9%	71	10	25	16	45	6	26	4	NM	6	NM	0	7	6	1	0	0	0	1	0	18	10
Georgia	NM	135	NM	124	121	NM	NM	16	16	108	105	NM	NM	NM	0	NM	NM	NM	NM	0	0	NM	NM	NM	NM
Maryland	63	49	28.1%	19	14	45	35	NM	1	18	13	NM	12	NM	0	13	11	2	2	0	0	2	2	30	22
North Carolina	353	194	81.3%	339	182	14	12	23	7	309	169	16	15	7	6	9	8	0	0	0	0	0	0	5	4
South Carolina	19	4	382.1%	8	0	12	4	0	0	8	0	3	1	0	0	3	1	1	NM	0	0	1	NM	7	2
Virginia	34	12	177.7%	29	9	5	3	14	0	15	9	2	1	0	0	2	1	0	NM	0	0	0	NM	3	2
West Virginia	0	0	40.8%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East South Central	47	28	65.7%	38	20	9	8	4	1	33	19	NM	6	NM	0	6	5	0	0	0	0	0	0	3	2
Alabama	NM	14	NM	12	13	NM	1	NM	0	9	13	0	0	0	0	0	0	0	0	0	0	0	0	NM	0
Kentucky	4	2	51.1%	2	1	2	1	2	1	0	0	1	1	0	0	1	1	0	0	0	0	0	0	1	0
Mississippi	15	0	NM	14	0	1	0	0	0	14	0	1	0	0	0	1	0	NM	0	0	0	NM	0	0	0
Tennessee	15	11	33.9%	10	6	6	5	0	0	9	6	NM	4	NM	0	4	4	NM	0	0	0	NM	0	2	1
West South Central	211	112	88.6%	142	68	68	44	NM	1	141	67	17	10	0	0	17	10	0	0	0	0	0	0	51	34
Arkansas	2	3	-14.6%	2	2	1	0	NM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	NM
Louisiana	15	14	5.8%	0	0	15	14	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	14	13
Oklahoma	1	1	14.2%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NM
Texas	193	94	104.2%	140	65	53	29	NM	0	140	65	16	9	0	0	16	9	0	0	0	0	0	0	36	20
Mountain	938	921	1.8%	716	726	223	196	51	65	658	653	68	66	6	8	62	59	13	15	0	0	13	14	147	123
Arizona	348	321	8.7%	228	208	121	112	36	32	191	175	NM	32	NM	2	32	31	10	12	0	0	10	12	79	70
Colorado	90	87	3.2%	54	56	36	31	NM	0	53	54	NM	15	NM	2	14	13	0	0	0	0	0	0	21	18
Idaho	28	5	505.1%	27	4	1	1	0	0	27	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Montana	NM	1	NM	NM	0	1	1	0	0	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Nevada	259	278	-6.8%	233	253	26	25	2	4	227	244	NM	11	NM	4	6	7	2	2	0	0	2	2	18	17
New Mexico	77	101	-23.9%	61	89	16	12	13	30	48	59	6	5	0	0	6	5	0	0	0	0	0	0	10	8
Utah	132	128	2.8%	110	115	22	13	0	0	110	115	4	3	0	0	4	3	1	0	0	0	1	0	17	9
Wyoming	0	0	42.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NM
Pacific Contiguous	1,924	1,840	4.5%	1,194	1,254	730	586	30	35	1,154	1,210	181	134	7	9	174	125	NM	96	NM	1	121	95	435	366
California	1,896	1,826	3.8%	1,177	1,249	719	577	30	34	1,138	1,206	177	130	7	9	171	122	NM	96	NM	1	121	95	428	360
Oregon	23	11	111.6%	16	5	7	6	NM	0	16	5	3	3	0	0	3	3	1	1	0	0	1	1	3	3
Washington	4	3	28.6%	0	0	4	3	0	0	0	0	1	0	0	0	1	0	NM	0	0	0	NM	0	4	3
Pacific Noncontiguous	82	62	32.7%	13	7	68	54	3	3	10	4	26	20	0	0	26	20	0	0	0	0	0	0	42	35
Alaska	0	0	76.7%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawaii	82	62	32.7%	13	7	68	54	3	3	10	4	26	20	0	0	26	20	0	0	0	0	0	0	42	35
U.S. Total	4,520	3,840	17.7%	2,941	2,583	1,578	1,257	213	149	2,694	2,396	534	428	31	36	503	393	174	140	4	2	171	139	904	726

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 2017 are preliminary. Values for 2016 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 November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	3,240	2,323	39.5%	1,132	662	2,108	1,661	73	19	1,053	637	1,180	918	6	5	1,173	912	93	77	0	0	93	77	842	672
Connecticut	438	324	35.3%	55	23	384	301	3	2	51	20	145	122	0	0	145	122	20	15	0	0	20	15	219	165
Maine	48	27	74.0%	10	0	38	27	0	0	10	0	13	10	0	0	13	10	0	0	0	0	0	0	25	18
Massachusetts	2,377	1,755	35.5%	928	570	1,449	1,185	19	14	903	551	935	736	6	5	929	731	66	60	0	0	66	60	453	394
New Hampshire	82	48	71.6%	0	0	82	48	0	0	0	0	24	13	0	0	24	13	5	2	0	0	5	2	53	34
Rhode Island	68	41	64.3%	18	14	50	28	0	0	18	14	24	15	0	0	24	15	0	0	0	0	0	0	26	13
Vermont	227	127	78.7%	122	55	105	72	51	3	71	52	37	23	0	0	37	23	2	0	0	0	2	0	66	49
Middle Atlantic	4,438	3,392	30.8%	1,395	989	3,042	2,403	90	78	1,114	752	1,549	1,317	172	145	1,377	1,172	186	162	19	13	167	149	1,498	1,083
New Jersey	2,690	2,097	28.3%	1,108	791	1,582	1,306	90	78	849	570	996	901	158	137	837	764	107	85	10	5	97	80	648	463
New York	1,320	954	38.3%	201	127	1,119	827	0	0	195	124	414	300	6	3	408	297	13	12	0	0	13	12	697	518
Pennsylvania	428	341	25.6%	86	71	342	270	0	0	69	58	139	116	8	5	131	111	67	65	9	8	57	57	153	102
East North Central	954	568	68.0%	613	329	342	240	204	49	404	276	214	154	NM	2	211	152	20	13	2	2	19	11	112	78
Illinois	107	81	32.0%	52	46	55	35	2	2	50	44	35	23	0	0	35	23	0	0	0	0	0	0	19	12
Indiana	367	227	61.8%	337	211	30	16	116	30	221	180	14	7	0	0	14	7	1	1	0	0	1	1	15	8
Michigan	156	61	155.5%	76	8	80	53	76	8	0	0	50	29	0	0	50	29	1	1	0	0	1	1	29	23
Ohio	247	164	50.3%	122	61	125	103	10	8	108	49	97	82	NM	2	94	80	8	7	2	2	6	4	25	19
Wisconsin	78	35	120.9%	26	2	52	33	0	0	26	2	18	13	0	0	18	13	11	4	0	0	11	4	22	15
West North Central	1,118	304	267.7%	765	44	354	260	15	3	748	39	184	142	2	2	182	140	9	6	0	0	9	6	163	114
Iowa	92	56	63.3%	8	0	84	56	8	0	NM	0	52	34	0	0	52	34	3	2	0	0	3	2	29	19
Kansas	19	10	96.1%	3	2	16	8	0	0	3	2	5	2	0	0	5	2	0	0	0	0	0	0	11	6
Minnesota	735	43	NM	680	8	56	35	5	1	675	7	23	16	0	0	23	16	4	2	0	0	4	2	28	17
Missouri	246	188	31.1%	55	30	192	158	3	3	50	26	101	88	2	2	100	86	1	1	0	0	1	1	91	71
Nebraska	22	6	261.4%	17	4	5	3	0	0	17	4	2	1	0	0	2	1	0	0	0	0	0	0	3	2
North Dakota	0	0	12.8%	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	1	202.6%	NM	0	1	1	0	0	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Atlantic	10,432	5,453	91.3%	8,723	4,272	1,709	1,181	1,348	382	7,240	3,761	682	560	136	128	546	432	229	191	0	0	229	191	934	558
Delaware	143	109	31.9%	56	45	87	63	7	6	47	38	28	24	NM	1	27	22	5	4	0	0	5	4	56	37
District of Columbia	49	29	66.5%	0	0	49	29	0	0	0	0	27	14	0	0	27	14	0	0	0	0	0	0	21	15
Florida	984	329	198.6%	712	140	272	189	570	79	139	58	91	81	3	3	88	77	8	5	0	0	8	5	176	106
Georgia	2,242	931	140.8%	2,030	748	211	183	259	92	1,768	654	32	29	NM	2	28	26	168	144	0	0	168	144	15	12
Maryland	966	684	41.1%	265	199	701	485	9	9	249	184	203	169	6	7	197	162	31	33	0	0	31	33	473	291
North Carolina	5,440	3,279	65.9%	5,250	3,123	191	156	357	195	4,772	2,814	242	220	121	115	121	105	7	4	0	0	7	4	63	47
South Carolina	215	36	491.7%	84	4	130	32	0	0	84	4	33	9	0	0	33	9	9	1	0	0	9	1	88	21
Virginia	387	50	674.9%	326	12	61	38	146	2	180	9	23	15	0	0	23	15	1	0	0	0	1	0	37	23
West Virginia	7	5	38.7%	0	0	7	5	0	0	0	0	2	1	0	0	2	1	0	0	0	0	0	0	5	4
East South Central	543	222	143.9%	419	109	124	114	43	11	370	95	92	84	6	3	86	81	1	1	0	0	1	1	36	32
Alabama	194	32	513.3%	186	24	8	7	26	0	161	24	5	5	0	0	5	5	0	0	0	0	0	0	2	2
Kentucky	42	30	39.5%	18	11	24	19	18	11	0	0	15	12	0	0	15	12	0	0	0	0	0	0	9	7
Mississippi	84	6	NM	74	0	10	6	0	0	74	0	6	4	0	0	6	4	0	0	0	0	0	0	3	2
Tennessee	223	155	44.0%	141	74	82	81	0	0	135	71	66	62	6	3	60	59	1	1	0	0	1	1	22	21
West South Central	2,872	1,243	131.0%	2,003	694	869	549	12	7	1,990	686	221	140	2	2	219	139	0	0	0	0	0	0	650	411
Arkansas	38	30	23.8%	28	24	10	7	NM	1	26	22	4	3	0	0	4	3	0	0	0	0	0	0	6	4
Louisiana	195	178	9.4%	0	0	195	178	0	0	0	0	8	6	0	0	8	6	0	0	0	0	0	0	187	172
Oklahoma	10	9	18.0%	5	5	5	4	5	5	0	0	1	1	0	0	1	1	0	0	0	0	0	0	4	3
Texas	2,629	1,026	156.2%	1,971	665	658	361	5	0	1,964	663	208	131	2	2	206	129	0	0	0	0	0	0	452	232
Mountain	14,500	10,295	40.8%	11,539	7,707	2,960	2,587	849	743	10,587	6,868	900	912	100	94	799	818	167	192	2	2	165	189	1,996	1,580
Arizona	5,442	4,402	23.6%	3,794	2,903	1,649	1,499	575	470	3,198	2,411	453	462	21	22	432	440	130	159	0	0	130	159	1,086	900
Colorado	1,374	919	49.5%	879	486	495	433	NM	0	860	472	214	196	17	15	197	181	3	2	0	0	3	2	295	250
Idaho	486	33	NM	471	24	15	9	0	0	471	24	4	3	0	0	4	3	0	0	0	0	0	0	11	6
Montana	33	10	214.7%	19	0	14	10	0	0	19	0	4	3	0	0	4	3	0	0	0	0	0	0	10	7
Nevada	3,780	3,024	25.0%	3,454	2,674	326	350	38	48	3,351	2,566	96	148	63	57	34	91	25	24	2	2	23	21	270	238
New Mexico	1,239	822	50.8%	1,051	677	187	144	234	225	818	452	69	59	0	0	69	59	1	1	0	0	1	1	117	84
Utah	2,141	1,081	98.0%	1,871	943	269	138	0	0	1,871	943	58	40	0	0	58	40	7	6	0	0	7	6	204	92
Wyoming	4	3	35.3%	0	0	4	3	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	3	2
Pacific Contiguous	30,027	23,392	28.4%	19,759	15,449	10,268	7,944	512	449	19,098	14,877	2,416	1,782	123	115	2,294	1,667	1,703	1,315	27	8	1,676	1,307	6,298	4,970
California	29,526	23,122	27.7%	19,542	15,411	9,983	7,711	505	443	18,888	14,845	2,322	1,701	123	115	2,199	1,586	1,689	1,302	27	8	1,662	1,294	6,123	4,831
Oregon	389	183	111.9%	216	37	173	146	6	6	210	32	76	68	0	0	76	68	14	13	0	0	14	13	82	65
Washington	113	87	29.5%	0	1	112	86	0	1	0	0	18	13	0	0	18	13	0	0	0	0	0	0	94	73
Pacific Noncontiguous	1,075	789	36.2%	181	83	894	707	41	41	140	42	331	259	0	0	331	259	2	2	0	0	2	2	561	446
Alaska	2	1	51.8%	0	0	2	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
Hawaii	1,073	788	36.2%	181	83	893	705	41	41	140	42	330	258	0	0	330	258	2	2	0	0	2	2	560	445
U.S. Total	69,201	47,983	44.2%	46,530	30,337	22,670	17,645	3,187	1,783	42,744	28,032	7,768	6,267	549	496	7,219	5,771	2,411	1,958	50	26	2,361	1,932	13,090	9,942

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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, November 2017 and 2016 (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	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
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	2	4	-64.9%	2	4	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	2	4	-64.9%	2	4	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	35	40	-12.5%	0	0	35	40	0	0	0	0
Arizona	31	35	-12.8%	0	0	31	35	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	4	5	-10.7%	0	0	4	5	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	95	140	-32.3%	0	0	95	140	0	0	0	0
California	95	140	-32.3%	0	0	95	140	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	131	184	-28.8%	2	4	130	180	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 2017 are preliminary. Values for 2016 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 November 2017 and 2016 (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	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 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	16	73	-78.2%	16	73	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	16	73	-78.2%	16	73	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	857	864	-0.8%	0	0	857	864	0	0	0	0
Arizona	700	622	12.6%	0	0	700	622	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	157	242	-35.3%	0	0	157	242	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	2,274	2,356	-3.5%	0	0	2,274	2,356	0	0	0	0
California	2,274	2,356	-3.5%	0	0	2,274	2,356	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	3,147	3,293	-4.4%	16	73	3,131	3,220	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 2017 are preliminary. Values for 2016 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 2.1.A. Coal: Consumption for Electricity Generation, by Sector, 2007-November 2017 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	1,046,795	764,765	276,581	361	5,089
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
Year 2015					
January	71,384	50,757	20,271	18	338
February	67,136	47,845	18,954	19	318
March	58,367	42,202	15,797	17	351
April	48,543	36,037	12,193	12	302
May	57,153	42,814	14,005	10	323
June	68,982	50,592	18,017	14	359
July	76,570	56,202	19,977	14	376
August	73,810	54,023	19,408	12	368
Sept	64,823	46,706	17,746	10	360
October	53,659	39,023	14,309	11	317
November	48,943	35,427	13,209	12	295
December	50,224	37,878	12,041	14	292
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	63,391	46,761	16,354	12	265
February	47,879	35,522	12,112	10	235
March	48,699	35,716	12,738	9	235
April	44,210	31,495	12,507	5	202
May	50,710	37,277	13,209	6	219
June	58,886	43,798	14,855	7	226
July	69,807	52,067	17,495	8	237
August	65,877	49,106	16,528	8	235
Sept	54,700	39,430	15,035	8	227
October	50,172	36,285	13,644	7	236
November	50,897	35,844	14,817	7	229
Year to Date					
2015	689,370	501,628	183,886	149	3,707
2016	612,524	449,135	160,535	99	2,755
2017	605,227	443,301	159,293	87	2,546
Rolling 12 Months Ending in November					
2016	662,748	487,013	172,576	113	3,047
2017	670,074	490,359	176,805	99	2,812

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 2016 and prior years are final. Values for 2017 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, 2007-November 2017 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	22,810	0	3,795	1,566	17,449
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
Year 2015					
January	1,649	99	197	79	1,275
February	1,505	96	166	78	1,165
March	1,494	94	178	67	1,155
April	1,296	76	144	43	1,034
May	1,335	75	165	40	1,055
June	1,327	87	172	47	1,022
July	1,451	86	187	50	1,129
August	1,345	71	176	45	1,052
Sept	1,301	75	155	40	1,031
October	1,245	81	145	41	979
November	1,321	99	145	47	1,030
December	1,363	95	151	58	1,059
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	1,503	290	137	54	1,020
February	1,227	208	124	44	852
March	1,357	225	146	49	937
April	1,216	212	103	35	866
May	1,221	206	101	34	880
June	1,208	219	82	39	868
July	1,223	264	104	45	811
August	1,244	264	110	40	830
Sept	1,152	216	94	39	803
October	1,274	225	101	36	913
November	1,348	290	102	42	913
Year to Date					
2015	15,269	937	1,829	577	11,927
2016	15,071	2,678	1,200	508	10,685
2017	13,972	2,619	1,203	458	9,692
Rolling 12 Months Ending in November					
2016	16,434	2,773	1,351	567	11,744
2017	15,487	2,920	1,339	522	10,707

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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 2016 and prior years are final. Values for 2017 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, 2007-November 2017 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	1,069,606	764,765	280,377	1,927	22,537
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
Year 2015					
January	73,033	50,856	20,467	97	1,613
February	68,640	47,941	19,120	97	1,483
March	59,861	42,297	15,975	83	1,506
April	49,840	36,112	12,337	54	1,336
May	58,488	42,889	14,171	50	1,378
June	70,309	50,678	18,189	61	1,381
July	78,021	56,288	20,164	64	1,505
August	75,156	54,094	19,584	58	1,420
Sept	66,124	46,780	17,901	51	1,391
October	54,904	39,104	14,453	52	1,296
November	50,264	35,526	13,353	59	1,325
December	51,587	37,973	12,192	72	1,350
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	64,894	47,052	16,491	66	1,285
February	49,106	35,730	12,236	54	1,087
March	50,055	35,941	12,884	58	1,172
April	45,426	31,707	12,611	40	1,068
May	51,931	37,483	13,310	40	1,098
June	60,094	44,017	14,937	46	1,094
July	71,029	52,330	17,598	53	1,047
August	67,121	49,370	16,638	49	1,065
Sept	55,852	39,646	15,129	47	1,030
October	51,446	36,510	13,744	43	1,149
November	52,245	36,134	14,919	50	1,142
Year to Date					
2015	704,639	502,565	185,714	726	15,634
2016	627,596	451,813	161,735	607	13,440
2017	619,199	445,920	160,496	545	12,238
Rolling 12 Months Ending in November					
2016	679,183	489,785	173,927	680	14,790
2017	685,562	493,278	178,144	621	13,518

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 2016 and prior years are final. Values for 2017 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, 2007-November 2017 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	82,433	56,910	22,793	250	2,480
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
Year 2015					
January	3,293	2,061	1,135	33	64
February	8,589	3,547	4,845	93	103
March	1,785	1,243	472	18	53
April	1,522	1,232	222	14	54
May	1,697	1,251	376	15	55
June	1,745	1,380	296	14	56
July	1,995	1,480	453	16	45
August	1,801	1,398	344	17	42
Sept	1,656	1,230	378	7	41
October	1,541	1,215	273	7	46
November	1,720	1,348	324	7	40
December	1,581	1,177	354	8	42
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	1,978	1,459	453	20	45
February	1,570	1,157	362	13	38
March	1,673	1,342	278	16	37
April	1,519	1,188	285	11	36
May	1,751	1,304	394	16	37
June	1,739	1,290	397	14	38
July	1,853	1,296	505	17	35
August	1,724	1,276	392	20	37
Sept	1,724	1,254	417	15	39
October	1,731	1,331	346	15	40
November	1,599	1,166	379	16	39
Year to Date					
2015	27,344	17,385	9,119	241	599
2016	20,410	14,727	5,094	96	493
2017	18,861	14,061	4,208	172	420
Rolling 12 Months Ending in November					
2016	21,991	15,904	5,449	104	535
2017	20,856	15,472	4,738	183	463

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 2016 and prior years are final. Values for 2017 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, 2007-November 2017 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	13,462	0	1,303	441	11,718
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
Year 2015					
January	324	7	99	43	175
February	595	46	175	116	259
March	261	1	89	25	146
April	239	0	80	17	142
May	232	0	82	18	132
June	218	1	79	14	123
July	231	1	102	15	113
August	203	1	88	16	98
Sept	199	1	90	2	106
October	225	1	98	3	124
November	203	1	85	7	110
December	210	1	90	5	114
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	207	12	39	39	117
February	136	8	19	29	81
March	138	4	10	30	94
April	137	3	11	16	108
May	160	3	14	20	123
June	148	5	15	15	113
July	125	3	14	17	90
August	138	3	12	19	103
Sept	120	4	14	15	87
October	145	4	18	17	106
November	174	4	21	23	126
Year to Date					
2015	2,932	61	1,065	277	1,529
2016	2,099	59	212	219	1,609
2017	1,628	54	187	240	1,147
Rolling 12 Months Ending in November					
2016	2,309	61	302	224	1,722
2017	1,806	63	220	265	1,258

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 2016 and prior years are final. Values for 2017 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, 2007-November 2017 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	95,895	56,910	24,097	691	14,198
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
Year 2015					
January	3,617	2,069	1,234	76	239
February	9,184	3,593	5,020	209	362
March	2,046	1,244	560	43	199
April	1,761	1,233	301	31	196
May	1,930	1,251	458	34	187
June	1,963	1,381	375	28	179
July	2,226	1,481	555	32	159
August	2,004	1,399	432	33	140
Sept	1,856	1,230	468	10	147
October	1,766	1,216	371	9	170
November	1,923	1,349	409	14	150
December	1,791	1,178	444	13	155
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	2,185	1,471	492	59	162
February	1,705	1,164	381	41	119
March	1,811	1,346	288	46	131
April	1,657	1,190	296	26	144
May	1,911	1,307	408	35	160
June	1,886	1,295	412	29	150
July	1,978	1,299	519	34	125
August	1,862	1,279	404	39	140
Sept	1,844	1,258	431	30	125
October	1,876	1,335	364	31	146
November	1,773	1,170	400	39	164
Year to Date					
2015	30,277	17,446	10,184	518	2,128
2016	22,509	14,786	5,306	315	2,102
2017	20,489	14,115	4,395	411	1,567
Rolling 12 Months Ending in November					
2016	24,300	15,964	5,750	328	2,257
2017	22,662	15,534	4,958	448	1,721

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 2016 and prior years are final. Values for 2017 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, 2007-November 2017 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	6,036	2,808	2,715	2	512
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
Year 2015					
January	402	312	56	0	33
February	413	332	56	0	25
March	275	195	60	0	20
April	300	213	59	0	28
May	339	260	59	0	20
June	306	233	55	0	18
July	409	333	59	0	17
August	388	311	58	0	18
Sept	376	294	61	0	21
October	300	227	57	0	16
November	260	178	62	0	20
December	276	232	26	0	18
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	355	301	40	0	13
February	263	217	33	0	13
March	272	214	39	0	18
April	153	110	29	0	13
May	320	264	38	0	18
June	341	282	40	0	19
July	333	271	39	0	23
August	283	226	39	0	19
Sept	261	209	36	0	16
October	222	171	36	0	15
November	267	234	13	0	19
Year to Date					
2015	3,768	2,888	643	2	235
2016	3,918	3,167	536	1	213
2017	3,070	2,500	382	2	186
Rolling 12 Months Ending in November					
2016	4,194	3,399	562	2	231
2017	3,406	2,760	437	3	206

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2016 and prior years are final. Values for 2017 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, 2007-November 2017 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	1,262	0	162	11	1,090
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
Year 2015					
January	109	0	10	2	96
February	99	1	9	2	88
March	101	1	9	2	89
April	106	1	9	1	95
May	96	1	10	0	86
June	91	2	9	0	81
July	81	1	9	0	71
August	87	0	9	2	77
Sept	98	0	8	2	88
October	84	0	8	2	73
November	106	3	10	2	92
December	86	0	10	1	75
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	74	0	10	2	62
February	63	0	10	1	52
March	84	1	10	2	72
April	71	0	10	1	60
May	76	1	10	1	65
June	92	1	9	1	81
July	79	1	10	0	68
August	85	2	9	2	71
Sept	74	1	9	2	62
October	83	1	9	1	72
November	71	1	9	1	60
Year to Date					
2015	1,058	9	99	15	935
2016	1,003	5	103	7	888
2017	853	10	106	13	725
Rolling 12 Months Ending in November					
2016	1,090	5	113	9	962
2017	948	10	116	14	808

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 2016 and prior years are final. Values for 2017 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.3.C. Petroleum Coke: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2007-November 2017 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	7,299	2,808	2,877	12	1,602
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
Year 2015					
January	510	313	66	3	129
February	513	332	65	2	113
March	376	196	69	2	109
April	406	213	68	2	123
May	435	261	69	0	105
June	398	235	63	0	99
July	490	334	68	0	88
August	475	311	67	2	95
Sept	475	294	69	2	109
October	384	227	65	2	89
November	365	181	72	2	111
December	362	232	36	2	93
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	429	301	50	2	75
February	326	218	42	1	65
March	356	215	50	2	90
April	224	110	39	1	73
May	397	265	48	1	83
June	433	283	49	1	100
July	412	272	49	0	91
August	368	228	48	2	90
Sept	335	211	45	2	78
October	305	172	45	2	87
November	338	235	22	1	79
Year to Date					
2015	4,826	2,896	742	17	1,171
2016	4,921	3,172	639	9	1,101
2017	3,923	2,509	488	15	911
Rolling 12 Months Ending in November					
2016	5,283	3,404	676	10	1,193
2017	4,354	2,770	553	17	1,014

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 2016 and prior years are final. Values for 2017 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.4.A. Natural Gas: Consumption for Electricity Generation, by Sector, 2007-November 2017 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	7,089,342	2,736,418	3,765,194	34,087	553,643
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
Year 2015					
January	745,235	347,151	338,575	5,254	54,254
February	676,139	331,550	293,466	4,643	46,480
March	736,500	348,019	335,606	5,168	47,707
April	692,199	329,693	312,160	4,864	45,483
May	765,715	361,501	350,073	5,514	48,627
June	922,461	447,079	416,030	6,221	53,131
July	1,084,120	510,084	509,399	7,336	57,301
August	1,064,683	496,826	503,679	7,235	56,943
Sept	930,090	432,653	437,222	6,696	53,518
October	824,878	380,830	386,725	5,943	51,380
November	767,336	366,510	342,625	5,470	52,732
December	807,219	393,358	351,123	5,748	56,990
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	664,173	330,006	283,390	3,856	46,921
February	571,073	281,778	244,837	3,448	41,011
March	738,794	366,258	325,245	3,831	43,459
April	642,696	327,657	269,357	3,161	42,522
May	725,983	376,050	303,709	3,446	42,778
June	873,003	438,895	386,270	3,774	44,064
July	1,101,510	557,516	493,179	4,173	46,642
August	1,082,389	541,590	492,095	4,169	44,535
Sept	883,227	443,720	394,688	3,898	40,921
October	797,995	399,415	353,498	3,719	41,363
November	684,892	344,124	293,932	3,527	43,309
Year to Date					
2015	9,209,356	4,351,897	4,225,560	64,344	567,555
2016	9,483,714	4,675,510	4,276,546	42,757	488,900
2017	8,765,736	4,407,010	3,840,201	41,001	477,525
Rolling 12 Months Ending in November					
2016	10,290,933	5,068,868	4,627,669	48,505	545,890
2017	9,452,132	4,750,393	4,135,030	44,548	522,162

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

Table 2.4.B. Natural Gas: Consumption for Useful Thermal Output, by Sector, 2007-November 2017 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	872,579	0	339,796	35,987	496,796
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
Year 2015					
January	79,075	582	25,015	4,250	49,227
February	73,005	615	22,712	3,906	45,772
March	80,319	512	24,594	4,013	51,201
April	73,041	598	21,826	3,220	47,398
May	72,919	629	22,283	3,475	46,532
June	74,850	589	22,777	3,582	47,901
July	82,339	727	25,332	4,138	52,143
August	83,543	935	25,150	3,973	53,485
Sept	78,210	731	24,437	4,076	48,965
October	78,745	688	23,297	3,788	50,972
November	77,684	713	22,566	3,845	50,561
December	81,369	743	23,382	4,021	53,223
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	101,598	3,789	30,607	7,624	59,578
February	91,951	3,216	26,550	6,512	55,672
March	98,597	3,353	29,331	6,529	59,384
April	90,082	3,046	26,033	5,443	55,560
May	90,628	2,954	26,119	5,558	55,997
June	93,512	3,423	27,809	6,090	56,191
July	99,963	4,078	29,271	6,544	60,071
August	97,633	3,905	29,164	6,394	58,171
Sept	93,655	3,643	26,806	5,997	57,210
October	95,155	3,585	27,351	6,130	58,089
November	95,169	3,260	27,266	6,154	58,489
Year to Date					
2015	853,730	7,317	259,989	42,266	544,157
2016	1,053,206	34,576	327,850	74,184	616,594
2017	1,047,943	38,252	306,306	68,974	634,412
Rolling 12 Months Ending in November					
2016	1,134,574	35,319	351,233	78,205	669,817
2017	1,146,603	41,772	335,360	75,732	693,739

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

Table 2.4.C. Natural Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2007-November 2017 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	7,961,922	2,736,418	4,104,991	70,074	1,050,439
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
Year 2015					
January	824,310	347,733	363,591	9,504	103,482
February	749,144	332,165	316,178	8,549	92,252
March	816,819	348,531	360,200	9,180	98,908
April	765,240	330,291	333,985	8,084	92,881
May	838,634	362,129	372,356	8,989	95,159
June	997,311	447,668	438,807	9,804	101,032
July	1,166,459	510,811	534,731	11,474	109,444
August	1,148,226	497,761	528,829	11,208	110,428
Sept	1,008,300	433,385	461,659	10,772	102,484
October	903,623	381,518	410,022	9,731	102,351
November	845,020	367,223	365,190	9,315	103,292
December	888,588	394,101	374,505	9,769	110,212
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	765,771	333,795	313,997	11,480	106,499
February	663,024	284,994	271,387	9,960	96,683
March	837,391	369,612	354,576	10,360	102,843
April	732,778	330,703	295,390	8,603	98,082
May	816,611	379,005	329,828	9,004	98,775
June	966,516	442,318	414,079	9,864	100,255
July	1,201,473	561,593	522,450	10,716	106,713
August	1,180,022	545,494	521,259	10,562	102,707
Sept	976,882	447,362	421,494	9,895	98,131
October	893,150	403,000	380,849	9,849	99,452
November	780,061	347,385	321,198	9,681	101,798
Year to Date					
2015	10,063,086	4,359,214	4,485,550	106,611	1,111,712
2016	10,536,919	4,710,087	4,604,397	116,941	1,105,494
2017	9,813,679	4,445,262	4,146,507	109,974	1,111,936
Rolling 12 Months Ending in November					
2016	11,425,507	5,104,188	4,978,902	126,710	1,215,707
2017	10,598,735	4,792,165	4,470,390	120,279	1,215,901

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, 2007-November 2017 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	166,774	17,442	144,104	4,598	630
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
Year 2015					
January	22,341	2,166	17,669	2,131	375
February	19,907	1,894	15,857	1,843	313
March	22,993	2,187	18,282	2,152	372
April	23,039	2,153	18,422	2,078	386
May	23,827	2,070	19,235	2,148	374
June	23,305	2,066	18,720	2,146	372
July	25,727	2,228	20,794	2,293	413
August	24,507	2,120	19,753	2,227	407
Sept	23,326	2,004	18,828	2,108	387
October	23,435	2,081	18,967	1,989	398
November	24,602	2,123	20,052	2,020	408
December	25,520	2,165	20,803	2,115	438
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	23,584	2,207	19,369	1,643	365
February	21,206	2,062	17,335	1,459	350
March	23,155	2,249	18,845	1,669	392
April	21,385	2,091	17,433	1,515	347
May	21,918	2,234	17,938	1,460	286
June	21,971	1,949	18,174	1,533	316
July	22,779	1,989	18,962	1,569	259
August	22,967	2,092	18,999	1,583	294
Sept	21,801	2,001	17,978	1,544	278
October	21,577	2,029	17,840	1,398	309
November	21,851	2,118	17,729	1,671	332
Year to Date					
2015	257,009	23,092	206,578	23,135	4,204
2016	249,047	22,239	204,602	18,692	3,515
2017	244,195	23,021	200,601	17,044	3,528
Rolling 12 Months Ending in November					
2016	274,568	24,404	225,404	20,807	3,953
2017	268,704	25,063	220,993	18,797	3,852

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, 2007-November 2017 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	1,988	0	386	1,102	501
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
Year 2015					
January	105	0	34	42	29
February	102	0	40	37	24
March	131	0	54	47	30
April	128	0	50	47	31
May	125	0	49	45	31
June	119	0	42	46	30
July	151	0	72	47	32
August	123	0	60	31	32
Sept	132	0	54	47	31
October	111	0	45	36	30
November	143	0	68	45	30
December	152	0	76	45	31
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	445	0	278	94	73
February	432	0	269	92	70
March	476	1	306	92	77
April	408	0	221	107	80
May	291	0	133	85	73
June	370	1	185	89	96
July	358	1	204	85	69
August	401	1	208	98	94
Sept	354	1	175	98	80
October	389	1	243	93	53
November	426	0	275	85	66
Year to Date					
2015	1,370	2	568	470	330
2016	3,776	3	2,108	942	723
2017	4,351	6	2,497	1,018	830
Rolling 12 Months Ending in November					
2016	3,928	3	2,184	987	754
2017	4,738	6	2,727	1,109	895

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 2016 and prior years are final. Values for 2017 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.5.C. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2007-November 2017 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	168,762	17,442	144,490	5,699	1,131
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
Year 2015					
January	22,445	2,166	17,702	2,173	404
February	20,009	1,894	15,897	1,881	337
March	23,125	2,187	18,336	2,199	401
April	23,167	2,153	18,473	2,125	417
May	23,952	2,070	19,283	2,193	405
June	23,424	2,066	18,763	2,192	403
July	25,877	2,228	20,865	2,340	445
August	24,630	2,120	19,813	2,258	439
Sept	23,458	2,004	18,881	2,155	418
October	23,546	2,081	19,012	2,025	428
November	24,746	2,124	20,120	2,064	438
December	25,672	2,165	20,878	2,160	469
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	24,029	2,207	19,647	1,738	438
February	21,637	2,062	17,604	1,551	420
March	23,631	2,250	19,152	1,761	469
April	21,793	2,091	17,654	1,621	427
May	22,210	2,235	18,071	1,546	359
June	22,342	1,950	18,359	1,622	411
July	23,137	1,990	19,166	1,653	328
August	23,369	2,093	19,207	1,681	388
Sept	22,155	2,001	18,153	1,643	358
October	21,966	2,030	18,083	1,491	362
November	22,277	2,119	18,004	1,756	398
Year to Date					
2015	258,380	23,094	207,146	23,605	4,534
2016	252,824	22,242	206,710	19,634	4,238
2017	248,545	23,027	203,098	18,062	4,358
Rolling 12 Months Ending in November					
2016	278,496	24,407	227,588	21,794	4,707
2017	273,442	25,069	223,720	19,906	4,747

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

Table 2.6.A. Biogenic Municipal Solid Waste: Consumption for Electricity Generation, by Sector, 2007-November 2017 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	19,576	553	17,116	1,785	122
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
Year 2015					
January	1,335	31	1,114	190	0
February	1,212	24	1,020	168	0
March	1,310	28	1,088	194	0
April	1,315	41	1,077	196	1
May	1,380	45	1,136	199	1
June	1,417	44	1,168	205	1
July	1,540	46	1,274	219	1
August	1,491	43	1,239	208	1
Sept	1,388	43	1,139	206	1
October	1,383	38	1,157	187	1
November	1,389	34	1,153	202	1
December	1,471	36	1,232	202	1
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	1,412	35	1,179	198	0
February	1,223	19	1,020	185	0
March	1,308	36	1,075	197	0
April	1,270	35	1,033	201	0
May	1,386	36	1,130	219	1
June	1,399	38	1,160	199	1
July	1,416	41	1,156	218	1
August	1,428	47	1,166	215	1
Sept	1,299	41	1,057	200	1
October	1,296	33	1,051	210	1
November	1,289	30	1,059	200	1
Year to Date					
2015	15,160	415	12,565	2,173	7
2016	15,518	425	12,733	2,349	11
2017	14,725	390	12,086	2,242	7
Rolling 12 Months Ending in November					
2016	16,989	462	13,965	2,551	12
2017	16,201	428	13,306	2,459	7

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

Table 2.6.B. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output, by Sector, 2007-November 2017 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	2,219	0	768	1,136	315
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
Year 2015					
January	180	0	67	95	19
February	147	0	48	83	16
March	172	0	59	96	17
April	162	0	53	92	17
May	164	0	49	99	16
June	154	0	47	90	17
July	170	0	55	99	17
August	164	0	55	91	18
Sept	162	0	49	95	18
October	169	0	57	94	17
November	166	0	56	96	14
December	174	0	61	96	17
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	191	0	72	99	20
February	160	0	64	84	12
March	176	0	75	82	19
April	161	0	69	74	18
May	171	0	69	84	18
June	172	0	68	88	16
July	173	0	72	84	17
August	183	0	77	84	22
Sept	143	0	63	63	17
October	143	0	59	66	18
November	155	0	64	76	15
Year to Date					
2015	1,812	0	595	1,030	186
2016	2,047	0	814	1,035	197
2017	1,827	0	751	885	191
Rolling 12 Months Ending in November					
2016	2,221	0	875	1,132	214
2017	2,012	0	822	983	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 2.6.C. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2007-November 2017 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	21,796	553	17,885	2,921	437
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
Year 2015					
January	1,515	31	1,181	284	19
February	1,359	24	1,068	250	16
March	1,482	28	1,147	290	18
April	1,477	41	1,130	289	17
May	1,544	45	1,185	298	17
June	1,571	44	1,214	296	18
July	1,710	46	1,329	318	18
August	1,655	43	1,294	299	19
Sept	1,551	43	1,188	301	19
October	1,551	38	1,215	281	18
November	1,555	34	1,209	297	15
December	1,645	36	1,293	298	18
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	1,604	35	1,251	298	20
February	1,383	19	1,084	269	12
March	1,483	36	1,150	279	19
April	1,431	35	1,102	276	18
May	1,556	36	1,198	303	19
June	1,570	38	1,228	287	17
July	1,589	41	1,228	302	18
August	1,612	47	1,243	299	23
Sept	1,441	41	1,120	262	18
October	1,439	33	1,110	276	19
November	1,444	30	1,123	276	15
Year to Date					
2015	16,971	415	13,159	3,203	193
2016	17,565	425	13,547	3,384	208
2017	16,552	390	12,837	3,127	199
Rolling 12 Months Ending in November					
2016	19,210	462	14,840	3,683	226
2017	18,213	428	14,128	3,443	215

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

Table 2.7.A. Wood / Wood Waste Biomass: Consumption for Electricity Generation, by Sector, 2007-November 2017 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	353,025	31,568	132,953	284	188,220
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
Year 2015					
January	36,170	4,203	15,139	53	16,775
February	33,328	3,574	14,696	51	15,007
March	33,569	3,459	14,639	41	15,430
April	31,142	2,361	13,300	48	15,433
May	32,373	3,394	13,359	54	15,567
June	33,871	3,817	14,521	25	15,508
July	36,954	4,615	15,335	62	16,942
August	37,027	4,529	15,927	30	16,541
Sept	33,522	3,464	14,011	42	16,005
October	30,952	3,269	12,065	42	15,577
November	32,840	3,484	13,457	20	15,880
December	34,900	3,750	14,939	35	16,176
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	31,706	3,909	13,533	56	14,208
February	29,797	3,477	12,653	50	13,617
March	32,848	4,094	14,372	26	14,356
April	29,061	3,047	12,331	34	13,650
May	30,150	3,583	12,937	43	13,587
June	31,698	3,694	13,829	38	14,138
July	34,231	3,839	15,149	41	15,202
August	34,458	3,818	15,424	41	15,175
Sept	29,567	3,091	13,202	15	13,258
October	32,050	3,893	14,393	33	13,731
November	31,331	3,512	13,877	41	13,901
Year to Date					
2015	371,750	40,169	156,449	469	174,664
2016	328,016	36,984	136,316	431	154,285
2017	346,897	39,956	151,701	417	154,823
Rolling 12 Months Ending in November					
2016	362,916	40,735	151,254	466	170,461
2017	378,864	44,008	164,901	459	169,496

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Table 2.7.B. Wood / Wood Waste Biomass: Consumption for Useful Thermal Output, by Sector, 2007-November 2017 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2007	982,486	0	21,435	1,756	959,296
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
Year 2015					
January	84,431	912	1,877	388	81,254
February	75,501	897	1,754	371	72,478
March	77,437	822	1,688	320	74,607
April	77,369	538	1,622	300	74,909
May	79,154	742	936	146	77,329
June	77,486	796	1,477	273	74,940
July	80,499	768	1,635	384	77,711
August	81,262	782	1,727	295	78,459
Sept	77,136	694	1,765	327	74,350
October	75,247	739	1,386	273	72,849
November	77,481	741	1,513	295	74,932
December	80,959	919	1,819	342	77,880
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	85,579	1,076	2,005	525	81,973
February	79,087	985	1,792	430	75,881
March	81,473	1,068	2,428	299	77,678
April	77,440	879	2,063	295	74,203
May	78,631	888	2,209	301	75,234
June	80,934	1,051	2,297	322	77,264
July	83,942	1,105	2,079	355	80,403
August	85,888	1,140	2,000	365	82,383
Sept	77,354	979	1,940	233	74,202
October	79,934	933	2,085	402	76,514
November	81,151	782	2,106	473	77,790
Year to Date					
2015	863,003	8,432	17,381	3,373	833,817
2016	869,431	9,736	20,746	4,119	834,829
2017	891,412	10,885	23,004	3,999	853,525
Rolling 12 Months Ending in November					
2016	950,389	10,655	22,564	4,461	912,709
2017	991,823	12,099	25,163	4,400	950,161

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 2016 and prior years are final. Values for 2017 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.8.A. Consumption of Coal for Electricity Generation by State, by Sector, November 2017 and November 2016 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	7	30	-77.0%	6	1	1	29	0	0	NM	0
Connecticut	0	1	-100.0%	0	0	0	1	0	0	0	0
Maine	1	1	-0.6%	0	0	1	1	0	0	NM	0
Massachusetts	0	27	-100.0%	0	0	0	27	0	0	0	0
New Hampshire	6	1	365.0%	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	1,835	1,906	-3.7%	0	0	1,826	1,892	0	0	9	14
New Jersey	38	35	7.3%	0	0	38	35	0	0	0	0
New York	18	7	148.0%	0	0	14	0	0	0	4	7
Pennsylvania	1,779	1,864	-4.5%	0	0	1,774	1,857	0	0	5	7
East North Central	11,485	9,670	19.0%	7,061	6,388	4,364	3,229	1	2	58	50
Illinois	3,065	2,008	53.0%	169	111	2,852	1,860	0	1	44	37
Indiana	2,670	2,431	9.8%	2,568	2,319	101	111	1	1	0	0
Michigan	1,819	1,780	2.2%	1,797	1,762	20	17	0	0	1	1
Ohio	2,030	1,967	3.2%	639	726	1,391	1,241	0	0	0	0
Wisconsin	1,902	1,482	28.0%	1,889	1,470	0	0	0	0	13	12
West North Central	9,156	8,337	9.8%	9,048	8,247	0	0	2	4	106	86
Iowa	1,003	867	16.0%	960	829	0	0	2	1	41	37
Kansas	901	1,036	-13.0%	901	1,036	0	0	0	0	0	0
Minnesota	1,320	1,180	12.0%	1,298	1,160	0	0	0	0	22	20
Missouri	2,879	2,376	21.0%	2,879	2,374	0	0	0	2	0	0
Nebraska	1,061	1,077	-1.5%	1,022	1,051	0	0	0	0	39	26
North Dakota	1,868	1,684	11.0%	1,865	1,681	0	0	0	0	3	3
South Dakota	124	116	7.1%	124	116	0	0	0	0	0	0
South Atlantic	5,680	6,241	-9.0%	4,739	5,440	924	778	1	1	15	22
Delaware	20	0	--	0	0	20	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,068	1,245	-14.0%	1,067	1,232	0	12	0	0	1	1
Georgia	970	1,136	-15.0%	968	1,133	0	0	0	0	3	3
Maryland	252	280	-9.7%	0	0	251	278	0	0	2	2
North Carolina	691	727	-4.9%	684	718	3	4	1	1	3	3
South Carolina	432	475	-9.1%	431	474	0	0	0	0	1	1
Virginia	322	298	8.1%	297	276	19	11	0	0	7	11
West Virginia	1,924	2,079	-7.5%	1,292	1,608	632	472	0	0	0	0
East South Central	4,214	5,064	-17.0%	4,029	4,790	174	262	0	0	12	12
Alabama	1,068	1,390	-23.0%	1,066	1,389	0	0	0	0	1	1
Kentucky	1,981	2,201	-10.0%	1,981	2,201	0	0	0	0	0	0
Mississippi	328	340	-3.6%	154	78	174	262	0	0	0	0
Tennessee	837	1,134	-26.0%	827	1,123	0	0	0	0	11	11
West South Central	10,144	8,803	15.0%	4,252	3,575	5,878	5,210	0	0	14	17
Arkansas	1,107	895	24.0%	865	661	241	234	0	0	1	1
Louisiana	486	393	24.0%	250	250	236	143	0	0	0	0
Oklahoma	830	922	-9.9%	730	820	87	85	0	0	13	17
Texas	7,720	6,593	17.0%	2,407	1,843	5,314	4,749	0	0	0	0
Mountain	7,713	7,606	1.4%	6,687	6,631	1,017	966	0	0	9	9
Arizona	1,491	1,196	25.0%	1,491	1,196	0	0	0	0	0	0
Colorado	1,363	1,431	-4.7%	1,363	1,431	0	0	0	0	0	0
Idaho	NM	1	NM	0	0	0	0	0	0	NM	1
Montana	881	868	1.5%	0	26	881	842	0	0	0	0
Nevada	53	41	29.0%	0	0	53	41	0	0	0	0
New Mexico	840	1,043	-19.0%	840	1,043	0	0	0	0	0	0
Utah	1,155	1,046	10.0%	1,117	1,008	38	38	0	0	0	0
Wyoming	1,929	1,979	-2.5%	1,876	1,927	45	45	0	0	8	8
Pacific Contiguous	560	318	76.0%	0	0	554	312	0	0	6	6
California	5	5	0.4%	0	0	0	0	0	0	5	5
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	555	312	78.0%	0	0	554	312	0	0	1	1
Pacific Noncontiguous	102	102	0.1%	NM	17	78	81	3	3	0	0
Alaska	37	34	7.8%	NM	17	12	14	3	3	0	0
Hawaii	66	68	-3.8%	0	0	66	68	0	0	0	0
U.S. Total	50,897	48,076	5.9%	35,844	35,090	14,817	12,758	7	10	229	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 2017 are preliminary. Values for 2016 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 November 2017 and November 2016 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	729	970	-25.0%	84	124	643	844	0	0	3	3
Connecticut	73	74	-0.9%	0	0	73	74	0	0	0	0
Maine	14	14	-4.6%	0	0	11	11	0	0	3	3
Massachusetts	559	759	-26.0%	0	0	559	759	0	0	0	0
New Hampshire	84	124	-32.0%	84	124	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	21,169	25,970	-18.0%	0	0	21,027	25,772	0	0	141	198
New Jersey	461	513	-10.0%	0	0	461	513	0	0	0	0
New York	272	725	-62.0%	0	0	198	627	0	0	74	97
Pennsylvania	20,436	24,733	-17.0%	0	0	20,369	24,632	0	0	67	101
East North Central	131,176	129,843	1.0%	80,545	78,750	49,961	50,449	16	22	653	622
Illinois	31,785	32,415	-1.9%	1,977	1,716	29,313	30,278	9	7	487	414
Indiana	31,991	32,485	-1.5%	30,826	30,909	1,157	1,562	7	10	0	3
Michigan	22,282	21,148	5.4%	22,069	20,916	198	202	0	4	15	26
Ohio	26,101	26,277	-0.7%	6,805	7,848	19,294	18,407	0	0	2	23
Wisconsin	19,017	17,518	8.6%	18,868	17,361	0	0	0	0	150	157
West North Central	105,606	103,018	2.5%	104,513	101,967	0	0	26	32	1,066	1,019
Iowa	13,190	12,691	3.9%	12,721	12,192	0	0	20	20	449	479
Kansas	11,326	13,163	-14.0%	11,326	13,163	0	0	0	0	0	0
Minnesota	12,257	12,061	1.6%	12,016	11,898	0	0	1	1	240	161
Missouri	36,016	32,439	11.0%	36,011	32,428	0	0	5	11	0	0
Nebraska	11,880	12,138	-2.1%	11,534	11,789	0	0	0	0	346	349
North Dakota	19,789	19,367	2.2%	19,757	19,337	0	0	0	0	31	31
South Dakota	1,149	1,159	-0.9%	1,149	1,159	0	0	0	0	0	0
South Atlantic	83,852	94,351	-11.0%	74,783	82,689	8,873	11,368	12	12	184	282
Delaware	156	220	-29.0%	0	0	156	220	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	15,798	16,187	-2.4%	15,726	15,831	48	326	0	0	24	30
Georgia	15,492	17,780	-13.0%	15,462	17,739	0	0	0	0	30	42
Maryland	3,277	5,431	-40.0%	0	0	3,260	5,414	0	0	17	17
North Carolina	12,311	13,569	-9.3%	12,235	13,453	35	69	10	10	30	36
South Carolina	6,893	7,808	-12.0%	6,888	7,784	0	0	0	0	4	23
Virginia	4,743	6,781	-30.0%	4,469	6,434	193	232	2	2	79	114
West Virginia	25,183	26,574	-5.2%	20,003	21,449	5,180	5,106	0	0	0	20
East South Central	56,440	63,291	-11.0%	54,097	60,297	2,199	2,810	0	0	145	184
Alabama	14,810	15,997	-7.4%	14,797	15,981	0	0	0	0	12	17
Kentucky	25,278	28,979	-13.0%	25,278	28,979	0	0	0	0	0	0
Mississippi	3,576	4,162	-14.0%	1,377	1,352	2,199	2,810	0	0	0	0
Tennessee	12,777	14,152	-9.7%	12,645	13,985	0	0	0	0	133	167
West South Central	117,313	108,385	8.2%	53,920	51,905	63,236	56,284	0	0	157	196
Arkansas	13,747	12,344	11.0%	12,034	10,045	1,705	2,291	0	0	7	8
Louisiana	7,738	7,665	0.9%	4,620	5,242	3,117	2,423	0	0	0	0
Oklahoma	10,323	10,975	-5.9%	9,214	9,693	960	1,093	0	0	149	188
Texas	85,505	77,402	10.0%	28,051	26,925	57,453	50,477	0	0	0	0
Mountain	83,774	82,009	2.2%	74,148	72,269	9,488	9,557	0	0	137	183
Arizona	15,580	14,984	4.0%	15,580	14,984	0	0	0	0	0	0
Colorado	15,201	14,985	1.4%	15,199	14,978	0	6	0	0	2	2
Idaho	5	6	-10.0%	0	0	0	0	0	0	5	6
Montana	8,328	8,474	-1.7%	217	228	8,110	8,243	0	0	2	2
Nevada	1,051	1,144	-8.1%	535	674	516	470	0	0	0	0
New Mexico	9,806	9,441	3.9%	9,806	9,441	0	0	0	0	0	0
Utah	11,296	10,870	3.9%	10,878	10,416	375	362	0	0	44	91
Wyoming	22,505	22,106	1.8%	21,933	21,549	488	476	0	0	84	81
Pacific Contiguous	4,106	3,572	15.0%	1,007	905	3,039	2,602	0	0	60	65
California	53	57	-7.0%	0	0	0	0	0	0	53	57
Oregon	1,007	905	11.0%	1,007	905	0	0	0	0	0	0
Washington	3,046	2,609	17.0%	0	0	3,039	2,602	0	0	7	8
Pacific Noncontiguous	1,063	1,116	-4.7%	205	229	825	851	32	33	0	3
Alaska	368	406	-9.4%	205	229	131	144	32	33	0	0
Hawaii	695	709	-2.1%	0	0	695	707	0	0	0	3
U.S. Total	605,227	612,524	-1.2%	443,301	449,135	159,293	160,535	87	99	2,546	2,755

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Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.9.A. Consumption of Petroleum Liquids for Electricity Generation by State, by Sector, November 2017 and November 2016 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	58	110	-47.0%	4	11	50	92	3	7	1	1
Connecticut	10	9	12.0%	1	1	9	8	NM	0	0	0
Maine	16	6	171.0%	0	0	15	5	1	1	1	0
Massachusetts	23	74	-69.0%	NM	1	21	68	NM	5	0	0
New Hampshire	5	3	52.0%	1	0	NM	2	2	1	0	0
Rhode Island	NM	15	NM	0	6	NM	9	0	0	0	0
Vermont	1	3	-75.0%	1	3	0	0	0	0	0	0
Middle Atlantic	89	73	22.0%	29	7	53	57	NM	2	5	7
New Jersey	NM	2	NM	NM	0	NM	2	0	0	0	0
New York	43	18	139.0%	29	7	10	6	NM	1	3	4
Pennsylvania	44	53	-18.0%	0	0	41	49	1	1	NM	3
East North Central	106	89	19.0%	58	51	45	36	0	1	4	1
Illinois	5	10	-50.0%	1	1	4	9	NM	0	0	0
Indiana	24	14	64.0%	20	13	0	0	0	0	3	1
Michigan	23	18	26.0%	22	17	0	0	0	0	NM	0
Ohio	50	44	14.0%	9	16	41	27	0	0	0	0
Wisconsin	5	3	103.0%	5	2	0	0	0	0	NM	0
West North Central	63	44	41.0%	59	44	NM	1	0	0	0	0
Iowa	15	7	109.0%	15	7	NM	0	0	0	0	0
Kansas	20	12	62.0%	20	12	0	0	0	0	0	0
Minnesota	8	3	160.0%	NM	3	NM	1	NM	0	0	0
Missouri	13	15	-12.0%	13	15	NM	0	0	0	0	0
Nebraska	NM	0	NM	NM	0	0	0	0	0	0	0
North Dakota	5	6	-18.0%	5	6	0	0	0	0	0	0
South Dakota	NM	0	NM	NM	0	0	0	NM	0	0	0
South Atlantic	204	235	-13.0%	146	209	44	19	9	1	6	6
Delaware	NM	2	NM	1	1	NM	1	0	0	0	0
District of Columbia	0	0	-100.0%	0	0	0	0	0	0	0	0
Florida	31	138	-78.0%	29	135	1	1	0	0	NM	2
Georgia	15	12	21.0%	9	8	NM	3	0	0	3	1
Maryland	19	8	132.0%	2	0	17	8	0	0	0	0
North Carolina	55	23	135.0%	53	21	NM	1	0	0	1	0
South Carolina	11	13	-21.0%	10	11	0	0	0	0	0	2
Virginia	48	21	126.0%	22	16	17	5	8	0	NM	0
West Virginia	19	16	18.0%	19	16	0	0	0	0	0	0
East South Central	46	49	-6.5%	45	48	NM	0	0	0	NM	1
Alabama	NM	3	NM	2	2	NM	0	0	0	NM	1
Kentucky	17	19	-13.0%	17	19	0	0	0	0	0	0
Mississippi	NM	0	NM	NM	0	0	0	0	0	0	0
Tennessee	25	26	-2.8%	25	26	0	0	0	0	0	0
West South Central	24	26	-9.0%	19	18	5	8	0	0	0	1
Arkansas	4	12	-66.0%	4	11	0	1	0	0	0	0
Louisiana	NM	2	NM	NM	2	0	0	0	0	0	0
Oklahoma	5	2	151.0%	5	2	0	0	0	0	0	0
Texas	12	11	13.0%	7	4	5	6	0	0	0	0
Mountain	27	33	-19.0%	26	31	1	2	0	0	0	0
Arizona	9	10	-6.9%	9	10	0	0	0	0	0	0
Colorado	2	4	-54.0%	2	4	0	0	0	0	0	0
Idaho	0	0	-25.0%	0	0	0	0	0	0	0	0
Montana	NM	2	NM	NM	0	1	2	0	0	0	0
Nevada	0	0	27.0%	0	0	0	0	0	0	0	0
New Mexico	8	4	73.0%	8	4	0	0	0	0	0	0
Utah	4	3	27.0%	4	3	0	0	0	0	0	0
Wyoming	3	10	-67.0%	3	10	0	0	0	0	0	0
Pacific Contiguous	8	7	8.9%	6	5	1	1	0	0	1	1
California	6	6	3.8%	5	5	0	0	0	0	NM	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	2	2	26.0%	NM	0	1	1	0	0	1	1
Pacific Noncontiguous	974	1,005	-3.1%	776	826	176	155	1	1	21	22
Alaska	122	168	-27.0%	116	160	0	0	1	0	4	8
Hawaii	852	837	1.8%	660	666	176	155	0	1	16	14
U.S. Total	1,599	1,672	-4.3%	1,166	1,249	379	372	16	11	39	40

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Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.9.B. Consumption of Petroleum Liquids for Electricity Generation by State, by Sector, Year-to-Date through November 2017 and November 2016 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	619	1,001	-38.0%	80	109	496	844	36	41	7	8
Connecticut	164	180	-8.8%	11	10	152	166	NM	2	0	1
Maine	114	214	-47.0%	0	0	102	202	6	6	6	6
Massachusetts	257	497	-48.0%	17	26	223	454	16	18	1	0
New Hampshire	51	59	-14.0%	37	42	NM	3	11	13	0	0
Rhode Island	23	41	-44.0%	5	21	NM	19	2	1	0	0
Vermont	11	10	4.1%	10	10	0	0	0	0	0	0
Middle Atlantic	1,235	1,701	-27.0%	421	579	737	1,050	23	21	54	51
New Jersey	62	101	-39.0%	1	2	60	98	0	1	NM	0
New York	726	1,038	-30.0%	419	576	259	415	13	13	34	34
Pennsylvania	448	562	-20.0%	0	2	417	537	10	7	20	17
East North Central	916	974	-5.9%	590	603	304	351	6	5	16	15
Illinois	85	124	-31.0%	15	16	70	107	NM	1	0	0
Indiana	195	185	5.8%	182	174	0	0	0	1	13	10
Michigan	214	232	-7.8%	209	229	0	0	4	3	1	1
Ohio	358	367	-2.3%	122	124	234	240	1	1	2	3
Wisconsin	63	67	-5.2%	62	61	1	4	0	0	1	1
West North Central	526	466	13.0%	507	448	16	14	2	2	1	2
Iowa	143	141	1.4%	141	139	2	2	0	0	0	0
Kansas	108	58	87.0%	108	58	0	0	0	0	0	0
Minnesota	74	56	31.0%	57	42	14	12	1	1	1	1
Missouri	107	138	-23.0%	107	138	NM	0	0	0	0	0
Nebraska	15	15	-1.5%	15	15	0	0	0	0	0	0
North Dakota	63	49	29.0%	63	48	0	0	0	0	0	1
South Dakota	17	9	87.0%	17	9	0	0	NM	0	0	0
South Atlantic	2,825	3,795	-26.0%	2,153	2,879	523	819	91	13	59	84
Delaware	59	109	-46.0%	2	16	57	93	0	0	0	0
District of Columbia	0	4	-100.0%	0	0	0	0	0	4	0	0
Florida	877	1,360	-36.0%	849	1,321	11	16	0	0	17	24
Georgia	181	200	-9.5%	131	127	27	44	4	3	19	26
Maryland	230	338	-32.0%	7	3	220	332	1	1	2	2
North Carolina	372	428	-13.0%	343	357	20	63	1	0	8	7
South Carolina	151	198	-24.0%	140	175	2	4	0	0	8	18
Virginia	767	964	-20.0%	493	695	183	258	85	3	5	7
West Virginia	189	193	-1.8%	187	184	2	9	0	0	0	0
East South Central	465	524	-11.0%	443	493	8	12	0	0	14	19
Alabama	60	72	-18.0%	41	46	7	11	0	0	12	15
Kentucky	170	198	-14.0%	170	198	0	0	0	0	0	0
Mississippi	21	30	-30.0%	20	28	0	0	0	0	1	2
Tennessee	214	224	-4.4%	212	222	1	0	0	0	1	2
West South Central	256	264	-3.1%	143	174	107	83	1	2	5	6
Arkansas	77	65	17.0%	34	48	41	14	0	0	2	3
Louisiana	19	28	-32.0%	19	25	0	3	0	0	0	0
Oklahoma	25	31	-18.0%	24	30	0	0	0	0	1	1
Texas	135	140	-3.3%	66	71	66	66	1	2	2	2
Mountain	372	396	-6.0%	335	344	37	42	0	0	0	10
Arizona	95	92	3.6%	95	92	0	0	0	0	0	0
Colorado	19	18	4.0%	19	18	0	0	0	0	0	0
Idaho	0	0	-75.0%	0	0	0	0	0	0	0	0
Montana	29	35	-18.0%	NM	1	28	34	0	0	0	0
Nevada	18	21	-14.0%	12	16	7	5	0	0	0	0
New Mexico	79	89	-11.0%	79	89	0	0	0	0	0	0
Utah	61	50	23.0%	58	47	2	3	0	0	0	0
Wyoming	70	91	-23.0%	70	81	0	0	0	0	0	9
Pacific Contiguous	135	171	-21.0%	84	68	28	30	1	1	23	72
California	86	137	-37.0%	63	58	8	14	0	0	15	65
Oregon	17	6	190.0%	17	6	0	0	0	0	0	0
Washington	32	28	17.0%	5	4	20	16	0	0	8	7
Pacific Noncontiguous	11,511	11,119	3.5%	9,306	9,030	1,953	1,850	12	12	241	226
Alaska	1,461	1,230	19.0%	1,391	1,170	0	0	5	2	66	58
Hawaii	10,050	9,889	1.6%	7,915	7,861	1,953	1,850	7	10	175	169
U.S. Total	18,861	20,410	-7.6%	14,061	14,727	4,208	5,094	172	96	420	493

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

Table 2.10.A. Consumption of Petroleum Coke for Electricity Generation by State, by Sector, November 2017 and November 2016 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
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	-5.3%	0	0	0	0	0	0	1	1
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	2	NM	0	0	0	0	0	0	NM	2
East North Central	56	62	-9.8%	48	24	0	31	0	0	8	7
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	49	27	84.0%	42	20	0	0	0	0	8	7
Ohio	0	31	-100.0%	0	0	0	31	0	0	0	0
Wisconsin	7	4	63.0%	7	4	0	0	0	0	0	0
West North Central	1	1	-39.0%	0	0	0	0	0	0	1	1
Iowa	1	1	-39.0%	0	0	0	0	0	0	1	1
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	26	18	46.0%	21	16	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	21	16	35.0%	21	16	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	31	-100.0%	0	31	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	31	-100.0%	0	31	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	169	176	-3.9%	164	169	0	0	0	0	5	7
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	165	173	-4.3%	164	169	0	0	0	0	1	4
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	4	3	14.0%	0	0	0	0	0	0	4	3
Mountain	13	15	-9.7%	0	0	13	15	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	13	15	-9.7%	0	0	13	15	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	1	-100.0%	0	0	0	0	0	0	0	1
California	0	1	-100.0%	0	0	0	0	0	0	0	1
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	267	307	-13.0%	234	239	13	46	0	0	19	21

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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 November 2017 and November 2016 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 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	21	-21.0%	0	0	0	0	0	0	17	21
New Jersey	6	6	16.0%	0	0	0	0	0	0	6	6
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	10	15	-35.0%	0	0	0	0	0	0	10	15
East North Central	767	915	-16.0%	466	458	235	391	0	0	67	67
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	159	-100.0%	0	159	0	0	0	0	0	0
Michigan	491	324	52.0%	424	264	0	1	0	0	67	58
Ohio	235	391	-40.0%	0	0	235	390	0	0	0	1
Wisconsin	42	42	-0.3%	42	35	0	0	0	0	0	7
West North Central	6	6	13.0%	0	0	0	0	2	1	4	4
Iowa	6	6	13.0%	0	0	0	0	2	1	4	4
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	332	726	-54.0%	308	703	0	0	0	0	24	23
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	308	703	-56.0%	308	703	0	0	0	0	0	0
Georgia	24	23	7.1%	0	0	0	0	0	0	24	23
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	166	408	-59.0%	166	408	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	166	408	-59.0%	166	408	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	1,635	1,682	-2.8%	1,560	1,598	0	0	0	0	74	85
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,592	1,636	-2.7%	1,560	1,598	0	0	0	0	31	39
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	43	46	-6.6%	0	0	0	0	0	0	43	46
Mountain	147	145	1.4%	0	0	147	145	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	147	145	1.4%	0	0	147	145	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	14	-100.0%	0	0	0	0	0	0	0	14
California	0	14	-100.0%	0	0	0	0	0	0	0	14
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	3,070	3,918	-22.0%	2,500	3,167	382	536	2	1	186	213

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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, November 2017 and November 2016 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	26,491	25,232	5.0%	216	61	25,432	24,412	376	376	467	383
Connecticut	10,418	10,187	2.3%	137	42	9,900	9,751	161	181	220	212
Maine	1,525	1,214	26.0%	0	0	NM	1,119	12	7	129	88
Massachusetts	9,436	7,804	21.0%	NM	18	9,066	7,560	181	163	111	64
New Hampshire	1,860	3,106	-40.0%	1	0	1,849	3,078	4	8	7	19
Rhode Island	3,251	2,921	11.0%	0	0	3,233	2,904	18	17	0	0
Vermont	1	2	-53.0%	1	2	0	0	0	0	0	0
Middle Atlantic	75,081	84,458	-11.0%	6,716	6,222	66,862	76,911	518	467	985	858
New Jersey	17,080	18,432	-7.3%	NM	159	16,677	18,104	90	58	162	111
New York	25,916	26,637	-2.7%	6,562	6,054	18,766	20,093	366	359	223	130
Pennsylvania	32,084	39,389	-19.0%	2	8	31,420	38,714	62	50	599	616
East North Central	61,540	59,634	3.2%	26,263	24,758	32,484	33,055	533	462	2,260	1,359
Illinois	6,984	8,549	-18.0%	NM	458	5,667	7,633	139	83	415	375
Indiana	11,792	13,453	-12.0%	8,550	10,999	2,018	2,088	74	77	1,150	289
Michigan	15,317	15,721	-2.6%	4,869	4,534	9,709	10,462	248	224	490	501
Ohio	19,760	15,588	27.0%	4,962	3,067	14,689	12,417	45	45	63	59
Wisconsin	7,687	6,323	22.0%	7,119	5,700	400	455	26	33	141	135
West North Central	12,795	10,062	27.0%	10,897	9,177	1,519	602	117	99	262	183
Iowa	2,256	959	135.0%	2,079	833	0	0	46	33	131	93
Kansas	1,741	1,402	24.0%	1,709	1,383	0	0	0	0	32	19
Minnesota	4,408	3,326	33.0%	3,595	2,919	713	344	31	30	69	34
Missouri	2,895	1,954	48.0%	2,036	1,649	NM	258	39	34	15	13
Nebraska	283	680	-58.0%	282	679	0	0	1	2	0	0
North Dakota	784	1,133	-31.0%	769	1,108	0	0	0	0	15	25
South Dakota	427	607	-30.0%	427	607	0	0	0	0	0	0
South Atlantic	184,031	165,238	11.0%	148,825	138,559	32,777	24,658	465	114	1,964	1,907
Delaware	2,669	3,915	-32.0%	9	47	2,271	3,436	0	0	388	432
District of Columbia	25	41	-41.0%	0	0	0	0	25	41	0	0
Florida	86,496	77,322	12.0%	80,157	71,166	5,720	5,538	10	11	609	607
Georgia	28,084	24,212	16.0%	20,832	20,502	6,987	3,460	0	0	265	249
Maryland	5,430	525	935.0%	0	0	4,978	445	412	48	40	32
North Carolina	23,179	23,797	-2.6%	21,916	22,127	1,198	1,623	11	9	55	39
South Carolina	10,070	13,616	-26.0%	8,493	8,905	1,509	4,690	0	1	68	20
Virginia	27,049	21,270	27.0%	17,291	15,707	9,375	5,211	7	4	375	348
West Virginia	1,031	540	91.0%	127	105	739	255	0	0	165	180
East South Central	68,141	59,647	14.0%	45,029	37,824	22,125	20,903	75	43	911	877
Alabama	30,098	29,983	0.4%	9,737	8,809	19,876	20,716	0	0	485	457
Kentucky	7,685	4,283	79.0%	7,287	4,042	307	182	0	0	91	59
Mississippi	24,992	21,447	17.0%	22,893	21,291	1,925	4	0	0	174	152
Tennessee	5,366	3,934	36.0%	5,112	3,682	17	1	75	43	161	208
West South Central	145,124	164,965	-12.0%	46,362	55,295	68,945	77,036	232	374	29,585	32,260
Arkansas	6,653	10,505	-37.0%	3,594	4,471	2,942	5,877	0	39	118	119
Louisiana	27,817	32,566	-15.0%	13,835	16,799	1,842	2,520	57	53	12,083	13,193
Oklahoma	15,152	21,400	-29.0%	9,597	14,288	5,365	7,013	0	0	190	100
Texas	95,502	100,495	-5.0%	19,335	19,738	58,796	61,627	175	282	17,195	18,848
Mountain	43,158	43,872	-1.6%	33,120	33,614	8,605	9,211	196	124	1,237	923
Arizona	12,819	12,161	5.4%	9,230	6,893	3,544	5,239	46	29	0	0
Colorado	6,372	5,526	15.0%	5,318	4,546	1,018	962	8	0	28	19
Idaho	1,655	827	100.0%	933	247	675	530	15	6	33	45
Montana	342	314	8.9%	302	264	37	49	0	0	2	1
Nevada	13,901	15,528	-10.0%	12,402	14,041	1,297	1,286	22	20	181	181
New Mexico	4,945	5,169	-4.3%	2,971	4,100	1,925	1,035	NM	34	1	0
Utah	2,635	3,848	-32.0%	1,873	3,419	109	110	59	35	594	285
Wyoming	488	498	-1.9%	90	106	0	0	0	0	398	392
Pacific Contiguous	66,231	63,402	4.5%	24,410	25,992	35,183	31,281	1,014	883	5,625	5,245
California	51,807	51,564	0.5%	17,043	18,564	28,240	26,965	991	863	5,534	5,171
Oregon	8,062	7,797	3.4%	3,274	4,280	4,730	3,465	14	15	44	37
Washington	6,362	4,041	57.0%	4,093	3,148	2,213	851	9	4	47	38
Pacific Noncontiguous	2,300	2,494	-7.8%	2,287	2,469	0	0	0	2	13	22
Alaska	2,300	2,494	-7.8%	2,287	2,469	0	0	0	2	13	22
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	684,892	679,004	0.9%	344,124	333,973	293,932	298,069	3,527	2,944	43,309	44,018

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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 November 2017 and November 2016 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	336,477	362,386	-7.1%	4,041	3,214	322,815	349,401	4,295	4,776	5,325	4,995
Connecticut	103,996	117,299	-11.0%	731	380	99,027	112,474	1,816	2,039	2,421	2,406
Maine	19,762	23,013	-14.0%	0	0	18,065	21,468	140	126	1,557	1,419
Massachusetts	148,621	145,834	1.9%	NM	2,371	142,456	140,189	2,076	2,298	1,174	976
New Hampshire	24,756	31,921	-22.0%	384	451	24,162	31,190	38	86	172	193
Rhode Island	39,328	44,303	-11.0%	0	0	39,105	44,080	222	224	0	0
Vermont	14	16	-14.0%	11	12	0	0	3	4	0	0
Middle Atlantic	1,028,747	1,179,307	-13.0%	85,873	103,824	926,867	1,059,220	5,731	6,015	10,276	10,249
New Jersey	249,974	294,978	-15.0%	NM	2,411	245,230	289,984	893	882	1,738	1,701
New York	364,863	420,793	-13.0%	83,699	101,318	274,977	313,053	4,213	4,568	1,974	1,854
Pennsylvania	413,909	463,536	-11.0%	60	94	406,660	456,183	625	565	6,564	6,694
East North Central	738,157	794,788	-7.1%	322,592	357,222	387,151	416,398	6,765	6,927	21,650	14,240
Illinois	141,002	140,997	0.0%	19,236	13,024	115,479	121,685	1,775	1,661	4,512	4,627
Indiana	130,593	139,233	-6.2%	103,059	112,756	16,704	22,934	903	935	9,928	2,608
Michigan	180,083	211,129	-15.0%	65,631	82,605	106,759	120,574	2,619	2,826	5,074	5,125
Ohio	195,949	194,871	0.6%	53,945	51,199	140,098	142,283	1,158	948	749	441
Wisconsin	90,530	108,557	-17.0%	80,721	97,638	8,111	8,923	311	558	1,387	1,439
West North Central	167,095	170,148	-1.8%	144,503	143,642	18,883	22,473	1,358	1,493	2,350	2,539
Iowa	26,160	20,937	25.0%	24,381	19,762	NM	0	428	434	1,350	741
Kansas	22,082	19,510	13.0%	21,888	19,246	0	0	0	0	194	264
Minnesota	52,504	62,765	-16.0%	43,531	50,346	7,947	10,701	458	558	568	1,160
Missouri	46,706	44,087	5.9%	35,162	31,680	10,936	11,772	462	489	146	146
Nebraska	5,256	5,633	-6.7%	5,246	5,612	0	0	10	13	0	9
North Dakota	8,465	10,057	-16.0%	8,372	9,837	0	0	0	0	92	220
South Dakota	5,922	7,159	-17.0%	5,922	7,159	0	0	0	0	0	0
South Atlantic	2,263,809	2,258,650	0.2%	1,828,711	1,810,740	406,819	422,293	5,791	5,632	22,488	19,984
Delaware	49,158	56,398	-13.0%	186	679	44,518	51,053	0	0	4,455	4,665
District of Columbia	567	559	1.4%	0	0	0	0	567	559	0	0
Florida	1,113,482	1,109,599	0.3%	1,032,542	1,007,297	73,898	95,059	123	160	6,919	7,083
Georgia	348,566	355,206	-1.9%	262,140	273,139	82,901	79,415	0	0	3,524	2,652
Maryland	52,840	52,626	0.4%	0	0	47,456	47,479	4,975	4,789	409	358
North Carolina	259,969	272,224	-4.5%	226,289	235,376	33,008	36,225	77	69	596	554
South Carolina	122,268	124,416	-1.7%	105,798	99,372	15,726	24,757	2	8	742	279
Virginia	303,513	276,799	9.7%	200,078	193,397	99,376	79,754	48	47	4,012	3,600
West Virginia	13,447	10,823	24.0%	1,678	1,480	9,937	8,551	0	0	1,832	793
East South Central	820,616	858,430	-4.4%	560,180	564,040	248,690	283,535	810	818	10,936	10,037
Alabama	348,386	373,526	-6.7%	121,137	110,555	221,507	257,363	0	0	5,742	5,609
Kentucky	78,986	61,905	28.0%	74,300	55,718	3,761	5,250	0	0	925	937
Mississippi	317,588	341,000	-6.9%	292,376	318,219	23,280	20,911	21	0	1,910	1,870
Tennessee	75,656	81,998	-7.7%	72,367	79,548	142	11	789	818	2,359	1,621
West South Central	2,047,919	2,331,863	-12.0%	690,199	840,810	1,023,907	1,134,143	3,487	4,359	330,325	352,550
Arkansas	117,041	124,861	-6.3%	47,604	52,816	68,168	70,385	0	409	1,269	1,251
Louisiana	376,365	449,528	-16.0%	217,826	264,914	28,120	41,778	540	688	129,879	142,148
Oklahoma	218,572	261,490	-16.0%	139,821	182,583	76,902	77,691	0	0	1,850	1,215
Texas	1,335,940	1,495,984	-11.0%	284,948	340,497	850,718	944,288	2,946	3,263	197,327	207,936
Mountain	616,379	693,629	-11.0%	471,788	514,551	130,653	165,592	2,032	2,126	11,905	11,360
Arizona	207,917	246,482	-16.0%	138,103	143,558	69,241	102,323	574	601	0	0
Colorado	86,577	86,238	0.4%	70,770	71,588	15,488	14,338	8	12	310	299
Idaho	18,787	22,270	-16.0%	10,784	12,799	7,342	8,737	157	158	503	577
Montana	4,684	5,046	-7.2%	3,783	4,217	884	811	0	0	16	18
Nevada	180,840	192,616	-6.1%	164,547	176,062	13,763	14,078	226	250	2,303	2,227
New Mexico	69,967	75,588	-7.4%	47,355	51,325	22,082	23,701	514	547	15	14
Utah	42,715	60,456	-29.0%	35,343	53,647	1,839	1,593	553	559	4,980	4,658
Wyoming	4,893	4,933	-0.8%	1,101	1,353	13	12	0	0	3,778	3,567
Pacific Contiguous	722,043	808,561	-11.0%	274,887	311,766	374,415	423,490	10,709	10,604	62,032	62,702
California	583,817	644,102	-9.4%	204,040	223,333	308,155	348,577	10,488	10,344	61,134	61,848
Oregon	73,854	94,181	-22.0%	30,962	45,190	42,298	48,361	161	185	434	444
Washington	64,372	70,279	-8.4%	39,886	43,242	23,962	26,551	60	75	464	410
Pacific Noncontiguous	24,495	25,951	-5.6%	24,236	25,701	0	0	22	7	237	244
Alaska	24,495	25,951	-5.6%	24,236	25,701	0	0	22	7	237	244
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	8,765,736	9,483,714	-7.6%	4,407,010	4,675,510	3,840,201	4,276,546	41,001	42,757	477,525	488,900

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 preliminary. Values for 2016 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, November 2017 and November 2016 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	903	882	2.4%	0	0	879	866	23	16	0	0
Connecticut	NM	40	NM	0	0	NM	40	0	0	0	0
Maine	NM	55	NM	0	0	NM	55	0	0	0	0
Massachusetts	344	325	5.9%	0	0	344	325	0	0	0	0
New Hampshire	86	119	-28.0%	0	0	NM	103	23	16	0	0
Rhode Island	353	308	15.0%	0	0	353	308	0	0	0	0
Vermont	NM	34	NM	0	0	NM	34	0	0	0	0
Middle Atlantic	4,035	4,628	-13.0%	0	0	3,844	4,440	NM	71	112	117
New Jersey	613	633	-3.1%	0	0	586	608	NM	25	0	0
New York	1,211	1,385	-13.0%	0	0	1,211	1,385	0	0	0	0
Pennsylvania	2,211	2,610	-15.0%	0	0	2,047	2,447	NM	46	112	117
East North Central	5,111	5,159	-0.9%	605	578	4,457	4,550	23	12	26	19
Illinois	956	1,068	-10.0%	32	42	924	1,026	0	0	0	0
Indiana	671	614	9.2%	563	524	104	89	0	0	NM	1
Michigan	1,683	1,689	-0.3%	0	0	1,683	1,689	0	0	0	0
Ohio	845	861	-1.9%	0	0	845	861	0	0	0	0
Wisconsin	957	927	3.2%	NM	11	901	885	23	12	22	18
West North Central	943	870	8.4%	282	199	661	671	0	0	0	0
Iowa	210	252	-17.0%	0	0	210	252	0	0	0	0
Kansas	113	109	3.4%	0	0	113	109	0	0	0	0
Minnesota	312	297	5.0%	NM	66	245	231	0	0	0	0
Missouri	162	142	14.0%	NM	63	NM	79	0	0	0	0
Nebraska	147	70	109.0%	147	70	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	3,804	4,820	-21.0%	390	382	3,104	4,017	115	250	194	171
Delaware	108	114	-5.6%	0	0	NM	102	0	0	NM	12
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	587	655	-10.0%	146	148	441	507	0	1	0	0
Georgia	352	378	-6.9%	0	0	329	354	0	0	23	24
Maryland	232	239	-2.9%	0	0	155	169	NM	70	0	0
North Carolina	896	1,760	-49.0%	0	0	878	1,603	NM	157	0	0
South Carolina	427	395	8.1%	236	230	NM	31	0	0	159	134
Virginia	1,202	1,279	-6.0%	7	5	1,173	1,251	NM	23	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	434	433	0.4%	170	171	265	262	0	0	0	0
Alabama	NM	86	NM	0	0	NM	86	0	0	0	0
Kentucky	177	194	-8.9%	170	171	7	24	0	0	0	0
Mississippi	NM	11	NM	0	0	NM	11	0	0	0	0
Tennessee	151	142	6.1%	0	0	151	142	0	0	0	0
West South Central	1,259	1,650	-24.0%	0	0	1,207	1,589	52	61	0	0
Arkansas	128	142	-9.9%	0	0	128	142	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	NM	25	NM	0	0	NM	25	0	0	0	0
Texas	1,100	1,483	-26.0%	0	0	1,049	1,422	52	61	0	0
Mountain	534	543	-1.7%	NM	21	473	474	44	49	0	0
Arizona	NM	72	NM	0	0	NM	72	0	0	0	0
Colorado	NM	110	NM	0	0	NM	110	0	0	0	0
Idaho	NM	83	NM	NM	21	NM	47	20	15	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	126	124	1.5%	0	0	126	124	0	0	0	0
New Mexico	NM	2	NM	0	0	NM	2	0	0	0	0
Utah	176	152	16.0%	0	0	152	119	24	33	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	4,754	4,990	-4.7%	655	590	2,839	3,168	1,260	1,232	0	0
California	3,930	4,188	-6.2%	253	227	2,461	2,769	1,216	1,192	0	0
Oregon	466	461	0.9%	117	127	304	294	NM	40	0	0
Washington	358	341	5.1%	284	236	NM	105	0	0	0	0
Pacific Noncontiguous	75	72	3.9%	0	0	0	0	75	72	0	0
Alaska	75	72	3.9%	0	0	0	0	75	72	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	21,851	24,047	-9.1%	2,118	1,941	17,729	20,036	1,671	1,762	332	307

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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 November 2017 and November 2016 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	9,910	10,333	-4.1%	0	0	9,687	10,153	223	180	0	0
Connecticut	399	439	-9.0%	0	0	399	439	0	0	0	0
Maine	620	667	-7.0%	0	0	620	667	0	0	0	0
Massachusetts	3,902	3,764	3.7%	0	0	3,902	3,764	0	0	0	0
New Hampshire	945	1,296	-27.0%	0	0	723	1,116	223	180	0	0
Rhode Island	3,705	3,776	-1.9%	0	0	3,705	3,776	0	0	0	0
Vermont	338	392	-14.0%	0	0	338	392	0	0	0	0
Middle Atlantic	48,278	48,928	-1.3%	0	0	46,022	46,916	871	766	1,385	1,246
New Jersey	7,047	7,373	-4.4%	0	0	6,765	7,096	281	278	0	0
New York	14,461	14,692	-1.6%	0	0	14,461	14,692	0	0	0	0
Pennsylvania	26,771	26,863	-0.3%	0	0	24,796	25,128	590	488	1,385	1,246
East North Central	58,302	56,414	3.3%	7,139	6,284	50,624	49,775	324	135	214	220
Illinois	11,238	11,447	-1.8%	372	380	10,866	11,067	0	0	0	0
Indiana	7,740	6,765	14.0%	6,648	5,773	1,081	981	0	0	NM	11
Michigan	19,033	18,164	4.8%	0	0	19,033	18,164	0	0	0	0
Ohio	9,776	9,482	3.1%	0	0	9,776	9,482	0	0	0	0
Wisconsin	10,516	10,556	-0.4%	NM	130	9,869	10,081	324	135	203	210
West North Central	9,974	10,245	-2.6%	3,168	3,095	6,806	7,150	0	0	0	0
Iowa	1,683	2,390	-30.0%	0	0	1,683	2,390	0	0	0	0
Kansas	1,281	1,163	10.0%	0	0	1,281	1,163	0	0	0	0
Minnesota	3,552	3,323	6.9%	774	700	2,778	2,623	0	0	0	0
Missouri	1,876	1,749	7.3%	812	774	1,064	975	0	0	0	0
Nebraska	1,583	1,621	-2.4%	1,583	1,621	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	41,642	42,461	-1.9%	4,260	4,112	34,344	34,462	1,108	1,839	1,929	2,049
Delaware	1,226	1,251	-2.0%	0	0	1,090	1,117	0	0	136	134
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	6,492	7,132	-9.0%	1,468	1,544	5,024	5,571	0	7	0	10
Georgia	3,589	4,351	-18.0%	0	0	3,303	3,917	0	0	286	434
Maryland	2,478	2,461	0.7%	0	0	1,772	1,741	706	720	0	0
North Carolina	9,857	9,853	0.0%	0	0	9,666	8,975	192	878	0	0
South Carolina	4,593	4,326	6.2%	2,720	2,517	366	339	0	0	1,507	1,471
Virginia	13,407	13,087	2.4%	72	51	13,124	12,801	210	234	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	5,002	4,974	0.6%	1,942	1,970	3,060	3,004	0	0	0	0
Alabama	1,014	990	2.5%	0	0	1,014	990	0	0	0	0
Kentucky	2,081	2,243	-7.3%	1,942	1,970	138	273	0	0	0	0
Mississippi	192	171	12.0%	0	0	192	171	0	0	0	0
Tennessee	1,716	1,570	9.3%	0	0	1,716	1,570	0	0	0	0
West South Central	13,927	14,183	-1.8%	0	0	13,452	13,678	474	505	0	0
Arkansas	1,452	1,348	7.7%	0	0	1,452	1,348	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	345	328	5.1%	0	0	345	328	0	0	0	0
Texas	12,130	12,507	-3.0%	0	0	11,656	12,002	474	505	0	0
Mountain	5,877	5,905	-0.5%	202	224	5,260	5,153	416	528	0	0
Arizona	819	779	5.2%	0	0	819	779	0	0	0	0
Colorado	987	1,196	-17.0%	0	0	987	1,196	0	0	0	0
Idaho	771	906	-15.0%	202	224	383	514	186	167	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	1,441	1,349	6.8%	0	0	1,441	1,349	0	0	0	0
New Mexico	NM	26	NM	0	0	NM	26	0	0	0	0
Utah	1,829	1,649	11.0%	0	0	1,599	1,289	230	361	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	50,573	54,900	-7.9%	6,310	6,554	31,345	34,310	12,918	14,036	0	0
California	41,575	45,977	-9.6%	1,907	2,627	27,170	29,774	12,498	13,576	0	0
Oregon	5,074	5,350	-5.2%	1,328	1,478	3,326	3,412	420	460	0	0
Washington	3,923	3,573	9.8%	3,074	2,448	849	1,124	0	0	0	0
Pacific Noncontiguous	710	704	0.8%	0	0	0	0	710	704	0	0
Alaska	710	704	0.8%	0	0	0	0	710	704	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	244,195	249,047	-1.9%	23,021	22,239	200,601	204,602	17,044	18,692	3,528	3,515

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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, November 2017 and November 2016 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	298	305	-2.4%	0	0	280	291	18	14	0	0
Connecticut	104	112	-7.4%	0	0	104	112	0	0	0	0
Maine	26	23	17.0%	0	0	9	9	18	14	0	0
Massachusetts	158	161	-1.8%	0	0	158	161	0	0	0	0
New Hampshire	10	10	-0.3%	0	0	10	10	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	457	449	1.8%	0	0	367	352	90	97	0	0
New Jersey	116	117	-0.7%	0	0	87	91	29	26	0	0
New York	173	170	2.4%	0	0	132	120	42	49	0	0
Pennsylvania	167	163	2.8%	0	0	148	141	19	22	0	0
East North Central	18	21	-16.0%	2	3	0	0	16	18	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	2	1	8.7%	0	0	0	0	2	1	0	0
Michigan	14	17	-14.0%	0	0	0	0	14	17	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	2	3	-36.0%	2	3	0	0	0	0	0	0
West North Central	45	56	-19.0%	28	36	18	19	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	45	56	-19.0%	28	36	18	19	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	379	443	-14.0%	0	0	339	398	40	46	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	286	288	-0.8%	0	0	286	288	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	53	56	-4.3%	0	0	53	56	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	40	99	-60.0%	0	0	0	54	40	46	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	-16.0%	0	0	0	0	0	0	1	1
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	1	1	-16.0%	0	0	0	0	0	0	1	1
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	55	67	-18.0%	0	0	55	67	0	0	0	0
California	33	44	-25.0%	0	0	33	44	0	0	0	0
Oregon	10	9	8.3%	0	0	10	9	0	0	0	0
Washington	12	14	-13.0%	0	0	12	14	0	0	0	0
Pacific Noncontiguous	36	36	-1.8%	0	0	0	0	36	36	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	36	36	-1.8%	0	0	0	0	36	36	0	0
U.S. Total	1,289	1,379	-6.6%	30	39	1,059	1,127	200	212	1	1

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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.B. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State, by Sector, Year-to-Date through November 2017 and November 2016 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	3,319	3,428	-3.2%	0	0	3,131	3,257	188	171	0	0
Connecticut	1,139	1,220	-6.6%	0	0	1,139	1,220	0	0	0	0
Maine	291	274	6.1%	0	0	103	103	188	171	0	0
Massachusetts	1,773	1,821	-2.7%	0	0	1,773	1,821	0	0	0	0
New Hampshire	115	112	3.2%	0	0	115	112	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	4,959	4,951	0.2%	0	0	3,956	3,898	1,003	1,053	0	0
New Jersey	1,307	1,311	-0.3%	0	0	986	996	321	314	0	0
New York	1,833	1,866	-1.8%	0	0	1,380	1,350	453	516	0	0
Pennsylvania	1,820	1,774	2.6%	0	0	1,590	1,551	230	223	0	0
East North Central	217	231	-6.0%	33	36	0	0	184	195	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	16	16	0.6%	0	0	0	0	16	16	0	0
Michigan	168	179	-6.1%	0	0	0	0	168	179	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	33	36	-8.3%	33	36	0	0	0	0	0	0
West North Central	571	599	-4.6%	358	390	213	198	0	10	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	571	599	-4.6%	358	390	213	198	0	10	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	4,593	5,220	-12.0%	0	0	4,117	4,709	476	511	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	3,470	3,590	-3.3%	0	0	3,470	3,590	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	580	583	-0.4%	0	0	580	582	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	542	1,048	-48.0%	0	0	66	537	476	511	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	7	11	-33.0%	0	0	0	0	0	0	7	11
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	7	11	-33.0%	0	0	0	0	0	0	7	11
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	0	3	-84.0%	0	0	0	3	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	3	-84.0%	0	0	0	3	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	669	668	0.2%	0	0	669	668	0	0	0	0
California	423	412	2.6%	0	0	423	412	0	0	0	0
Oregon	100	104	-3.2%	0	0	100	104	0	0	0	0
Washington	146	152	-4.1%	0	0	146	152	0	0	0	0
Pacific Noncontiguous	390	408	-4.4%	0	0	0	0	390	408	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	390	408	-4.4%	0	0	0	0	390	408	0	0
U.S. Total	14,725	15,518	-5.1%	390	425	12,086	12,733	2,242	2,349	7	11

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

Table 2.14.A. Consumption of Wood / Wood Waste Biomass for Electricity Generation by State, by Sector, November 2017 and November 2016 (Billion Btus)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	4,752	4,680	1.5%	595	857	3,752	3,363	1	1	404	459
Connecticut	371	338	9.9%	0	0	371	338	0	0	0	0
Maine	1,926	1,528	26.0%	0	0	1,521	1,068	0	0	404	459
Massachusetts	NM	176	NM	0	0	NM	176	0	0	0	0
New Hampshire	1,946	2,092	-7.0%	442	497	1,504	1,595	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	328	547	-40.0%	152	360	NM	186	0	1	0	0
Middle Atlantic	1,166	1,122	3.9%	0	0	594	578	0	0	572	544
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	685	662	3.4%	0	0	594	578	0	0	91	85
Pennsylvania	481	460	4.6%	0	0	0	0	0	0	481	460
East North Central	2,243	1,987	13.0%	497	451	1,083	910	0	0	663	625
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	1,375	1,220	13.0%	0	0	1,073	898	0	0	301	323
Ohio	103	101	1.5%	0	0	10	12	0	0	93	89
Wisconsin	765	665	15.0%	497	451	0	0	0	0	269	214
West North Central	1,042	1,040	0.2%	182	202	609	591	29	6	222	241
Iowa	0	0	-97.0%	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	1,013	1,040	-2.6%	182	202	609	591	0	5	222	241
Missouri	29	0	--	0	0	0	0	29	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	10,855	8,967	21.0%	1,828	660	3,674	2,898	11	13	5,342	5,396
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	1,642	1,514	8.5%	0	0	1,023	851	0	0	619	663
Georgia	3,046	2,866	6.3%	0	0	1,039	680	0	0	2,007	2,187
Maryland	62	70	-11.0%	0	0	0	0	11	13	51	57
North Carolina	1,412	1,144	23.0%	0	0	803	559	0	0	609	585
South Carolina	1,518	1,519	-0.1%	106	167	542	560	0	0	870	792
Virginia	3,175	1,853	71.0%	1,721	493	NM	249	0	0	1,185	1,112
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	2,933	3,183	-7.9%	0	0	197	197	0	0	2,736	2,985
Alabama	2,044	2,051	-0.4%	0	0	197	197	0	0	1,847	1,854
Kentucky	136	150	-9.7%	0	0	0	0	0	0	136	150
Mississippi	467	587	-21.0%	0	0	0	0	0	0	467	587
Tennessee	286	394	-27.0%	0	0	0	0	0	0	286	394
West South Central	2,367	2,732	-13.0%	0	0	0	176	0	0	2,367	2,556
Arkansas	602	585	3.0%	0	0	0	0	0	0	602	585
Louisiana	1,250	1,435	-13.0%	0	0	0	0	0	0	1,250	1,435
Oklahoma	155	156	-0.4%	0	0	0	0	0	0	155	156
Texas	360	556	-35.0%	0	0	0	176	0	0	360	380
Mountain	492	609	-19.0%	0	0	403	450	0	0	89	159
Arizona	NM	302	NM	0	0	NM	302	0	0	0	0
Colorado	101	121	-17.0%	0	0	101	121	0	0	0	0
Idaho	95	166	-43.0%	0	0	27	27	0	0	68	138
Montana	22	21	3.8%	0	0	0	0	0	0	22	21
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	5,480	4,856	13.0%	411	426	3,564	3,047	0	0	1,505	1,382
California	3,693	2,953	25.0%	0	0	3,297	2,678	0	0	396	275
Oregon	619	706	-12.0%	0	0	NM	370	0	0	352	336
Washington	1,168	1,197	-2.4%	411	426	0	0	0	0	757	771
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	31,331	29,176	7.4%	3,512	2,597	13,877	12,211	41	20	13,901	14,349

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

Table 2.14.B. Consumption of Wood / Wood Waste Biomass for Electricity Generation by State, by Sector, Year-to-Date through November 2017 and November 2016 (Billion Btus)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	56,329	54,233	3.9%	7,673	8,520	43,728	40,983	45	18	4,883	4,711
Connecticut	4,307	4,062	6.0%	0	0	4,307	4,062	0	0	0	0
Maine	22,874	21,582	6.0%	0	0	17,955	16,862	36	9	4,883	4,711
Massachusetts	2,124	2,053	3.4%	0	0	2,124	2,053	0	0	0	0
New Hampshire	21,588	20,615	4.7%	4,273	4,512	17,315	16,103	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	5,436	5,920	-8.2%	3,400	4,008	2,028	1,903	8	9	0	0
Middle Atlantic	12,518	11,658	7.4%	0	0	6,277	5,669	0	0	6,241	5,989
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	7,256	6,635	9.4%	0	0	6,276	5,654	0	0	980	981
Pennsylvania	5,262	5,023	4.8%	0	0	1	15	0	0	5,261	5,008
East North Central	24,109	21,887	10.0%	4,902	4,020	12,138	10,727	0	1	7,070	7,140
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	15,255	13,962	9.3%	0	0	12,004	10,583	0	1	3,251	3,379
Ohio	1,161	1,184	-1.9%	0	0	134	144	0	0	1,027	1,040
Wisconsin	7,693	6,741	14.0%	4,902	4,020	0	0	0	0	2,792	2,721
West North Central	10,408	8,949	16.0%	2,008	1,908	5,453	4,232	327	290	2,620	2,520
Iowa	10	5	97.0%	0	0	0	0	10	5	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	10,107	8,700	16.0%	2,008	1,908	5,453	4,232	26	41	2,620	2,520
Missouri	291	244	19.0%	0	0	0	0	291	244	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	116,002	105,817	9.6%	20,622	17,778	36,352	29,471	45	122	58,982	58,446
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	18,579	15,031	24.0%	0	0	10,442	6,970	0	0	8,137	8,061
Georgia	30,199	28,603	5.6%	0	0	8,301	6,595	0	0	21,898	22,008
Maryland	613	667	-8.2%	0	0	0	0	45	122	568	545
North Carolina	14,855	13,258	12.0%	0	0	8,503	7,353	0	0	6,352	5,906
South Carolina	17,326	16,801	3.1%	1,626	1,549	6,131	5,829	0	0	9,569	9,423
Virginia	34,430	31,456	9.5%	18,996	16,229	2,975	2,724	0	0	12,459	12,502
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	33,548	33,660	-0.3%	0	0	2,241	2,254	0	0	31,308	31,407
Alabama	21,853	21,667	0.9%	0	0	2,241	2,254	0	0	19,613	19,413
Kentucky	1,502	1,513	-0.7%	0	0	0	0	0	0	1,502	1,513
Mississippi	6,313	6,627	-4.7%	0	0	0	0	0	0	6,313	6,627
Tennessee	3,880	3,853	0.7%	0	0	0	0	0	0	3,880	3,853
West South Central	27,258	28,235	-3.5%	0	337	1,218	1,625	0	0	26,040	26,273
Arkansas	6,270	5,930	5.7%	0	0	0	0	0	0	6,270	5,930
Louisiana	14,247	14,716	-3.2%	0	0	0	0	0	0	14,247	14,716
Oklahoma	1,443	1,531	-5.7%	0	0	0	0	0	0	1,443	1,531
Texas	5,298	6,058	-13.0%	0	337	1,218	1,625	0	0	4,080	4,096
Mountain	6,154	6,222	-1.1%	0	0	4,706	4,532	0	0	1,448	1,690
Arizona	3,224	3,112	3.6%	0	0	3,224	3,112	0	0	0	0
Colorado	1,202	1,120	7.3%	0	0	1,202	1,120	0	0	0	0
Idaho	1,501	1,775	-15.0%	0	0	280	299	0	0	1,221	1,476
Montana	227	215	5.7%	0	0	0	0	0	0	227	215
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	60,570	57,355	5.6%	4,752	4,422	39,588	36,824	0	0	16,231	16,109
California	40,634	38,015	6.9%	0	0	36,553	33,935	0	0	4,081	4,080
Oregon	6,811	6,541	4.1%	0	0	3,035	2,889	0	0	3,776	3,652
Washington	13,125	12,799	2.5%	4,752	4,422	0	0	0	0	8,374	8,377
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	346,897	328,016	5.8%	39,956	36,984	151,701	136,316	417	431	154,823	154,285

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 preliminary. Values for 2016 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 3.1. Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, 2007 - November 2017

	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									
2007	151,221	44,433	554	120,504	28,032	253	30,717	16,401	301
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	31,702	845	130,885	20,920	603	31,124	10,781	241
Year 2015, End of Month Stocks									
January	154,390	32,896	892	118,239	22,177	742	36,151	10,718	150
February	149,071	28,446	850	115,271	20,328	723	33,800	8,118	127
March	154,347	29,536	818	120,635	21,165	698	33,712	8,371	120
April	167,063	29,614	912	130,078	21,218	776	36,985	8,396	136
May	172,809	30,184	999	134,499	21,504	856	38,310	8,680	143
June	166,437	30,441	1,031	130,716	21,634	883	35,720	8,807	149
July	157,938	30,119	1,064	124,301	21,365	909	33,638	8,754	156
August	155,952	30,143	1,029	123,296	21,138	891	32,656	9,005	138
Sept	162,109	31,390	1,102	128,351	21,450	973	33,757	9,941	129
October	175,588	32,462	1,151	138,712	21,540	1,026	36,876	10,922	125
November	188,595	33,487	1,290	149,168	21,946	1,159	39,427	11,542	131
December	195,548	32,884	1,340	153,226	21,443	1,163	42,322	11,441	177
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	35,481	780	128,256	20,846	589	30,652	14,635	191
Sept	156,567	35,555	768	127,532	20,925	566	29,035	14,630	201
October	160,932	35,754	813	131,510	21,022	606	29,422	14,732	207
November	170,277	31,920	833	138,091	21,192	606	32,185	10,727	227
December	162,009	31,702	845	130,885	20,920	603	31,124	10,781	241
Year 2017, End of Month Stocks									
January	156,175	31,468	794	125,187	20,714	542	30,988	10,754	252
February	160,447	31,094	821	128,010	20,442	551	32,438	10,652	270
March	161,691	31,622	855	128,575	21,144	566	33,116	10,478	289
April	163,726	31,325	933	130,310	21,030	630	33,416	10,295	304
May	162,396	30,891	881	129,229	20,604	570	33,167	10,286	312
June	157,717	30,545	867	126,381	20,543	542	31,336	10,002	325
July	145,518	30,466	875	117,574	20,548	552	27,944	9,917	323
August	141,672	30,068	918	114,013	20,225	576	27,659	9,843	341
Sept	139,531	29,643	987	113,336	20,051	632	26,195	9,592	356
October	141,169	29,642	1,056	114,806	20,002	690	26,363	9,641	366
November	143,115	29,700	1,087	117,616	20,118	685	25,499	9,582	403

Notes: See Glossary for definitions. Values for 2016 and prior years are final. Values for 2017 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, November 2017 and 2016

Census Division and State	Coal (Thousand Tons)			Petroleum Liquids (Thousand Barrels)			Petroleum Coke (Thousand Tons)		
	November 2017	November 2016	Percentage Change	November 2017	November 2016	Percentage Change	November 2017	November 2016	Percentage Change
New England	W	1,911	W	3,963	4,557	-13.0%	0	0	--
Connecticut	W	W	W	1,396	1,608	-13.2%	0	0	--
Maine	0	0	--	450	478	-5.7%	0	0	--
Massachusetts	W	W	W	1,590	1,908	-16.7%	0	0	--
New Hampshire	W	W	W	334	371	-9.9%	0	0	--
Rhode Island	W	W	W	147	152	-3.0%	0	0	--
Vermont	0	0	--	45	NM	NM	0	0	--
Middle Atlantic	4,264	4,898	-12.9%	5,343	5,733	-6.8%	0	W	W
New Jersey	145	797	-81.9%	622	665	-6.4%	0	0	--
New York	W	W	W	3,509	3,719	-5.6%	0	0	--
Pennsylvania	W	W	W	1,211	1,349	-10.2%	0	W	W
East North Central	30,009	36,899	-18.7%	1,105	1,118	-1.2%	431	W	W
Illinois	6,128	7,597	-19.3%	70	79	-10.7%	0	0	--
Indiana	8,706	10,401	-16.3%	103	108	-4.6%	W	0	W
Michigan	5,789	5,869	-1.4%	333	343	-3.0%	W	W	W
Ohio	5,608	8,333	-32.7%	412	371	11.0%	W	W	W
Wisconsin	3,777	4,699	-19.6%	187	217	-14.0%	W	W	W
West North Central	28,204	32,387	-12.9%	844	1,020	-17.3%	0	0	--
Iowa	6,797	8,766	-22.5%	102	148	-30.6%	0	0	--
Kansas	4,189	4,776	-12.3%	111	135	-18.0%	0	0	--
Minnesota	3,457	4,336	-20.3%	111	139	-20.2%	0	0	--
Missouri	8,614	9,557	-9.9%	341	392	-13.0%	0	0	--
Nebraska	3,190	3,188	0.1%	103	115	-10.4%	0	0	--
North Dakota	W	W	W	30	37	-19.0%	0	0	--
South Dakota	W	W	W	44	53	-16.9%	0	0	--
South Atlantic	25,305	27,900	-9.3%	12,035	12,086	-0.4%	W	W	W
Delaware	W	W	W	382	510	-25.2%	0	0	--
District of Columbia	0	0	--	0	0	--	0	0	--
Florida	4,356	4,863	-10.4%	5,456	4,861	12.2%	W	W	W
Georgia	5,365	4,772	12.4%	800	913	-12.5%	0	0	--
Maryland	1,585	1,253	26.5%	740	915	-19.1%	0	0	--
North Carolina	4,370	5,385	-18.9%	1,199	1,247	-3.8%	0	0	--
South Carolina	4,210	5,271	-20.1%	691	720	-4.1%	0	0	--
Virginia	W	1,274	W	2,632	2,771	-5.0%	0	0	--
West Virginia	4,056	W	W	136	148	-8.4%	W	W	W
East South Central	13,332	16,420	-18.8%	1,881	1,992	-5.6%	W	W	W
Alabama	3,179	3,674	-13.5%	323	339	-4.6%	0	0	--
Kentucky	6,748	8,236	-18.1%	256	237	8.0%	W	W	W
Mississippi	928	1,192	-22.1%	560	572	-2.1%	0	0	--
Tennessee	2,477	3,318	-25.3%	741	844	-12.2%	0	0	--
West South Central	20,350	26,098	-22.0%	1,701	1,794	-5.2%	W	W	W
Arkansas	3,063	4,326	-29.2%	182	186	-2.0%	0	0	--
Louisiana	2,424	2,692	-9.9%	378	421	-10.2%	W	W	W
Oklahoma	3,695	4,892	-24.5%	104	110	-5.4%	0	0	--
Texas	11,168	14,189	-21.3%	1,036	1,076	-3.8%	0	0	--
Mountain	19,421	22,063	-12.0%	393	411	-4.5%	W	W	W
Arizona	3,163	4,030	-21.5%	134	145	-7.4%	0	0	--
Colorado	4,550	5,344	-14.9%	140	131	6.9%	0	0	--
Idaho	0	0	--	0	0	1.9%	0	0	--
Montana	W	W	W	18	18	0.5%	W	W	W
Nevada	W	W	W	5	15	-66.0%	0	0	--
New Mexico	W	W	W	25	41	-38.6%	0	0	--
Utah	4,835	5,371	-10.0%	34	35	-3.2%	0	0	--
Wyoming	4,464	4,366	2.2%	36	26	36.8%	0	0	--
Pacific Contiguous	W	W	W	328	459	-28.5%	0	0	--
California	0	0	--	156	163	-4.5%	0	0	--
Oregon	W	W	W	70	78	-10.4%	0	0	--
Washington	W	W	W	102	217	-53.1%	0	0	--
Pacific Noncontiguous	W	W	W	2,109	2,749	-23.3%	0	0	--
Alaska	0	W	W	93	308	-69.9%	0	0	--
Hawaii	W	W	W	2,017	2,442	-17.4%	0	0	--
U.S. Total	143,115	170,277	-16.0%	29,700	31,920	-7.0%	1,087	833	30.5%

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.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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, November 2017 and 2016

	Electric Power Sector			Electric Utilities		Independent Power Producers	
Census Division	**November 2017**	**November 2016**	**Percentage Change**	**November 2017**	**November 2016**	**November 2017**	**November 2016**
Coal (Thousand Tons)							
New England	W	1,911	W	W	W	W	W
Middle Atlantic	4,264	4,898	-12.9%	W	0	W	4,898
East North Central	30,009	36,899	-18.7%	20,009	23,288	10,000	13,610
West North Central	28,204	32,387	-12.9%	28,204	W	0	W
South Atlantic	25,305	27,900	-9.3%	22,793	25,833	2,512	2,067
East South Central	13,332	16,420	-18.8%	13,332	16,420	0	0
West South Central	20,350	26,098	-22.0%	13,770	17,552	6,580	8,547
Mountain	19,421	22,063	-12.0%	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	**143,115**	**170,277**	**-16.0%**	**117,616**	**138,091**	**25,499**	**32,185**
Petroleum Liquids (Thousand Barrels)							
New England	3,963	4,557	-13.0%	620	683	3,342	3,874
Middle Atlantic	5,343	5,733	-6.8%	2,164	2,299	3,178	3,434
East North Central	1,105	1,118	-1.2%	758	796	347	322
West North Central	844	1,020	-17.3%	821	995	22	25
South Atlantic	12,035	12,086	-0.4%	9,966	9,665	2,069	2,421
East South Central	1,881	1,992	-5.6%	1,808	1,920	73	73
West South Central	1,701	1,794	-5.2%	1,315	1,385	386	409
Mountain	393	411	-4.5%	359	378	33	34
Pacific Contiguous	328	459	-28.5%	224	360	103	99
Pacific Noncontiguous	2,109	2,749	-23.3%	2,081	2,712	28	38
U.S. Total	**29,700**	**31,920**	**-7.0%**	**20,118**	**21,192**	**9,582**	**10,727**
Petroleum Coke (Thousand Tons)							
New England	0	0	--	0	0	0	0
Middle Atlantic	0	W	W	0	0	0	W
East North Central	431	W	W	W	W	W	W
West North Central	0	0	--	0	0	0	0
South Atlantic	W	W	W	W	W	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	**1,087**	**833**	**30.5%**	**W**	**W**	**W**	**W**

W = Withheld to avoid disclosure of individual company data.
Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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, 2007 - November 2017

	Electric Power Sector			
Period	Bituminous Coal	Subbituminous Coal	Lignite Coal	Total
End of Year Stocks				
2007	63,964	82,692	4,565	151,221
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
Year 2015, End of Month Stocks				
January	70,423	78,424	5,542	154,390
February	64,396	79,411	5,264	149,071
March	65,421	84,013	4,912	154,347
April	70,985	90,919	5,159	167,063
May	74,195	93,538	5,077	172,809
June	72,921	88,835	4,681	166,437
July	68,197	84,988	4,753	157,938
August	67,777	83,691	4,484	155,952
Sept	70,365	87,185	4,559	162,109
October	76,243	94,720	4,626	175,588
November	80,254	103,602	4,738	188,595
December	82,004	108,614	4,931	195,548
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	65,806	86,034	4,335	156,175
February	67,754	88,269	4,424	160,447
March	67,740	89,299	4,651	161,691
April	68,132	90,589	5,005	163,726
May	68,338	88,854	5,204	162,396
June	66,473	86,543	4,701	157,717
July	60,367	80,871	4,281	145,518
August	59,133	77,489	5,050	141,672
Sept	58,387	77,199	3,945	139,531
October	59,035	78,615	3,519	141,169
November	59,340	79,694	4,081	143,115

Notes: See Glossary for definitions.
Values for 2016 and prior years are final. Values for 2017 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 4.1. Receipts, Average Cost, and Quality of Fossil Fuels: Total (All Sectors), 2007 - November 2017

	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												
2007	21,152,358	1,054,664	1.77	35.48	0.96	98.6	375,260	60,068	9.59	59.93	0.71	62.6
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	9.40	56.95	0.49	68.1
Year 2015												
January	1,417,725	73,633	2.29	44.01	1.28	100.8	13,274	2,193	12.76	77.28	0.57	60.6
February	1,175,859	61,197	2.26	43.43	1.29	89.2	20,116	3,305	12.61	76.83	0.51	36.0
March	1,237,697	63,691	2.26	43.97	1.28	106.4	14,354	2,373	12.54	76.00	0.54	116.0
April	1,183,833	61,120	2.23	43.29	1.32	122.6	9,153	1,520	13.18	79.55	0.43	86.3
May	1,228,784	63,030	2.26	44.13	1.35	107.8	11,636	1,923	12.71	77.02	0.45	99.6
June	1,201,874	62,061	2.25	43.65	1.36	88.3	9,858	1,630	13.57	82.13	0.49	83.0
July	1,302,808	68,352	2.21	42.10	1.25	87.6	8,538	1,410	12.57	76.20	0.44	63.4
August	1,395,614	72,257	2.23	43.11	1.30	96.1	9,362	1,552	12.08	72.92	0.47	77.4
Sept	1,361,468	70,737	2.22	42.67	1.30	107.0	14,105	2,316	9.67	58.83	0.43	124.8
October	1,285,699	67,027	2.15	41.16	1.26	122.1	13,066	2,137	9.10	55.68	0.44	121.0
November	1,170,593	61,257	2.15	41.17	1.25	121.9	14,148	2,306	8.96	55.05	0.54	119.9
December	1,124,253	58,569	2.16	41.43	1.28	113.5	10,037	1,657	8.83	53.52	0.42	92.5
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	10.19	61.94	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	1,099,136	57,463	2.09	40.05	1.26	88.6	9,304	1,546	11.91	71.72	0.46	70.8
February	997,916	52,098	2.07	39.58	1.30	106.1	6,122	1,015	11.61	70.06	0.49	59.5
March	966,998	50,174	2.08	40.17	1.35	100.2	11,990	2,018	11.62	69.01	0.54	111.4
April	893,611	46,168	2.11	40.85	1.34	101.6	6,223	1,033	11.59	69.85	0.48	62.3
May	939,123	48,842	2.13	40.90	1.32	94.1	6,485	1,082	W	W	0.48	56.6
June	1,032,209	53,498	2.11	40.71	1.31	89.0	7,209	1,196	W	W	0.47	63.4
July	1,080,359	56,632	2.09	39.84	1.22	79.7	6,488	1,086	W	W	0.48	54.9
August	1,172,537	61,134	2.08	39.85	1.30	91.1	6,866	1,136	W	W	0.47	61.0
Sept	1,005,155	52,845	2.03	38.55	1.24	94.6	6,394	1,061	W	W	0.49	57.6
October	990,301	51,848	2.03	38.86	1.27	100.8	7,328	1,212	11.87	71.73	0.52	64.6
November	976,444	51,520	2.04	38.66	1.26	98.6	9,150	1,512	12.27	74.25	0.47	85.3
Year to Date												
2015	13,961,955	724,360	2.23	42.97	1.29	102.8	137,610	22,664	11.68	70.98	0.49	74.9
2016	11,421,172	593,408	2.12	40.74	1.34	94.6	93,871	15,484	9.28	56.29	0.49	68.8
2017	11,153,789	582,221	2.08	39.81	1.29	94.0	83,560	13,897	11.56	69.49	0.49	67.8
Rolling 12 Months Ending in November												
2016	12,545,425	651,977	2.12	40.80	1.34	96.0	103,908	17,141	9.23	56.01	0.48	70.5
2017	12,248,890	639,583	2.08	39.79	1.29	93.3	91,499	15,220	W	W	0.49	67.2

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 2016 and prior years are final. Values for 2017 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), 2007 - November 2017 (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												
2007	161,091	5,656	1.51	43.02	5.07	77.5	7,396,233	7,200,316	7.11	7.30	90.4	3.23
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
Year 2015												
January	14,001	495	2.00	56.58	5.22	96.9	751,373	727,845	4.11	4.24	88.3	2.92
February	9,854	345	1.76	50.27	5.29	67.4	687,566	665,945	4.70	4.85	88.9	3.19
March	9,700	346	2.00	56.19	5.16	91.9	755,061	731,417	3.55	3.66	89.5	2.78
April	11,283	401	1.96	55.27	5.00	98.8	717,016	693,722	3.10	3.21	90.7	2.58
May	12,122	428	2.02	57.16	5.23	98.3	787,887	762,232	3.14	3.25	90.9	2.64
June	9,569	337	1.87	53.03	5.55	84.8	934,171	902,955	3.12	3.23	90.5	2.66
July	13,055	461	1.90	53.83	5.07	94.1	1,093,897	1,057,630	3.11	3.22	90.7	2.63
August	11,554	405	1.82	52.03	5.01	85.3	1,073,001	1,038,464	3.11	3.22	90.4	2.62
Sept	13,295	468	1.74	49.40	5.12	98.6	938,261	907,211	3.06	3.17	90.0	2.57
October	11,080	390	1.83	52.05	5.08	101.6	833,330	804,958	2.92	3.02	89.1	2.47
November	12,117	429	1.59	44.93	5.59	117.3	783,337	758,502	2.65	2.74	89.8	2.38
December	11,037	393	1.57	44.13	5.73	108.4	818,600	791,698	2.59	2.68	89.1	2.36
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	58.6	605,952	585,551	4.13	4.28	76.5	2.82
February	7,593	271	2.00	56.03	5.85	83.0	532,101	514,990	3.58	3.70	77.7	2.60
March	8,628	309	2.06	57.51	5.29	86.8	616,880	597,210	3.36	3.47	71.3	2.62
April	5,835	208	2.00	55.96	5.34	93.1	576,203	557,620	3.38	3.49	76.1	2.62
May	6,776	242	2.05	57.46	5.57	61.1	646,016	625,858	3.49	3.60	76.6	W
June	8,657	308	W	W	5.55	71.1	762,488	737,995	3.30	3.41	76.4	W
July	8,498	302	W	W	5.50	73.2	928,732	897,833	3.22	3.33	74.7	W
August	7,972	284	W	W	5.47	77.2	900,125	870,465	3.16	3.27	73.8	W
Sept	7,915	284	W	W	5.43	84.5	759,247	733,551	3.20	3.31	75.1	W
October	8,347	297	W	W	5.61	97.4	691,894	670,086	3.16	3.27	75.0	W
November	7,469	266	W	W	5.67	78.7	607,157	588,140	3.37	3.48	75.4	W
Year to Date												
2015	127,631	4,504	1.86	52.80	5.21	93.3	9,354,902	9,050,883	3.29	3.40	89.9	2.67
2016	106,997	3,811	1.61	45.21	5.40	77.5	9,889,561	9,565,822	2.79	2.89	90.8	2.44
2017	84,749	3,022	W	W	5.54	77.0	7,626,794	7,379,299	3.37	3.48	75.2	W
Rolling 12 Months Ending in November												
2016	118,035	4,204	1.61	45.11	5.43	79.6	10,708,160	10,357,519	2.78	2.87	90.7	2.43
2017	94,693	3,376	W	W	5.53	77.5	8,356,338	8,084,657	3.42	3.54	76.3	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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- 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.
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- See the Technical Notes for fuel conversion factors.
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Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 4.2. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2007 - November 2017

	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												
2007	15,561,395	767,377	1.78	36.06	0.92	100.3	216,349	34,026	9.24	58.73	0.77	59.8
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
Year 2015												
January	1,022,724	52,840	2.31	44.72	1.17	103.9	8,679	1,427	11.79	71.76	0.57	69.0
February	853,788	44,181	2.26	43.70	1.17	92.2	8,590	1,404	11.71	71.63	0.47	39.1
March	915,194	47,024	2.26	44.08	1.17	111.2	10,166	1,669	12.11	73.85	0.52	134.1
April	872,141	44,828	2.26	43.98	1.20	124.1	6,581	1,083	13.26	80.57	0.39	87.9
May	918,188	46,827	2.29	44.97	1.21	109.2	7,705	1,259	12.50	76.54	0.46	100.6
June	897,838	45,934	2.28	44.49	1.23	90.6	7,498	1,234	13.66	82.97	0.46	89.4
July	959,033	49,930	2.24	42.94	1.11	88.7	6,138	1,004	12.47	76.21	0.40	67.8
August	1,026,500	52,727	2.26	44.04	1.17	97.5	5,716	944	11.75	71.16	0.42	67.5
Sept	993,558	51,091	2.26	44.03	1.16	109.2	7,097	1,157	9.75	59.76	0.38	94.1
October	941,342	48,715	2.19	42.30	1.13	124.6	5,909	970	9.43	57.50	0.44	79.8
November	862,786	44,830	2.20	42.41	1.14	126.2	8,558	1,386	8.80	54.38	0.57	102.8
December	825,539	42,781	2.21	42.64	1.16	112.7	7,402	1,209	8.52	52.14	0.37	102.7
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	791,083	41,154	2.14	41.21	1.14	87.5	6,498	1,069	11.09	67.38	0.44	72.7
February	732,712	38,088	2.11	40.63	1.20	106.6	4,563	754	11.53	69.80	0.46	64.8
March	702,185	36,293	2.13	41.15	1.21	101.0	10,468	1,759	11.58	68.94	0.53	130.7
April	646,292	33,094	2.15	41.91	1.22	104.4	4,679	774	11.38	68.84	0.46	65.0
May	688,996	35,438	2.16	42.03	1.20	94.5	4,612	764	11.38	68.72	0.45	58.4
June	781,557	40,089	2.13	41.60	1.20	91.1	5,560	915	10.86	66.00	0.47	70.7
July	811,773	42,046	2.12	40.90	1.12	80.4	4,654	774	10.91	65.61	0.45	59.6
August	882,432	45,611	2.11	40.88	1.19	92.4	5,107	838	11.08	67.53	0.46	65.5
Sept	736,582	38,557	2.08	39.78	1.10	97.3	4,752	779	11.75	71.65	0.48	62.0
October	728,591	37,915	2.09	40.19	1.16	103.9	4,858	796	11.98	73.15	0.49	59.6
November	721,520	37,867	2.11	40.29	1.13	104.8	6,681	1,094	12.02	73.45	0.41	93.5
Year to Date												
2015	10,263,092	528,926	2.26	43.80	1.17	105.3	82,638	13,537	11.57	70.65	0.47	77.6
2016	8,475,431	435,784	2.16	42.09	1.21	96.5	67,729	11,060	9.03	55.32	0.46	74.8
2017	8,223,723	426,151	2.12	40.95	1.17	95.6	62,433	10,315	11.43	69.20	0.47	73.1
Rolling 12 Months Ending in November												
2016	9,300,969	478,565	2.17	42.14	1.21	97.7	75,131	12,269	8.98	55.01	0.44	76.9
2017	9,005,170	466,574	2.12	40.96	1.17	94.6	67,998	11,240	11.37	68.81	0.47	72.4

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

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- See the 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, 2007 - November 2017 (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												
2007	84,812	2,964	1.73	49.57	5.09	105.6	2,378,104	2,315,637	7.47	7.67	84.6	2.61
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
Year 2015												
January	11,509	404	1.94	55.36	5.21	129.1	345,262	334,921	4.24	4.37	96.3	2.84
February	8,617	301	1.72	49.17	5.31	90.5	325,811	315,866	4.57	4.72	95.1	2.95
March	7,949	283	1.95	54.67	5.16	144.7	343,696	333,075	3.78	3.90	95.6	2.74
April	8,845	313	1.95	55.11	4.92	146.8	331,639	321,268	3.48	3.60	97.3	2.65
May	10,125	357	1.98	56.26	5.21	136.5	364,935	353,283	3.50	3.61	97.6	2.69
June	7,485	262	1.73	49.60	5.62	111.4	444,769	429,988	3.47	3.59	96.1	2.72
July	11,256	395	1.86	52.91	5.04	118.3	509,115	491,495	3.46	3.59	96.2	2.69
August	9,787	342	1.76	50.54	4.92	109.8	492,323	476,327	3.46	3.57	95.7	2.67
Sept	12,216	429	1.72	49.08	5.09	145.7	428,044	413,887	3.40	3.52	95.5	2.63
October	9,567	334	1.77	50.64	5.05	147.2	380,675	367,001	3.25	3.37	96.2	2.52
November	10,082	354	1.46	41.65	5.64	196.4	365,361	354,358	2.97	3.07	96.5	2.47
December	8,492	297	1.35	38.62	5.76	128.1	386,119	373,572	2.93	3.03	94.8	2.47
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	288,262	278,520	4.35	4.50	83.4	2.77
February	7,593	271	2.00	56.03	5.85	124.3	250,636	242,634	3.83	3.96	85.1	2.58
March	8,628	309	2.06	57.51	5.29	143.9	297,757	288,239	3.56	3.67	78.0	2.64
April	5,835	208	2.00	55.96	5.34	188.7	281,424	272,351	3.52	3.63	82.4	2.60
May	6,776	242	2.05	57.46	5.57	91.5	323,910	314,005	3.71	3.82	82.9	2.69
June	8,386	298	2.14	60.07	5.55	105.5	368,351	356,696	3.57	3.69	80.6	2.63
July	8,245	292	2.11	59.61	5.49	107.5	446,470	431,599	3.48	3.60	76.9	2.62
August	7,676	273	2.11	59.17	5.45	119.8	432,280	418,121	3.46	3.57	76.7	2.58
Sept	7,658	274	2.12	59.07	5.42	130.2	362,510	350,495	3.58	3.70	78.4	2.61
October	7,454	265	2.37	66.84	5.58	154.2	329,450	319,249	3.59	3.70	79.2	2.60
November	7,084	252	2.52	70.93	5.66	107.1	290,187	281,227	3.68	3.80	81.0	2.63
Year to Date												
2015	107,437	3,772	1.80	51.37	5.19	130.2	4,331,629	4,191,468	3.57	3.69	96.2	2.69
2016	91,688	3,254	1.48	41.69	5.38	102.6	4,727,082	4,571,137	3.08	3.18	97.1	2.52
2017	82,393	2,937	2.15	60.25	5.53	117.0	3,671,238	3,553,136	3.64	3.76	79.9	2.63
Rolling 12 Months Ending in November												
2016	100,180	3,552	1.47	41.43	5.41	104.3	5,113,201	4,944,710	3.07	3.17	96.9	2.51
2017	90,410	3,220	2.13	59.89	5.52	116.2	4,019,493	3,889,537	3.69	3.81	81.2	2.64

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

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

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Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2007 - November 2017

	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												
2007	5,275,454	273,216	1.71	33.11	1.06	97.5	125,025	20,486	10.49	64.01	0.45	85.0
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	9.97	58.79	0.48	75.1
Year 2015												
January	370,545	19,679	2.19	41.18	1.57	96.2	4,385	732	15.01	89.69	0.49	59.4
February	302,474	16,111	2.22	41.77	1.63	84.3	11,250	1,857	13.25	80.43	0.51	37.0
March	298,086	15,549	2.21	42.43	1.63	97.3	3,976	670	13.58	80.81	0.49	119.6
April	290,324	15,310	2.11	40.15	1.67	124.1	2,315	394	12.90	76.13	0.46	130.6
May	289,053	15,209	2.13	40.54	1.77	107.3	3,836	648	13.09	77.69	0.41	141.4
June	282,635	15,143	2.14	40.04	1.77	83.3	2,120	356	13.32	79.32	0.48	95.0
July	319,704	17,307	2.09	38.62	1.66	85.8	2,277	386	12.82	75.72	0.47	69.7
August	345,979	18,463	2.11	39.54	1.69	94.3	3,485	581	12.58	75.51	0.48	134.5
Sept	345,305	18,605	2.05	38.03	1.69	103.9	6,857	1,134	9.47	57.12	0.47	242.0
October	323,263	17,340	1.99	37.04	1.62	120.0	6,936	1,131	8.70	53.42	0.41	304.8
November	286,023	15,432	1.97	36.47	1.57	115.6	5,410	891	9.13	55.56	0.45	217.6
December	278,119	14,836	1.96	36.85	1.64	121.7	2,401	409	9.61	56.22	0.45	92.1
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	11.16	66.40	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	293,070	15,606	1.93	36.35	1.59	94.6	2,679	456	13.98	82.08	0.47	92.7
February	250,099	13,304	1.90	35.74	1.60	108.7	1,438	241	W	W	0.50	63.4
March	247,658	13,058	1.93	36.69	1.75	101.4	1,344	231	12.02	69.90	0.44	80.3
April	231,929	12,350	1.97	37.09	1.66	97.9	1,383	233	W	W	0.44	78.7
May	234,471	12,642	1.99	36.90	1.67	95.0	1,718	293	W	W	0.45	71.8
June	235,473	12,689	2.00	37.14	1.68	85.0	1,507	258	W	W	0.42	62.6
July	253,594	13,865	1.97	36.04	1.55	78.8	1,739	297	W	W	0.48	57.2
August	274,367	14,784	1.94	35.96	1.64	88.9	1,649	280	W	W	0.43	69.4
Sept	254,384	13,609	1.84	34.37	1.64	90.0	1,491	258	W	W	0.42	59.9
October	246,724	13,227	1.83	34.24	1.61	96.2	2,321	393	11.66	68.89	0.50	107.9
November	240,378	12,958	1.79	33.17	1.64	86.9	2,269	386	13.06	76.71	0.56	96.6
Year to Date												
2015	3,453,390	184,146	2.11	39.60	1.66	99.2	52,848	8,780	11.78	70.98	0.46	86.2
2016	2,749,986	148,477	1.93	35.76	1.74	91.8	23,773	4,040	9.90	58.30	0.47	76.1
2017	2,762,147	148,092	1.92	35.78	1.64	92.3	19,539	3,327	11.98	70.38	0.47	75.7
Rolling 12 Months Ending in November												
2016	3,028,104	163,313	1.93	35.86	1.73	93.9	26,174	4,449	W	W	0.47	77.4
2017	3,059,520	164,263	1.92	35.72	1.63	92.2	21,742	3,697	W	W	0.47	74.6

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

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Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2007 - November 2017 (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												
2007	56,580	1,994	1.02	28.95	4.88	69.3	4,097,825	3,990,546	6.92	7.11	97.2	4.06
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
Year 2015												
January	1,427	52	W	W	5.10	77.7	341,822	330,761	4.08	4.22	91.0	W
February	562	20	W	W	4.53	30.3	301,145	291,394	5.27	5.45	92.2	W
March	956	34	W	W	4.81	48.8	347,024	336,090	3.37	3.49	93.3	W
April	1,501	54	W	W	4.95	79.8	324,962	313,969	2.65	2.75	94.0	W
May	1,348	48	W	W	5.17	69.5	359,864	347,963	2.75	2.85	93.5	W
June	1,237	44	W	W	5.22	69.1	425,118	410,985	2.68	2.78	93.7	W
July	1,119	40	W	W	5.30	58.9	516,995	500,696	2.71	2.79	93.6	W
August	1,289	45	W	W	5.62	67.7	511,789	495,450	2.71	2.80	93.7	W
Sept	432	16	W	W	5.44	22.4	445,913	431,110	2.69	2.79	93.4	W
October	1,295	47	W	W	5.38	71.8	394,437	381,566	2.55	2.64	93.1	W
November	1,643	59	W	W	5.35	82.8	351,912	340,122	2.31	2.40	93.1	W
December	1,742	65	W	W	5.70	179.6	362,309	350,090	2.21	2.29	93.5	W
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	259,636	250,896	3.97	4.11	79.9	2.84
February	0	0	--	--	--	0.0	227,496	220,081	3.33	3.44	81.1	W
March	0	0	--	--	--	0.0	263,669	255,227	3.21	3.31	72.0	2.55
April	0	0	--	--	--	0.0	241,451	233,602	3.19	3.30	79.1	W
May	0	0	--	--	--	0.0	269,235	260,637	3.19	3.29	79.0	W
June	0	0	--	--	--	0.0	339,166	328,064	2.92	3.02	79.2	W
July	0	0	--	--	--	0.0	423,924	409,779	2.86	2.96	78.4	W
August	0	0	--	--	--	0.0	412,138	398,444	2.76	2.85	76.4	W
Sept	0	0	--	--	--	0.0	342,641	330,729	2.68	2.78	78.5	W
October	0	0	--	--	--	0.0	310,113	300,091	2.60	2.69	78.8	2.26
November	0	0	--	--	--	0.0	261,523	253,222	3.02	3.12	78.8	2.41
Year to Date												
2015	12,809	458	2.45	68.46	5.20	61.7	4,320,981	4,180,105	3.00	3.10	93.2	W
2016	12,072	437	2.50	68.98	5.43	68.4	4,478,208	4,331,285	2.45	2.53	94.1	W
2017	0	0	--	--	--	0.0	3,350,992	3,240,770	3.03	3.13	78.2	2.49
Rolling 12 Months Ending in November												
2016	13,814	503	W	W	5.47	74.4	4,840,517	4,681,375	2.43	2.52	94.0	W
2017	1,501	55	W	W	5.50	10.0	3,664,513	3,544,003	3.09	3.19	79.3	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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- Totals may not equal the sum of components because of independent rounding.

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

Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector, 2007 - November 2017

	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												
2007	12,419	531	2.67	62.46	2.58	27.6	249	43	14.04	81.93	0.17	6.2
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
Year 2015												
January	309	14	W	W	2.65	14.4	0	0	--	--	--	0.0
February	479	23	2.14	44.32	1.71	23.9	0	0	--	--	--	0.0
March	177	8	W	W	2.93	9.3	0	0	--	--	--	0.0
April	298	13	W	W	2.72	23.8	0	0	--	--	--	0.0
May	102	5	W	W	2.90	9.0	0	0	--	--	--	0.0
June	213	9	W	W	2.30	15.1	0	0	--	--	--	0.0
July	124	5	W	W	2.93	8.3	0	0	--	--	--	0.0
August	187	8	W	W	2.46	13.3	0	0	--	--	--	0.0
Sept	49	2	W	W	3.01	4.3	0	0	--	--	--	0.0
October	130	6	W	W	3.08	11.1	0	0	--	--	--	0.0
November	182	8	W	W	3.00	13.6	0	0	--	--	--	0.0
December	188	8	W	W	2.86	11.5	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	7.4	0	0	--	--	--	0.0
February	91	4	W	W	2.95	7.4	0	0	--	--	--	0.0
March	104	5	W	W	3.02	7.8	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	1.6	0	0	--	--	--	0.0
July	0	0	--	--	--	0.0	0	0	--	--	--	0.0
August	4	0	W	W	2.77	0.3	0	0	--	--	--	0.0
Sept	72	3	W	W	2.96	6.7	0	0	--	--	--	0.0
October	35	2	W	W	2.96	3.5	0	0	--	--	--	0.0
November	13	1	W	W	3.04	1.2	0	0	--	--	--	0.0
Year to Date												
2015	2,252	100	2.86	64.22	2.52	13.8	0	0	--	--	--	0.0
2016	1,074	47	W	W	3.03	7.8	0	0	--	--	--	0.0
2017	459	20	W	W	2.99	3.7	0	0	--	--	--	0.0
Rolling 12 Months Ending in November												
2016	1,262	56	W	W	3.00	8.2	0	0	--	--	--	0.0
2017	673	30	W	W	3.01	4.8	0	0	--	--	--	0.0

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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 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commerical Sector, 2007 - November 2017 (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												
2007	0	0	--	--	--	0.0	23,502	22,955	7.99	8.18	32.8	6.20
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
Year 2015												
January	0	0	--	--	--	0.0	552	545	W	W	5.7	W
February	0	0	--	--	--	0.0	378	372	W	W	4.4	W
March	0	0	--	--	--	0.0	438	432	W	W	4.7	W
April	0	0	--	--	--	0.0	420	413	W	W	5.1	W
May	0	0	--	--	--	0.0	494	488	W	W	5.4	W
June	0	0	--	--	--	0.0	522	513	W	W	5.2	W
July	0	0	--	--	--	0.0	540	528	W	W	4.6	W
August	0	0	--	--	--	0.0	694	680	W	W	6.1	W
Sept	0	0	--	--	--	0.0	632	620	W	W	5.8	W
October	0	0	--	--	--	0.0	530	523	W	W	5.4	W
November	0	0	--	--	--	0.0	775	749	W	W	8.0	W
December	0	0	--	--	--	0.0	524	507	W	W	5.2	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	5.6	W
February	0	0	--	--	--	0.0	646	624	W	W	6.3	W
March	0	0	--	--	--	0.0	680	662	W	W	6.4	W
April	0	0	--	--	--	0.0	502	490	W	W	5.7	W
May	0	0	--	--	--	0.0	497	483	W	W	5.4	W
June	0	0	--	--	--	0.0	615	595	W	W	6.0	W
July	0	0	--	--	--	0.0	636	613	W	W	5.7	W
August	0	0	--	--	--	0.0	809	778	W	W	7.4	W
Sept	0	0	--	--	--	0.0	707	685	W	W	6.9	W
October	0	0	--	--	--	0.0	605	588	W	W	6.0	W
November	0	0	--	--	--	0.0	749	725	W	W	7.5	W
Year to Date												
2015	0	0	--	--	--	0.0	5,975	5,863	W	W	5.5	W
2016	0	0	--	--	--	0.0	7,438	7,217	W	W	6.2	W
2017	0	0	--	--	--	0.0	7,107	6,881	W	W	6.3	W
Rolling 12 Months Ending in November												
2016	0	0	--	--	--	0.0	7,962	7,724	W	W	6.1	W
2017	0	0	--	--	--	0.0	7,675	7,430	W	W	6.2	W

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Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2007 - November 2017

	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												
2007	303,091	13,540	2.20	49.16	1.36	60.1	33,637	5,514	8.53	52.06	1.33	38.8
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
Year 2015												
January	24,148	1,100	W	W	1.36	68.2	210	34	13.50	83.50	1.82	14.2
February	19,118	882	2.77	60.15	1.42	59.5	275	44	15.47	96.51	1.58	12.2
March	24,240	1,110	W	W	1.30	73.7	212	34	14.93	93.02	1.65	17.1
April	21,069	969	W	W	1.42	72.5	257	43	13.30	79.04	0.98	22.1
May	21,441	991	W	W	1.28	71.9	95	16	15.20	90.88	1.05	8.5
June	21,188	975	W	W	1.36	70.6	240	39	13.12	79.91	1.30	22.0
July	23,947	1,110	W	W	1.34	73.7	122	20	13.55	83.51	1.58	12.5
August	22,948	1,059	W	W	1.28	74.6	161	26	13.21	81.06	1.52	18.7
Sept	22,556	1,038	W	W	1.22	74.6	151	25	13.56	82.72	1.38	16.9
October	20,964	967	W	W	1.40	74.6	221	36	12.74	77.23	1.26	21.5
November	21,602	987	W	W	1.51	74.5	180	29	11.49	71.78	1.40	19.1
December	20,408	944	W	W	1.36	69.9	234	38	11.75	72.24	1.52	24.5
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	14,872	698	W	W	1.31	54.3	128	21	11.64	72.27	1.06	12.7
February	15,014	702	W	W	1.10	64.5	121	19	W	W	1.36	16.3
March	17,051	819	W	W	1.28	69.8	178	29	10.66	66.36	1.22	21.7
April	15,389	724	W	W	1.17	67.9	160	26	W	W	1.27	17.8
May	15,645	762	W	W	1.10	69.4	155	25	W	W	1.21	15.7
June	15,163	720	W	W	1.32	65.8	142	23	W	W	1.11	15.0
July	14,992	721	2.47	51.34	1.23	68.8	95	15	W	W	1.30	12.2
August	15,734	738	W	W	1.30	69.3	110	18	W	W	1.55	12.6
Sept	14,117	677	W	W	1.10	65.7	151	24	W	W	1.51	19.3
October	14,951	704	W	W	1.30	61.3	149	24	11.43	71.09	1.58	16.4
November	14,533	694	W	W	1.38	60.8	199	32	11.67	72.03	1.71	19.6
Year to Date												
2015	243,222	11,188	2.72	59.22	1.35	71.6	2,124	347	13.64	83.59	1.41	16.3
2016	194,681	9,100	W	W	1.29	67.7	2,369	384	10.30	63.43	1.28	18.3
2017	167,460	7,958	W	W	1.24	65.0	1,587	255	11.18	69.64	1.36	16.3
Rolling 12 Months Ending in November												
2016	215,090	10,044	W	W	1.30	67.9	2,603	423	W	W	1.30	18.7
2017	183,527	8,717	W	W	1.24	64.5	1,759	283	W	W	1.34	16.4

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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.

- Values for 2016 and prior years are final. Values for 2017 are preliminary.
- See Glossary for definitions.
- Starting in January 2013, there may have been a shift in the continuity of Chapter 4 tables due to changes in the sample design of Form EIA-923 and the imputation process.
- See the EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
- See the Technical Notes for fuel conversion factors.
- Totals may not equal the sum of components because of independent rounding.

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

Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2007 - November 2017 (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												
2007	19,700	698	1.96	55.42	5.52	43.6	896,803	871,178	6.97	7.18	82.9	5.78
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
Year 2015												
January	1,065	39	W	W	5.45	30.6	63,737	61,619	W	W	59.6	W
February	675	25	W	W	5.72	22.1	60,233	58,313	W	W	63.2	W
March	794	29	W	W	5.66	26.6	63,904	61,821	W	W	62.5	W
April	937	34	W	W	5.81	27.3	59,995	58,072	W	W	62.5	W
May	650	24	W	W	5.58	22.7	62,594	60,498	W	W	63.6	W
June	847	32	W	W	5.41	31.7	63,763	61,470	W	W	60.8	W
July	680	26	W	W	5.28	29.4	67,248	64,911	W	W	59.3	W
August	478	18	W	W	5.34	18.9	68,195	66,008	W	W	59.8	W
Sept	648	24	W	W	5.57	22.0	63,672	61,594	W	W	60.1	W
October	218	9	W	W	4.62	9.6	57,688	55,868	W	W	54.6	W
November	393	15	W	W	5.27	13.3	65,289	63,274	W	W	61.3	W
December	804	30	W	W	5.46	32.7	69,647	67,528	W	W	61.3	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	57,392	55,497	W	W	52.1	W
February	0	0	--	--	--	0.0	53,322	51,652	W	W	53.4	W
March	0	0	--	--	--	0.0	54,774	53,082	W	W	51.6	W
April	0	0	--	--	--	0.0	52,826	51,178	W	W	52.2	W
May	0	0	--	--	--	0.0	52,374	50,733	W	W	51.4	W
June	271	9	W	W	5.75	9.5	54,356	52,640	W	W	52.5	W
July	253	9	W	W	5.85	10.1	57,702	55,842	W	W	52.3	W
August	296	11	W	W	5.85	11.9	54,898	53,122	W	W	51.7	W
Sept	257	9	W	W	5.85	12.0	53,389	51,642	W	W	52.6	W
October	893	32	W	W	5.85	37.4	51,726	50,157	W	W	50.4	W
November	386	14	W	W	5.85	17.6	54,697	52,966	W	W	52.0	W
Year to Date												
2015	7,385	274	W	W	5.50	23.4	696,317	673,448	W	W	60.6	W
2016	3,237	120	W	W	5.82	10.9	676,833	656,183	W	W	59.4	W
2017	2,356	85	W	W	5.84	9.3	597,457	578,512	W	W	52.0	W
Rolling 12 Months Ending in November												
2016	4,041	150	W	W	5.74	12.6	746,480	723,710	W	W	59.5	W
2017	2,783	101	W	W	5.86	9.9	664,658	643,687	W	W	52.9	W

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

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

Table 4.6.A. Receipts of Coal Delivered for Electricity Generation by State, November 2017 and 2016
(Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	6	92	-94.0%	0	0	6	90	0	0	0	2
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	6	7	-9.2%	0	0	6	5	0	0	0	2
Massachusetts	0	85	-100.0%	0	0	0	85	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	1,128	1,854	-39.0%	0	0	1,120	1,812	0	0	8	41
New Jersey	49	52	-5.9%	0	0	49	52	0	0	0	0
New York	8	69	-88.0%	0	0	0	44	0	0	8	24
Pennsylvania	1,070	1,732	-38.0%	0	0	1,070	1,716	0	0	0	17
East North Central	11,548	11,171	3.4%	7,228	6,824	4,153	4,135	0	0	167	212
Illinois	3,199	3,318	-3.6%	653	556	2,379	2,590	0	0	167	173
Indiana	2,552	2,321	10.0%	2,401	2,219	151	101	0	0	0	0
Michigan	1,780	1,651	7.8%	1,749	1,634	30	17	0	0	0	0
Ohio	2,169	2,024	7.2%	576	597	1,593	1,426	0	0	0	0
Wisconsin	1,848	1,857	-0.5%	1,848	1,818	0	0	0	0	0	39
West North Central	10,280	9,969	3.1%	10,030	9,759	0	0	1	10	250	200
Iowa	1,459	1,422	2.6%	1,273	1,291	0	0	0	0	186	131
Kansas	1,107	1,318	-16.0%	1,107	1,318	0	0	0	0	0	0
Minnesota	1,286	1,417	-9.3%	1,286	1,409	0	0	0	0	0	8
Missouri	3,182	2,724	17.0%	3,182	2,713	0	0	1	10	0	0
Nebraska	1,025	1,105	-7.2%	961	1,044	0	0	0	0	64	61
North Dakota	2,052	1,829	12.0%	2,052	1,829	0	0	0	0	0	0
South Dakota	169	156	8.6%	169	156	0	0	0	0	0	0
South Atlantic	6,424	8,118	-21.0%	5,541	6,862	801	1,162	0	0	82	94
Delaware	0	14	-100.0%	0	0	0	14	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,156	1,169	-1.1%	1,145	1,169	0	0	0	0	11	0
Georgia	1,242	1,543	-20.0%	1,232	1,533	0	0	0	0	10	10
Maryland	326	633	-48.0%	0	0	308	615	0	0	18	18
North Carolina	835	1,249	-33.0%	810	1,205	4	8	0	0	20	37
South Carolina	515	635	-19.0%	515	632	0	0	0	0	0	3
Virginia	393	551	-29.0%	325	447	45	78	0	0	23	26
West Virginia	1,958	2,324	-16.0%	1,514	1,877	444	447	0	0	0	0
East South Central	4,002	6,038	-34.0%	3,748	5,705	173	261	0	0	80	72
Alabama	1,161	1,356	-14.0%	1,161	1,356	0	0	0	0	0	0
Kentucky	2,032	3,360	-40.0%	2,032	3,360	0	0	0	0	0	0
Mississippi	306	452	-32.0%	133	190	173	261	0	0	0	0
Tennessee	503	871	-42.0%	423	799	0	0	0	0	80	72
West South Central	10,221	11,074	-7.7%	4,799	4,992	5,370	6,046	0	0	52	36
Arkansas	1,436	1,198	20.0%	1,134	978	296	215	0	0	6	5
Louisiana	597	699	-15.0%	432	469	165	230	0	0	0	0
Oklahoma	628	863	-27.0%	493	743	90	89	0	0	45	31
Texas	7,560	8,314	-9.1%	2,741	2,802	4,819	5,512	0	0	0	0
Mountain	7,292	8,339	-13.0%	6,340	7,391	952	948	0	0	0	0
Arizona	1,419	1,372	3.4%	1,419	1,372	0	0	0	0	0	0
Colorado	1,511	1,517	-0.4%	1,511	1,517	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	823	850	-3.1%	0	24	823	826	0	0	0	0
Nevada	45	77	-41.0%	0	36	45	40	0	0	0	0
New Mexico	812	1,071	-24.0%	812	1,071	0	0	0	0	0	0
Utah	999	1,233	-19.0%	961	1,197	38	36	0	0	0	0
Wyoming	1,683	2,220	-24.0%	1,637	2,174	45	46	0	0	0	0
Pacific Contiguous	541	589	-8.1%	164	70	322	475	0	0	55	44
California	55	44	26.0%	0	0	0	0	0	0	55	44
Oregon	164	70	135.0%	164	70	0	0	0	0	0	0
Washington	322	475	-32.0%	0	0	322	475	0	0	0	0
Pacific Noncontiguous	78	133	-41.0%	17	13	61	120	0	0	0	0
Alaska	17	13	35.0%	17	13	0	0	0	0	0	0
Hawaii	61	120	-50.0%	0	0	61	120	0	0	0	0
U.S. Total	51,520	57,377	-10.0%	37,867	41,615	12,958	15,051	1	10	694	701

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Notes:
See Glossary for definitions. Values for 2016 are final. Values for 2017 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas.

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

Table 4.6.B. Receipts of Coal Delivered for Electricity Generation by State, (Year-to-Date) November 2017 and 2016 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	190	1,162	-84.0%	45	177	146	971	0	0	0	15
Connecticut	0	85	-100.0%	0	0	0	85	0	0	0	0
Maine	59	76	-23.0%	0	0	59	62	0	0	0	15
Massachusetts	87	824	-89.0%	0	0	87	824	0	0	0	0
New Hampshire	45	177	-75.0%	45	177	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	17,859	22,052	-19.0%	119	0	17,477	21,498	0	0	262	554
New Jersey	587	581	0.9%	0	0	587	581	0	0	0	0
New York	260	534	-51.0%	0	0	97	273	0	0	163	261
Pennsylvania	17,012	20,937	-19.0%	119	0	16,794	20,643	0	0	99	294
East North Central	125,730	125,197	0.4%	76,830	74,812	47,095	47,979	0	0	1,805	2,405
Illinois	36,588	35,432	3.3%	7,190	6,376	27,681	27,201	0	0	1,717	1,855
Indiana	26,334	26,376	-0.2%	24,950	24,751	1,385	1,624	0	0	0	0
Michigan	21,118	19,842	6.4%	20,871	19,602	239	229	0	0	8	10
Ohio	23,867	26,374	-9.5%	6,077	7,298	17,790	18,925	0	0	0	152
Wisconsin	17,822	17,173	3.8%	17,742	16,785	0	0	0	0	80	388
West North Central	105,404	107,925	-2.3%	102,400	105,175	0	0	20	47	2,984	2,702
Iowa	13,987	16,823	-17.0%	12,008	14,881	0	0	0	0	1,979	1,941
Kansas	10,962	13,201	-17.0%	10,962	13,201	0	0	0	0	0	0
Minnesota	11,627	11,516	1.0%	11,317	11,454	0	0	0	0	310	62
Missouri	34,143	32,091	6.4%	34,123	32,044	0	0	20	47	0	0
Nebraska	12,002	12,599	-4.7%	11,307	11,900	0	0	0	0	695	699
North Dakota	21,441	20,456	4.8%	21,441	20,456	0	0	0	0	0	0
South Dakota	1,241	1,238	0.2%	1,241	1,238	0	0	0	0	0	0
South Atlantic	80,807	87,499	-7.6%	70,919	75,346	8,951	11,048	0	0	937	1,105
Delaware	200	214	-6.5%	0	0	200	214	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	14,151	13,975	1.3%	13,979	13,685	26	290	0	0	147	0
Georgia	15,846	15,889	-0.3%	15,742	15,752	0	0	0	0	104	137
Maryland	3,503	4,899	-29.0%	0	0	3,323	4,692	0	0	180	207
North Carolina	12,294	11,160	10.0%	11,973	10,764	52	68	0	0	269	328
South Carolina	6,060	7,358	-18.0%	6,034	7,273	0	0	0	0	26	85
Virginia	4,974	7,261	-32.0%	4,381	6,390	382	593	0	0	211	279
West Virginia	23,780	26,743	-11.0%	18,811	21,482	4,969	5,192	0	0	0	69
East South Central	54,894	61,847	-11.0%	51,819	57,946	2,197	2,807	0	0	878	1,094
Alabama	14,466	14,973	-3.4%	14,466	14,973	0	0	0	0	0	0
Kentucky	29,248	34,140	-14.0%	29,248	34,140	0	0	0	0	0	0
Mississippi	3,569	4,027	-11.0%	1,372	1,220	2,197	2,807	0	0	0	0
Tennessee	7,611	8,707	-13.0%	6,733	7,613	0	0	0	0	878	1,094
West South Central	111,264	99,377	12.0%	51,267	47,669	59,587	51,295	0	0	410	413
Arkansas	12,866	11,526	12.0%	11,309	9,525	1,496	1,944	0	0	61	57
Louisiana	7,460	6,179	21.0%	4,655	4,626	2,805	1,554	0	0	0	0
Oklahoma	9,696	9,985	-2.9%	8,391	8,640	955	989	0	0	349	356
Texas	81,243	71,687	13.0%	26,912	24,879	54,330	46,808	0	0	0	0
Mountain	80,921	83,059	-2.6%	71,841	73,527	8,970	9,301	0	0	111	231
Arizona	15,199	14,066	8.1%	15,199	14,066	0	0	0	0	0	0
Colorado	15,140	14,591	3.8%	15,140	14,591	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	7,790	8,240	-5.5%	215	233	7,575	8,007	0	0	0	0
Nevada	713	912	-22.0%	182	459	531	453	0	0	0	0
New Mexico	9,873	9,801	0.7%	9,873	9,801	0	0	0	0	0	0
Utah	11,041	12,504	-12.0%	10,556	11,908	375	364	0	0	111	231
Wyoming	21,164	22,944	-7.8%	20,676	22,468	488	477	0	0	0	0
Pacific Contiguous	4,389	4,327	1.4%	756	951	3,063	2,795	0	0	571	580
California	571	580	-1.6%	0	0	0	0	0	0	571	580
Oregon	756	951	-21.0%	756	951	0	0	0	0	0	0
Washington	3,063	2,795	9.6%	0	0	3,063	2,795	0	0	0	0
Pacific Noncontiguous	764	965	-21.0%	157	181	607	784	0	0	0	0
Alaska	157	181	-14.0%	157	181	0	0	0	0	0	0
Hawaii	607	784	-23.0%	0	0	607	784	0	0	0	0
U.S. Total	582,221	593,408	-1.9%	426,151	435,784	148,092	148,477	20	47	7,958	9,100

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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, November 2017 and 2016
(Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	125	138	-9.9%	1	1	123	136	0	0	0	1
Connecticut	2	5	-64.0%	0	0	2	5	0	0	0	0
Maine	84	2	NM	0	0	84	0	0	0	0	1
Massachusetts	38	124	-69.0%	0	0	38	124	0	0	0	0
New Hampshire	1	1	19.0%	1	1	0	0	0	0	0	0
Rhode Island	0	7	-100.0%	0	0	0	7	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	33	222	-85.0%	0	147	26	53	0	0	6	22
New Jersey	0	1	-100.0%	0	0	0	1	0	0	0	0
New York	2	152	-99.0%	0	147	1	4	0	0	1	1
Pennsylvania	31	69	-55.0%	0	0	25	48	0	0	6	21
East North Central	90	120	-25.0%	41	67	48	50	0	0	1	3
Illinois	2	9	-73.0%	0	0	2	9	0	0	0	0
Indiana	14	14	-1.7%	14	14	0	0	0	0	0	0
Michigan	15	16	-10.0%	14	14	0	0	0	0	0	2
Ohio	55	75	-26.0%	9	33	46	41	0	0	1	1
Wisconsin	4	6	-38.0%	4	6	0	0	0	0	0	0
West North Central	44	41	6.6%	44	40	0	0	0	0	0	0
Iowa	9	7	24.0%	9	7	0	0	0	0	0	0
Kansas	17	9	101.0%	17	9	0	0	0	0	0	0
Minnesota	3	2	27.0%	3	2	0	0	0	0	0	0
Missouri	9	19	-52.0%	9	19	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	6	3	81.0%	6	3	0	0	0	0	0	0
South Dakota	0	1	-100.0%	0	1	0	0	0	0	0	0
South Atlantic	315	259	22.0%	240	200	50	39	0	0	24	20
Delaware	0	0	-100.0%	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	63	7	871.0%	58	7	0	0	0	0	6	0
Georgia	23	25	-9.5%	7	17	0	1	0	0	15	7
Maryland	34	20	65.0%	0	0	34	20	0	0	0	0
North Carolina	39	13	196.0%	37	11	0	0	0	0	2	1
South Carolina	7	23	-67.0%	7	12	0	0	0	0	0	11
Virginia	144	144	-0.2%	126	134	16	10	0	0	1	0
West Virginia	5	26	-81.0%	5	19	0	7	0	0	0	0
East South Central	25	43	-40.0%	25	41	0	0	0	0	1	1
Alabama	2	2	-16.0%	2	2	0	0	0	0	0	0
Kentucky	18	18	1.3%	18	18	0	0	0	0	0	0
Mississippi	1	1	-42.0%	1	1	0	0	0	0	0	0
Tennessee	5	22	-77.0%	4	20	0	0	0	0	1	1
West South Central	34	9	267.0%	31	8	3	2	0	0	0	0
Arkansas	7	7	-4.3%	7	6	0	1	0	0	0	0
Louisiana	4	0	--	4	0	0	0	0	0	0	0
Oklahoma	12	0	--	12	0	0	0	0	0	0	0
Texas	12	2	514.0%	8	2	3	0	0	0	0	0
Mountain	34	30	15.0%	31	26	3	3	0	0	0	0
Arizona	11	14	-23.0%	11	14	0	0	0	0	0	0
Colorado	1	0	--	1	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	3	3	17.0%	0	0	3	3	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	7	4	90.0%	7	4	0	0	0	0	0	0
Utah	9	1	550.0%	9	1	0	0	0	0	0	0
Wyoming	3	8	-59.0%	3	8	0	0	0	0	0	0
Pacific Contiguous	5	2	179.0%	4	1	1	1	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	5	2	179.0%	4	1	1	1	0	0	0	0
Pacific Noncontiguous	808	736	9.8%	678	573	130	163	0	0	0	0
Alaska	0	1	-100.0%	0	1	0	0	0	0	0	0
Hawaii	808	734	10.0%	678	572	130	163	0	0	0	0
U.S. Total	1,512	1,599	-5.4%	1,094	1,106	386	446	0	0	32	47

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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) November 2017 and 2016 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	378	498	-24.0%	11	74	367	419	0	0	0	5
Connecticut	24	35	-31.0%	0	0	24	35	0	0	0	0
Maine	176	23	669.0%	0	0	176	18	0	0	0	5
Massachusetts	167	416	-60.0%	0	66	167	351	0	0	0	0
New Hampshire	11	9	24.0%	11	9	0	0	0	0	0	0
Rhode Island	0	15	-100.0%	0	0	0	15	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	643	1,077	-40.0%	172	305	390	665	0	0	81	108
New Jersey	4	13	-67.0%	0	0	4	13	0	0	0	0
New York	290	593	-51.0%	172	305	97	268	0	0	21	20
Pennsylvania	349	471	-26.0%	0	0	288	384	0	0	61	87
East North Central	732	950	-23.0%	426	497	284	425	0	0	23	28
Illinois	72	108	-33.0%	4	4	68	104	0	0	0	0
Indiana	181	171	5.8%	181	171	0	0	0	0	0	0
Michigan	129	166	-22.0%	120	158	0	0	0	0	9	9
Ohio	315	456	-31.0%	86	120	215	317	0	0	13	19
Wisconsin	35	48	-27.0%	35	44	0	4	0	0	0	0
West North Central	363	333	8.9%	363	329	0	4	0	0	0	0
Iowa	89	84	5.6%	89	84	0	0	0	0	0	0
Kansas	93	37	148.0%	93	37	0	0	0	0	0	0
Minnesota	32	39	-19.0%	32	35	0	4	0	0	0	0
Missouri	79	114	-31.0%	79	114	0	0	0	0	0	0
Nebraska	1	3	-59.0%	1	3	0	0	0	0	0	0
North Dakota	64	51	25.0%	64	51	0	0	0	0	0	0
South Dakota	5	4	38.0%	5	4	0	0	0	0	0	0
South Atlantic	2,828	3,463	-18.0%	2,321	2,584	362	644	0	0	144	236
Delaware	15	78	-81.0%	0	0	15	78	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,430	835	71.0%	1,395	829	0	7	0	0	35	0
Georgia	178	251	-29.0%	125	159	3	32	0	0	49	60
Maryland	224	262	-15.0%	0	0	224	262	0	0	0	0
North Carolina	268	298	-10.0%	237	200	1	67	0	0	30	32
South Carolina	105	255	-59.0%	90	137	0	0	0	0	16	117
Virginia	439	1,279	-66.0%	306	1,062	119	191	0	0	14	26
West Virginia	169	205	-17.0%	169	198	0	7	0	0	0	0
East South Central	328	423	-23.0%	315	404	6	10	0	0	6	8
Alabama	42	60	-31.0%	36	50	6	10	0	0	0	0
Kentucky	156	174	-10.0%	156	174	0	0	0	0	0	0
Mississippi	13	24	-45.0%	13	24	0	0	0	0	0	0
Tennessee	117	165	-29.0%	110	157	0	0	0	0	6	8
West South Central	212	254	-17.0%	114	188	98	67	0	0	0	0
Arkansas	78	62	25.0%	33	46	45	16	0	0	0	0
Louisiana	4	53	-93.0%	4	51	0	2	0	0	0	0
Oklahoma	17	28	-39.0%	17	28	0	0	0	0	0	0
Texas	113	111	2.3%	61	63	53	48	0	0	0	0
Mountain	314	323	-2.9%	285	292	28	31	0	0	0	0
Arizona	75	98	-24.0%	75	98	0	0	0	0	0	0
Colorado	4	13	-68.0%	4	13	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	19	22	-13.0%	0	0	19	22	0	0	0	0
Nevada	17	21	-19.0%	11	16	6	5	0	0	0	0
New Mexico	66	73	-9.3%	66	73	0	0	0	0	0	0
Utah	62	28	119.0%	59	25	3	4	0	0	0	0
Wyoming	71	68	4.2%	71	68	0	0	0	0	0	0
Pacific Contiguous	34	18	91.0%	18	4	16	13	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	14	3	287.0%	14	3	0	0	0	0	0	0
Washington	21	14	43.0%	4	1	16	13	0	0	0	0
Pacific Noncontiguous	8,065	8,145	-1.0%	6,289	6,383	1,776	1,762	0	0	0	0
Alaska	1	8	-89.0%	1	8	0	0	0	0	0	0
Hawaii	8,064	8,136	-0.9%	6,288	6,374	1,776	1,762	0	0	0	0
U.S. Total	13,897	15,484	-10.0%	10,315	11,060	3,327	4,040	0	0	255	384

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

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

Table 4.8.A. Receipts of Petroleum Coke Delivered for Electricity Generation by State, November 2017 and 2016
(Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
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	-100.0%	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	-100.0%	0	0	0	0	0	0	0	0
East North Central	38	73	-48.0%	38	27	0	46	0	0	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	29	19	58.0%	29	19	0	0	0	0	0	0
Ohio	0	46	-100.0%	0	0	0	46	0	0	0	0
Wisconsin	8	8	3.0%	8	8	0	0	0	0	0	0
West North Central	14	0	--	0	0	0	0	0	0	14	0
Iowa	14	0	--	0	0	0	0	0	0	14	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	69	84	-17.0%	69	76	0	0	0	0	0	8
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	69	76	-8.9%	69	76	0	0	0	0	0	0
Georgia	0	8	-100.0%	0	0	0	0	0	0	0	8
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	13	-100.0%	0	13	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	13	-100.0%	0	13	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	145	163	-11.0%	145	163	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	145	163	-11.0%	145	163	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	266	333	-20.0%	252	279	0	47	0	0	14	8

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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) November 2017 and 2016 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 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	-100.0%	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	-100.0%	0	0	0	0	0	0	0	0
East North Central	493	940	-48.0%	493	485	0	437	0	0	0	18
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	162	-100.0%	0	162	0	0	0	0	0	0
Michigan	442	278	59.0%	442	278	0	0	0	0	0	0
Ohio	0	437	-100.0%	0	0	0	437	0	0	0	0
Wisconsin	50	63	-21.0%	50	45	0	0	0	0	0	18
West North Central	85	0	--	0	0	0	0	0	0	85	0
Iowa	85	0	--	0	0	0	0	0	0	85	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	624	1,342	-53.0%	624	1,241	0	0	0	0	0	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	624	1,241	-50.0%	624	1,241	0	0	0	0	0	0
Georgia	0	101	-100.0%	0	0	0	0	0	0	0	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	117	77	52.0%	117	77	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	117	77	52.0%	117	77	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	1,702	1,451	17.0%	1,702	1,451	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,702	1,451	17.0%	1,702	1,451	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	3,022	3,811	-21.0%	2,937	3,254	0	437	0	0	85	120

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 2016 are final. Values for 2017 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Petroleum 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, November 2017 and 2016
(Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	19,865	24,247	-18.0%	1	18	19,865	24,229	0	0	0	0
Connecticut	9,454	9,461	-0.1%	0	0	9,454	9,461	0	0	0	0
Maine	0	1,128	-100.0%	0	0	0	1,128	0	0	0	0
Massachusetts	7,211	7,674	-6.0%	0	18	7,211	7,657	0	0	0	0
New Hampshire	1,901	3,080	-38.0%	1	0	1,900	3,080	0	0	0	0
Rhode Island	1,300	2,903	-55.0%	0	0	1,300	2,903	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	58,433	81,693	-28.0%	5,933	5,540	51,946	75,793	0	0	553	361
New Jersey	8,491	18,871	-55.0%	0	0	8,491	18,871	0	0	0	0
New York	20,895	25,444	-18.0%	5,933	5,540	14,649	19,796	0	0	313	108
Pennsylvania	29,047	37,378	-22.0%	0	0	28,806	37,125	0	0	241	252
East North Central	50,494	59,646	-15.0%	18,910	24,179	29,812	33,669	581	497	1,190	1,302
Illinois	3,059	7,514	-59.0%	42	405	3,012	7,102	0	0	5	6
Indiana	9,483	12,931	-27.0%	7,511	10,827	1,972	2,103	0	0	0	0
Michigan	13,817	16,854	-18.0%	2,107	4,315	10,604	11,530	581	497	526	512
Ohio	18,624	15,803	18.0%	4,454	3,018	13,782	12,424	0	0	388	360
Wisconsin	5,510	6,545	-16.0%	4,797	5,613	442	508	0	0	272	424
West North Central	3,929	10,788	-64.0%	3,311	9,720	87	708	144	92	387	268
Iowa	1,560	2,083	-25.0%	1,199	1,815	0	0	0	0	362	268
Kansas	1,340	1,180	14.0%	1,340	1,180	0	0	0	0	0	0
Minnesota	142	3,239	-96.0%	29	2,781	87	457	1	1	25	0
Missouri	648	2,020	-68.0%	505	1,678	0	251	143	91	0	0
Nebraska	148	560	-74.0%	148	560	0	0	0	0	0	0
North Dakota	91	1,237	-93.0%	91	1,237	0	0	0	0	0	0
South Dakota	0	469	-100.0%	0	469	0	0	0	0	0	0
South Atlantic	162,422	164,069	-1.0%	136,224	138,132	23,245	22,149	0	0	2,954	3,788
Delaware	1,004	4,435	-77.0%	0	0	1,004	3,307	0	0	0	1,128
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	77,144	74,153	4.0%	75,923	70,457	1,084	3,696	0	0	138	0
Georgia	23,030	24,796	-7.1%	17,381	20,538	4,937	3,404	0	0	712	853
Maryland	4,557	521	775.0%	0	0	4,325	348	0	0	232	173
North Carolina	21,261	23,765	-11.0%	20,383	22,124	620	1,623	0	0	257	18
South Carolina	8,809	13,314	-34.0%	7,121	8,865	1,584	4,338	0	0	104	110
Virginia	25,266	21,980	15.0%	15,283	16,025	9,131	5,169	0	0	852	785
West Virginia	1,350	1,106	22.0%	133	123	558	262	0	0	658	721
East South Central	59,917	63,160	-5.1%	38,651	40,707	20,079	21,094	0	0	1,187	1,359
Alabama	26,375	29,325	-10.0%	8,539	8,428	17,836	20,897	0	0	0	0
Kentucky	5,291	4,190	26.0%	4,984	4,008	307	182	0	0	0	0
Mississippi	22,439	24,597	-8.8%	20,503	24,583	1,936	14	0	0	0	0
Tennessee	5,812	5,048	15.0%	4,625	3,688	0	0	0	0	1,187	1,359
West South Central	141,969	195,686	-27.0%	27,382	53,374	70,867	89,453	0	0	43,720	52,859
Arkansas	2,664	10,443	-74.0%	1	3,913	2,450	6,352	0	0	213	178
Louisiana	29,839	37,519	-20.0%	11,220	16,690	2,138	2,960	0	0	16,481	17,869
Oklahoma	12,636	20,710	-39.0%	7,114	13,966	5,315	6,701	0	0	206	43
Texas	96,830	127,014	-24.0%	9,046	18,805	60,964	73,441	0	0	26,820	34,769
Mountain	38,178	40,161	-4.9%	31,371	32,425	6,340	7,686	0	0	466	50
Arizona	12,597	12,044	4.6%	9,059	6,806	3,538	5,239	0	0	0	0
Colorado	6,106	5,367	14.0%	5,227	4,501	878	867	0	0	0	0
Idaho	0	714	-100.0%	0	229	0	484	0	0	0	0
Montana	238	198	21.0%	238	198	0	0	0	0	0	0
Nevada	12,402	14,068	-12.0%	12,402	14,068	0	0	0	0	0	0
New Mexico	4,452	4,711	-5.5%	2,592	3,692	1,860	1,019	0	0	0	0
Utah	2,291	3,041	-25.0%	1,760	2,913	65	78	0	0	466	50
Wyoming	91	19	377.0%	91	19	0	0	0	0	0	0
Pacific Contiguous	52,704	54,811	-3.8%	19,216	22,913	30,981	29,447	0	0	2,508	2,451
California	43,720	43,664	0.1%	14,959	15,733	26,253	25,479	0	0	2,508	2,451
Oregon	6,293	7,717	-18.0%	1,566	4,272	4,727	3,445	0	0	0	0
Washington	2,691	3,431	-22.0%	2,691	2,908	0	523	0	0	0	0
Pacific Noncontiguous	229	1,011	-77.0%	229	1,011	0	0	0	0	0	0
Alaska	229	1,011	-77.0%	229	1,011	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	588,140	695,273	-15.0%	281,227	328,019	253,222	304,227	725	589	52,966	62,438

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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.

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) November 2017 and 2016
(Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	245,497	347,456	-29.0%	1,081	1,900	244,416	345,556	0	0	0	0
Connecticut	90,199	109,207	-17.0%	0	0	90,199	109,207	0	0	0	0
Maine	70	21,769	-100.0%	0	0	70	21,769	0	0	0	0
Massachusetts	117,244	140,829	-17.0%	698	1,449	116,546	139,381	0	0	0	0
New Hampshire	24,627	31,677	-22.0%	384	451	24,243	31,226	0	0	0	0
Rhode Island	13,358	43,973	-70.0%	0	0	13,358	43,973	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	792,595	1,125,045	-30.0%	73,767	95,101	715,587	1,027,589	0	0	3,241	2,356
New Jersey	130,148	289,404	-55.0%	0	0	130,148	289,404	0	0	0	0
New York	291,072	393,374	-26.0%	73,767	95,101	216,080	297,442	0	0	1,225	831
Pennsylvania	371,375	442,267	-16.0%	0	0	369,359	440,743	0	0	2,016	1,525
East North Central	546,646	787,439	-31.0%	207,190	348,329	321,709	423,460	5,391	5,866	12,356	9,784
Illinois	56,751	127,798	-56.0%	240	12,144	56,463	115,620	0	0	48	33
Indiana	100,796	135,614	-26.0%	83,102	111,252	17,694	24,362	0	0	0	0
Michigan	162,314	222,366	-27.0%	33,385	79,251	118,159	132,112	5,391	5,866	5,379	5,138
Ohio	165,387	193,814	-15.0%	40,473	51,409	120,554	141,135	0	0	4,360	1,270
Wisconsin	61,397	107,847	-43.0%	49,989	94,273	8,839	10,231	0	0	2,569	3,342
West North Central	43,422	169,279	-74.0%	37,661	142,900	463	23,363	1,490	1,351	3,808	1,665
Iowa	18,223	28,831	-37.0%	14,553	28,268	0	0	0	0	3,671	563
Kansas	14,568	16,071	-9.3%	14,568	16,071	0	0	0	0	0	0
Minnesota	1,063	61,115	-98.0%	456	47,641	463	12,383	6	9	137	1,081
Missouri	6,272	42,501	-85.0%	4,787	30,180	0	10,980	1,484	1,341	0	0
Nebraska	2,092	4,170	-50.0%	2,092	4,149	0	0	0	0	0	21
North Dakota	1,204	10,985	-89.0%	1,204	10,985	0	0	0	0	0	0
South Dakota	0	5,606	-100.0%	0	5,606	0	0	0	0	0	0
South Atlantic	1,965,509	2,239,773	-12.0%	1,656,462	1,805,666	277,551	397,538	0	0	31,496	36,569
Delaware	26,490	60,443	-56.0%	0	0	26,490	47,561	0	0	0	12,882
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	992,081	1,078,371	-8.0%	975,647	999,016	14,476	79,355	0	0	1,958	0
Georgia	281,166	363,497	-23.0%	217,555	275,386	55,426	79,171	0	0	8,185	8,939
Maryland	37,625	46,978	-20.0%	0	0	35,436	45,001	0	0	2,189	1,977
North Carolina	234,300	271,084	-14.0%	206,298	234,684	26,200	36,225	0	0	1,801	175
South Carolina	103,757	122,930	-16.0%	86,778	99,108	15,909	22,132	0	0	1,070	1,689
Virginia	274,052	282,789	-3.1%	168,498	195,976	96,752	79,492	0	0	8,803	7,321
West Virginia	16,038	13,683	17.0%	1,686	1,495	6,863	8,601	0	0	7,489	3,586
East South Central	705,183	865,718	-19.0%	467,153	570,083	221,950	284,988	0	0	16,079	10,647
Alabama	304,429	364,400	-16.0%	109,708	105,643	194,721	258,756	0	0	0	0
Kentucky	46,382	61,894	-25.0%	42,521	56,644	3,861	5,250	0	0	0	0
Mississippi	275,886	348,829	-21.0%	252,518	327,847	23,368	20,982	0	0	0	0
Tennessee	78,487	90,596	-13.0%	62,407	79,948	0	0	0	0	16,079	10,647
West South Central	1,940,266	2,672,287	-27.0%	438,551	819,034	1,019,299	1,285,468	0	0	482,415	567,785
Arkansas	64,412	126,612	-49.0%	49	49,229	62,529	75,355	0	0	1,833	2,029
Louisiana	393,009	499,005	-21.0%	183,712	256,342	31,141	46,811	0	0	178,157	195,852
Oklahoma	187,338	259,569	-28.0%	108,532	181,389	76,776	77,432	0	0	2,031	748
Texas	1,295,507	1,787,101	-28.0%	146,258	332,074	848,854	1,085,871	0	0	300,395	369,157
Mountain	552,648	645,669	-14.0%	447,657	498,092	103,891	146,876	0	0	1,099	700
Arizona	205,652	244,836	-16.0%	136,473	142,607	69,179	102,229	0	0	0	0
Colorado	81,703	83,801	-2.5%	69,504	70,651	12,200	13,150	0	0	0	0
Idaho	0	19,319	-100.0%	0	11,308	0	8,011	0	0	0	0
Montana	2,878	3,174	-9.4%	2,878	3,156	0	18	0	0	0	0
Nevada	164,756	176,758	-6.8%	164,756	176,758	0	0	0	0	0	0
New Mexico	62,956	67,595	-6.9%	41,792	45,218	21,165	22,377	0	0	0	0
Utah	33,767	50,014	-32.0%	31,333	48,235	1,335	1,079	0	0	1,099	700
Wyoming	935	171	447.0%	922	159	13	12	0	0	0	0
Pacific Contiguous	586,033	701,081	-16.0%	222,112	277,958	335,904	396,446	0	0	28,018	26,676
California	507,156	545,000	-6.9%	185,626	193,615	293,512	324,709	0	0	28,018	26,676
Oregon	54,126	94,408	-43.0%	11,734	46,145	42,392	48,262	0	0	0	0
Washington	24,751	61,674	-60.0%	24,751	38,198	0	23,476	0	0	0	0
Pacific Noncontiguous	1,501	12,074	-88.0%	1,501	12,074	0	0	0	0	0	0
Alaska	1,501	12,074	-88.0%	1,501	12,074	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	7,379,299	9,565,822	-23.0%	3,553,136	4,571,137	3,240,770	4,331,285	6,881	7,217	578,512	656,183

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

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

Table 4.10.A. Average Cost of Coal Delivered for Electricity Generation by State, November 2017 and 2016
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016
New England	W	W	W	--	--	W	W
Connecticut	--	--	--	--	--	--	--
Maine	W	W	W	--	--	W	W
Massachusetts	--	W	W	--	--	--	W
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.05	1.88	9.0%	--	--	2.05	1.88
New Jersey	W	W	W	--	--	W	W
New York	--	W	W	--	--	--	W
Pennsylvania	W	1.81	W	--	--	W	1.81
East North Central	1.99	2.05	-2.9%	2.08	2.15	1.82	1.90
Illinois	W	1.75	W	1.89	1.82	W	1.74
Indiana	W	W	W	2.09	2.22	W	W
Michigan	W	W	W	2.24	2.24	W	W
Ohio	1.87	W	W	1.75	1.84	1.91	W
Wisconsin	2.14	2.17	-1.4%	2.14	2.17	--	--
West North Central	1.75	1.73	1.2%	1.75	1.73	--	--
Iowa	1.62	1.55	4.5%	1.62	1.55	--	--
Kansas	1.83	1.74	5.2%	1.83	1.74	--	--
Minnesota	2.05	2.02	1.5%	2.05	2.02	--	--
Missouri	1.87	1.91	-2.1%	1.87	1.91	--	--
Nebraska	1.35	1.34	0.7%	1.35	1.34	--	--
North Dakota	1.49	1.51	-1.3%	1.49	1.51	--	--
South Dakota	1.99	2.30	-13.0%	1.99	2.30	--	--
South Atlantic	2.69	2.72	-1.1%	2.73	2.75	2.44	2.61
Delaware	--	W	W	--	--	--	W
District of Columbia	--	--	--	--	--	--	--
Florida	2.94	3.00	-2.0%	2.94	3.00	--	--
Georgia	2.79	2.68	4.1%	2.79	2.68	--	--
Maryland	2.51	2.86	-12.0%	--	--	2.51	2.86
North Carolina	W	W	W	3.01	3.19	W	W
South Carolina	3.40	3.11	9.3%	3.40	3.11	--	--
Virginia	W	W	W	2.45	2.81	W	W
West Virginia	W	2.19	W	2.22	2.22	W	2.06
East South Central	W	W	W	2.06	2.17	W	W
Alabama	2.05	2.26	-9.3%	2.05	2.26	--	--
Kentucky	1.99	2.08	-4.3%	1.99	2.08	--	--
Mississippi	W	W	W	2.44	2.67	W	W
Tennessee	2.28	2.31	-1.3%	2.28	2.31	--	--
West South Central	1.87	1.96	-4.6%	2.20	2.12	1.57	1.81
Arkansas	W	W	W	1.94	2.09	W	W
Louisiana	W	W	W	4.76	3.06	W	W
Oklahoma	W	W	W	1.80	1.97	W	W
Texas	1.69	1.87	-9.6%	1.97	2.03	1.53	1.78
Mountain	W	W	W	1.98	1.82	W	W
Arizona	2.19	2.15	1.9%	2.19	2.15	--	--
Colorado	1.78	1.74	2.3%	1.78	1.74	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	1.00	W	W
Nevada	W	W	W	--	2.01	W	W
New Mexico	2.08	2.07	0.5%	2.08	2.07	--	--
Utah	2.04	1.90	7.4%	2.04	1.90	--	--
Wyoming	W	W	W	1.85	1.47	W	W
Pacific Contiguous	W	W	W	2.37	2.14	W	W
California	--	--	--	--	--	--	--
Oregon	2.37	2.14	11.0%	2.37	2.14	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.12	3.00	W	W
Alaska	3.12	3.00	4.0%	3.12	3.00	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.03	2.07	-1.9%	2.11	2.13	1.79	1.91

Displayed values of zero may represent small values that round to zero.
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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 4.10.B. Average Cost of Coal Delivered for Electricity Generation by State, (Year-to-Date) November 2017 and 2016
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	W	W	W	4.34	4.07	W	W
Connecticut	--	W	W	--	--	--	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	--	W	W
New Hampshire	4.34	4.07	6.6%	4.34	4.07	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	1.98	1.96	1.0%	1.66	--	1.98	1.96
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	--	W	W
Pennsylvania	1.91	1.89	1.1%	1.66	--	1.91	1.89
East North Central	2.02	2.09	-3.3%	2.10	2.18	1.88	1.94
Illinois	W	W	W	1.85	1.98	W	W
Indiana	W	W	W	2.15	2.25	W	W
Michigan	W	W	W	2.16	2.26	W	W
Ohio	1.92	2.06	-6.8%	1.73	1.90	1.98	2.12
Wisconsin	2.23	2.21	0.9%	2.23	2.21	--	--
West North Central	1.75	1.72	1.7%	1.75	1.72	--	--
Iowa	1.66	1.59	4.4%	1.66	1.59	--	--
Kansas	1.72	1.70	1.2%	1.72	1.70	--	--
Minnesota	2.08	2.06	1.0%	2.08	2.06	--	--
Missouri	1.87	1.87	0.0%	1.87	1.87	--	--
Nebraska	1.37	1.35	1.5%	1.37	1.35	--	--
North Dakota	1.59	1.54	3.2%	1.59	1.54	--	--
South Dakota	2.21	2.24	-1.3%	2.21	2.24	--	--
South Atlantic	2.70	2.75	-1.8%	2.73	2.78	2.49	2.53
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	2.95	3.02	W	W
Georgia	2.77	2.80	-1.1%	2.77	2.80	--	--
Maryland	2.68	2.84	-5.6%	--	--	2.68	2.84
North Carolina	W	W	W	2.97	3.10	W	W
South Carolina	3.30	3.19	3.4%	3.30	3.19	--	--
Virginia	W	W	W	2.74	2.90	W	W
West Virginia	W	2.26	W	2.21	2.30	W	2.05
East South Central	W	W	W	2.09	2.20	W	W
Alabama	2.17	2.36	-8.1%	2.17	2.36	--	--
Kentucky	1.99	2.12	-6.1%	1.99	2.12	--	--
Mississippi	W	W	W	2.66	2.68	W	W
Tennessee	2.29	2.23	2.7%	2.29	2.23	--	--
West South Central	1.93	1.92	0.5%	2.08	2.15	1.80	1.68
Arkansas	W	W	W	2.04	2.18	W	W
Louisiana	W	W	W	2.64	2.87	W	W
Oklahoma	W	W	W	1.83	1.91	W	W
Texas	1.88	1.80	4.4%	2.08	2.09	1.78	1.64
Mountain	W	W	W	1.92	1.88	W	W
Arizona	2.23	2.14	4.2%	2.23	2.14	--	--
Colorado	1.78	1.87	-4.8%	1.78	1.87	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.76	1.67	W	W
Nevada	W	W	W	3.08	2.02	W	W
New Mexico	1.98	1.87	5.9%	1.98	1.87	--	--
Utah	1.96	1.94	1.0%	1.96	1.94	--	--
Wyoming	W	W	W	1.71	1.67	W	W
Pacific Contiguous	W	W	W	2.32	2.24	W	W
California	--	--	--	--	--	--	--
Oregon	2.32	2.24	3.6%	2.32	2.24	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.05	3.09	W	W
Alaska	3.05	3.09	-1.3%	3.05	3.09	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.07	2.11	-1.9%	2.12	2.16	1.92	1.93

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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, November 2017 and 2016
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016
New England	W	W	W	16.80	12.16	W	W
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	21.72	W	W
New Hampshire	16.80	11.10	51.0%	16.80	11.10	--	--
Rhode Island	--	W	W	--	--	--	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	14.89	8.44	76.0%	--	7.59	14.89	11.05
New Jersey	--	W	W	--	--	--	W
New York	W	W	W	--	7.59	W	W
Pennsylvania	W	W	W	--	--	W	W
East North Central	15.52	11.74	32.0%	15.08	11.16	15.89	12.53
Illinois	W	11.40	W	--	--	W	11.40
Indiana	15.11	11.24	34.0%	15.11	11.24	--	--
Michigan	14.64	11.08	32.0%	14.64	11.08	--	--
Ohio	W	12.06	W	15.82	11.18	W	12.78
Wisconsin	14.89	11.01	35.0%	14.89	11.01	--	--
West North Central	14.88	10.91	36.0%	14.88	10.91	--	--
Iowa	14.70	11.14	32.0%	14.70	11.14	--	--
Kansas	14.80	10.83	37.0%	14.80	10.83	--	--
Minnesota	14.81	11.88	25.0%	14.81	11.88	--	--
Missouri	14.82	11.25	32.0%	14.82	11.25	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	15.49	8.44	84.0%	15.49	8.44	--	--
South Dakota	--	10.54	--	--	10.54	--	--
South Atlantic	11.16	9.38	19.0%	10.84	8.95	12.76	11.76
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	15.02	12.05	25.0%	15.02	12.05	--	--
Georgia	W	W	W	13.93	10.86	W	W
Maryland	W	10.97	W	--	--	W	10.97
North Carolina	14.50	W	W	14.50	11.29	--	W
South Carolina	15.35	12.37	24.0%	15.35	12.37	--	--
Virginia	W	W	W	7.51	7.61	W	W
West Virginia	16.04	W	W	16.04	12.84	--	W
East South Central	15.03	11.44	31.0%	15.03	11.44	--	--
Alabama	16.07	12.00	34.0%	16.07	12.00	--	--
Kentucky	14.98	11.38	32.0%	14.98	11.38	--	--
Mississippi	13.74	11.46	20.0%	13.74	11.46	--	--
Tennessee	15.04	11.42	32.0%	15.04	11.42	--	--
West South Central	W	W	W	14.54	10.92	W	W
Arkansas	14.27	W	W	14.27	10.89	--	W
Louisiana	13.95	--	--	13.95	--	--	--
Oklahoma	15.19	--	--	15.19	--	--	--
Texas	W	W	W	14.05	11.00	W	W
Mountain	W	W	W	16.67	12.52	W	W
Arizona	15.22	12.82	19.0%	15.22	12.82	--	--
Colorado	16.77	--	--	16.77	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	--	--	--	--	--	--	--
New Mexico	16.36	13.31	23.0%	16.36	13.31	--	--
Utah	17.92	W	W	17.92	11.43	--	W
Wyoming	18.77	11.75	60.0%	18.77	11.75	--	--
Pacific Contiguous	W	W	W	17.51	12.29	W	W
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	W	W	17.51	12.29	W	W
Pacific Noncontiguous	W	W	W	11.64	10.19	W	W
Alaska	--	16.04	--	--	16.04	--	--
Hawaii	W	W	W	11.64	10.17	W	W
U.S. Total	12.29	10.18	21.0%	12.02	9.80	13.06	11.16

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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) November 2017 and 2016 (Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	W	9.29	W	14.33	9.64	W	9.23
Connecticut	W	10.59	W	--	--	W	10.59
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	9.61	W	W
New Hampshire	14.33	9.85	45.0%	14.33	9.85	--	--
Rhode Island	--	W	W	--	--	--	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	13.01	10.01	30.0%	9.22	8.01	14.79	10.97
New Jersey	W	9.83	W	--	--	W	9.83
New York	W	9.82	W	9.22	8.01	W	11.88
Pennsylvania	12.87	10.32	25.0%	--	--	12.87	10.32
East North Central	13.10	W	W	12.95	10.65	13.32	W
Illinois	13.15	10.74	22.0%	12.77	10.80	13.16	10.74
Indiana	12.80	10.45	22.0%	12.80	10.45	--	--
Michigan	12.71	10.45	22.0%	12.71	10.45	--	--
Ohio	13.49	W	W	13.81	10.90	13.37	W
Wisconsin	12.51	W	W	12.51	11.45	--	W
West North Central	12.83	W	W	12.83	10.39	--	W
Iowa	12.91	10.68	21.0%	12.91	10.68	--	--
Kansas	12.97	10.30	26.0%	12.97	10.30	--	--
Minnesota	12.81	W	W	12.81	11.25	--	W
Missouri	12.93	10.57	22.0%	12.93	10.57	--	--
Nebraska	12.66	11.03	15.0%	12.66	11.03	--	--
North Dakota	12.45	9.12	37.0%	12.45	9.12	--	--
South Dakota	11.98	8.54	40.0%	11.98	8.54	--	--
South Atlantic	12.12	9.90	22.0%	12.13	9.80	12.05	10.40
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	12.47	W	W	12.47	11.66	--	W
Georgia	W	9.25	W	11.93	9.54	W	7.83
Maryland	11.58	9.62	20.0%	--	--	11.58	9.62
North Carolina	W	9.56	W	12.73	10.10	W	7.92
South Carolina	13.02	10.99	18.0%	13.02	10.99	--	--
Virginia	W	W	W	9.49	7.97	W	W
West Virginia	13.08	W	W	13.08	11.22	--	W
East South Central	W	W	W	12.43	10.27	W	W
Alabama	W	W	W	12.99	9.81	W	W
Kentucky	12.63	10.47	21.0%	12.63	10.47	--	--
Mississippi	11.91	9.31	28.0%	11.91	9.31	--	--
Tennessee	12.03	10.32	17.0%	12.03	10.32	--	--
West South Central	12.74	10.50	21.0%	12.82	10.33	12.65	11.01
Arkansas	W	W	W	12.75	9.99	W	W
Louisiana	13.95	W	W	13.95	9.66	--	W
Oklahoma	14.67	12.15	21.0%	14.67	12.15	--	--
Texas	W	W	W	12.26	10.31	W	W
Mountain	14.00	11.30	24.0%	14.02	11.21	13.80	12.15
Arizona	13.56	11.19	21.0%	13.56	11.19	--	--
Colorado	14.28	10.12	41.0%	14.28	10.12	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	12.34	11.79	W	W
New Mexico	13.95	10.96	27.0%	13.95	10.96	--	--
Utah	W	W	W	14.85	11.64	W	W
Wyoming	14.13	11.40	24.0%	14.13	11.40	--	--
Pacific Contiguous	W	W	W	13.87	11.43	W	W
California	--	--	--	--	--	--	--
Oregon	12.71	11.19	14.0%	12.71	11.19	--	--
Washington	W	W	W	17.51	12.29	W	W
Pacific Noncontiguous	W	W	W	10.89	8.39	W	W
Alaska	16.16	14.31	13.0%	16.16	14.31	--	--
Hawaii	W	W	W	10.89	8.38	W	W
U.S. Total	11.56	9.25	25.0%	11.43	9.03	11.98	9.90

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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, November 2017 and 2016
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	W	W	--	--	--	W
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	W	W	--	--	--	W
East North Central	1.54	W	W	1.54	1.45	--	W
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.47	1.32	11.0%	1.47	1.32	--	--
Ohio	--	W	W	--	--	--	W
Wisconsin	1.78	1.73	2.9%	1.78	1.73	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.92	2.35	24.0%	2.92	2.35	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.92	2.35	24.0%	2.92	2.35	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	1.47	--	--	1.47	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	1.47	--	--	1.47	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.58	2.34	10.0%	2.58	2.34	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.58	2.34	10.0%	2.58	2.34	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.52	W	W	2.52	2.22	--	W

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

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

Table 4.12.B. Average Cost of Petroleum Coke Delivered for Electricity Generation by State, (Year-to-Date) November 2017 and 2016 (Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	W	W	--	--	--	W
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	W	W	--	--	--	W
East North Central	1.49	W	W	1.49	1.22	--	W
Illinois	--	--	--	--	--	--	--
Indiana	--	0.96	--	--	0.96	--	--
Michigan	1.46	1.30	12.0%	1.46	1.30	--	--
Ohio	--	W	W	--	--	--	W
Wisconsin	1.79	1.71	4.7%	1.79	1.71	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.62	1.54	70.0%	2.62	1.54	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.62	1.54	70.0%	2.62	1.54	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	1.50	1.55	-3.2%	1.50	1.55	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	1.50	1.55	-3.2%	1.50	1.55	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.20	1.51	46.0%	2.20	1.51	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.20	1.51	46.0%	2.20	1.51	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.15	1.60	34.0%	2.15	1.48	--	2.50

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W = Withheld to avoid disclosure of individual company data.

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

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

Table 4.13.A. Average Cost of Natural Gas Delivered for Electricity Generation by State, November 2017 and 2016
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	November 2017	November 2016	Percentage Change	November 2017	November 2016	November 2017	November 2016
New England	W	3.48	W	11.53	3.33	W	3.48
Connecticut	4.05	3.26	24.0%	--	--	4.05	3.26
Maine	--	--	--	--	--	--	--
Massachusetts	W	3.94	W	--	3.33	W	3.94
New Hampshire	W	W	W	11.53	--	W	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.71	2.36	15.0%	3.19	3.28	2.65	2.28
New Jersey	2.86	2.37	21.0%	--	--	2.86	2.37
New York	3.29	2.86	15.0%	3.19	3.28	3.34	2.72
Pennsylvania	2.28	2.03	12.0%	--	--	2.28	2.03
East North Central	3.02	2.62	15.0%	3.15	2.78	2.93	2.50
Illinois	W	W	W	3.45	3.03	W	W
Indiana	W	W	W	3.10	2.79	W	W
Michigan	3.18	2.67	19.0%	3.48	2.82	3.12	2.62
Ohio	2.77	2.20	26.0%	2.95	2.08	2.71	2.23
Wisconsin	3.28	W	W	3.28	3.10	--	W
West North Central	W	3.01	W	3.24	2.94	W	3.90
Iowa	2.96	2.85	3.9%	2.96	2.85	--	--
Kansas	3.41	3.16	7.9%	3.41	3.16	--	--
Minnesota	W	W	W	3.52	3.34	W	W
Missouri	2.67	W	W	2.67	2.64	--	W
Nebraska	4.62	2.98	55.0%	4.62	2.98	--	--
North Dakota	5.44	2.58	111.0%	5.44	2.58	--	--
South Dakota	--	2.36	--	--	2.36	--	--
South Atlantic	3.95	3.74	5.6%	4.06	3.80	3.10	2.79
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	4.31	W	W	4.31	4.01	--	W
Georgia	W	3.04	W	3.74	3.07	W	2.87
Maryland	3.23	3.47	-6.9%	--	--	3.23	3.47
North Carolina	W	W	W	3.89	3.54	W	W
South Carolina	W	W	W	3.61	3.19	W	W
Virginia	W	W	W	3.63	4.54	W	W
West Virginia	W	2.67	W	3.07	2.46	W	2.77
East South Central	3.17	2.87	10.0%	3.15	2.89	3.23	2.80
Alabama	W	W	W	3.32	3.21	W	W
Kentucky	W	W	W	3.21	3.06	W	W
Mississippi	W	W	W	3.11	2.77	W	W
Tennessee	2.92	2.84	2.8%	2.92	2.84	--	--
West South Central	3.06	2.67	15.0%	3.20	2.83	2.99	2.56
Arkansas	W	W	W	3.01	3.03	W	W
Louisiana	W	W	W	3.27	2.86	W	W
Oklahoma	W	W	W	3.19	2.73	W	W
Texas	3.01	2.64	14.0%	3.11	2.85	3.00	2.58
Mountain	3.46	3.31	4.5%	3.46	3.32	3.39	3.16
Arizona	W	W	W	3.59	3.57	W	W
Colorado	W	W	W	3.64	3.58	W	W
Idaho	--	4.66	--	--	4.66	--	--
Montana	1.83	1.96	-6.6%	1.83	1.96	--	--
Nevada	3.29	3.23	1.9%	3.29	3.23	--	--
New Mexico	3.52	2.94	20.0%	3.52	2.94	--	--
Utah	W	W	W	3.64	3.16	W	W
Wyoming	3.52	W	W	3.52	10.76	--	W
Pacific Contiguous	3.51	3.09	14.0%	3.85	3.52	3.16	2.64
California	W	3.14	W	3.94	3.70	W	2.69
Oregon	W	W	W	2.70	2.62	W	W
Washington	4.02	W	W	4.02	3.96	--	W
Pacific Noncontiguous	8.13	6.87	18.0%	8.13	6.87	--	--
Alaska	8.13	6.87	18.0%	8.13	6.87	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.41	3.04	12.0%	3.68	3.36	3.02	2.59

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See Technical Notes for a discussion of the sample design for the Form EIA-923.
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Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

Table 4.13.B. Average Cost of Natural Gas Delivered for Electricity Generation by State, (Year-to-Date) November 2017 and 2016
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	November 2017 YTD	November 2016 YTD	Percentage Change	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	W	3.12	W	3.38	3.50	W	3.12
Connecticut	W	3.39	W	--	--	W	3.39
Maine	W	W	W	--	--	W	W
Massachusetts	3.31	3.01	10.0%	3.13	3.38	3.31	3.00
New Hampshire	W	W	W	3.81	3.91	W	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.74	2.08	32.0%	3.35	2.50	2.66	2.03
New Jersey	2.72	2.01	35.0%	--	--	2.72	2.01
New York	3.19	2.49	28.0%	3.35	2.50	3.13	2.49
Pennsylvania	2.39	1.74	37.0%	--	--	2.39	1.74
East North Central	3.07	2.57	19.0%	3.13	2.70	3.03	2.45
Illinois	3.09	2.75	12.0%	3.74	3.00	3.09	2.72
Indiana	W	W	W	3.07	2.83	W	W
Michigan	3.17	2.64	20.0%	3.38	2.82	3.12	2.54
Ohio	2.89	2.15	34.0%	2.82	2.16	2.91	2.14
Wisconsin	W	W	W	3.30	2.72	W	W
West North Central	W	2.84	W	3.20	2.84	W	2.84
Iowa	2.72	2.58	5.4%	2.72	2.58	--	--
Kansas	3.52	3.27	7.6%	3.52	3.27	--	--
Minnesota	W	W	W	3.49	2.99	W	W
Missouri	2.98	W	W	2.98	2.77	--	W
Nebraska	3.83	3.05	26.0%	3.83	3.05	--	--
North Dakota	5.12	2.55	101.0%	5.12	2.55	--	--
South Dakota	--	2.42	--	--	2.42	--	--
South Atlantic	3.88	3.39	14.0%	3.98	3.49	3.04	2.58
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	3.73	W	4.20	3.75	W	2.85
Georgia	W	2.90	W	3.62	2.96	W	2.69
Maryland	W	2.83	W	--	--	W	2.83
North Carolina	W	W	W	3.95	3.62	W	W
South Carolina	W	W	W	3.52	3.23	W	W
Virginia	3.23	W	W	3.50	2.96	2.46	W
West Virginia	W	W	W	2.97	2.42	W	W
East South Central	3.24	2.74	18.0%	3.23	2.75	3.27	2.73
Alabama	W	W	W	3.36	2.86	W	W
Kentucky	W	W	W	3.65	3.06	W	W
Mississippi	W	W	W	3.15	2.72	W	W
Tennessee	3.02	2.51	20.0%	3.02	2.51	--	--
West South Central	3.09	2.57	20.0%	3.21	2.68	3.03	2.49
Arkansas	W	W	W	3.18	3.00	W	W
Louisiana	W	2.61	W	3.27	2.65	W	2.37
Oklahoma	W	W	W	3.18	2.68	W	W
Texas	3.06	2.55	20.0%	3.15	2.65	3.04	2.51
Mountain	3.45	2.90	19.0%	3.45	2.92	3.34	2.77
Arizona	3.55	W	W	3.63	3.11	3.02	W
Colorado	W	W	W	3.44	3.06	W	W
Idaho	--	2.84	--	--	2.84	--	--
Montana	1.77	W	W	1.77	1.73	--	W
Nevada	3.37	2.84	19.0%	3.37	2.84	--	--
New Mexico	3.40	2.84	20.0%	3.40	2.84	--	--
Utah	W	W	W	3.35	2.58	W	W
Wyoming	W	W	W	3.42	8.71	W	W
Pacific Contiguous	3.57	2.87	24.0%	3.89	3.20	3.26	2.54
California	W	2.99	W	4.02	3.44	W	2.61
Oregon	W	W	W	2.65	2.29	W	W
Washington	3.75	W	W	3.75	3.33	--	W
Pacific Noncontiguous	8.10	6.57	23.0%	8.10	6.57	--	--
Alaska	8.10	6.57	23.0%	8.10	6.57	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.38	2.81	20.0%	3.64	3.08	3.03	2.45

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

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

Table 4.14. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Total (All Sectors) by State, November 2017

	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	6	0.67	7.1	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	6	0.67	7.1	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,042	3.01	8.6	0	--	--	0	--	--
New Jersey	49	1.83	7.8	0	--	--	0	--	--
New York	8	1.16	7.8	0	--	--	0	--	--
Pennsylvania	985	3.08	8.7	0	--	--	0	--	--
East North Central	5,719	3.16	10.2	5,829	0.24	4.7	0	--	--
Illinois	940	3.64	20.6	2,259	0.22	4.6	0	--	--
Indiana	2,427	2.83	8.5	126	0.21	4.5	0	--	--
Michigan	137	2.12	7.3	1,643	0.25	4.7	0	--	--
Ohio	2,154	3.42	8.9	15	0.31	5.0	0	--	--
Wisconsin	63	3.33	7.7	1,786	0.25	4.9	0	--	--
West North Central	64	3.39	9.5	8,164	0.27	5.0	2,052	0.78	9.6
Iowa	32	3.55	8.0	1,426	0.25	4.6	0	--	--
Kansas	15	3.67	14.2	1,092	0.32	4.9	0	--	--
Minnesota	0	--	--	1,286	0.35	6.4	0	--	--
Missouri	17	2.86	8.2	3,165	0.23	4.6	0	--	--
Nebraska	0	--	--	1,025	0.26	4.9	0	--	--
North Dakota	0	--	--	0	--	--	2,052	0.78	9.6
South Dakota	0	--	--	169	0.36	5.2	0	--	--
South Atlantic	5,627	2.41	10.8	761	0.34	4.8	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	1,156	2.39	8.3	0	--	--	0	--	--
Georgia	494	2.59	7.8	748	0.35	4.8	0	--	--
Maryland	313	2.43	10.6	14	0.20	4.4	0	--	--
North Carolina	835	1.56	10.2	0	--	--	0	--	--
South Carolina	515	1.72	9.4	0	--	--	0	--	--
Virginia	393	0.88	20.8	0	--	--	0	--	--
West Virginia	1,922	3.19	11.9	0	--	--	0	--	--
East South Central	2,276	2.67	8.9	1,552	0.26	5.0	173	0.52	13.0
Alabama	343	1.57	8.7	818	0.28	5.1	0	--	--
Kentucky	1,591	3.07	9.1	441	0.25	5.1	0	--	--
Mississippi	49	2.63	7.4	84	0.29	4.8	173	0.52	13.0
Tennessee	293	1.80	8.5	210	0.22	4.6	0	--	--
West South Central	88	2.18	13.1	7,219	0.28	5.0	2,914	1.11	17.7
Arkansas	6	0.62	10.7	1,430	0.23	4.7	0	--	--
Louisiana	48	2.82	8.2	383	0.28	4.9	166	0.54	17.4
Oklahoma	33	1.38	22.2	594	0.22	4.6	0	--	--
Texas	0	--	--	4,812	0.30	5.2	2,748	1.14	17.7
Mountain	2,039	0.60	13.4	5,216	0.53	8.8	0	--	--
Arizona	542	0.65	9.8	877	0.65	11.6	0	--	--
Colorado	122	0.45	10.7	1,389	0.35	5.7	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	823	0.64	9.5	0	--	--
Nevada	0	--	--	45	0.36	5.4	0	--	--
New Mexico	487	0.72	21.4	324	0.78	20.2	0	--	--
Utah	888	0.52	12.0	73	0.90	8.6	0	--	--
Wyoming	0	--	--	1,683	0.50	7.6	0	--	--
Pacific Contiguous	55	0.55	10.6	485	0.39	7.4	0	--	--
California	55	0.55	10.6	0	--	--	0	--	--
Oregon	0	--	--	164	0.23	4.8	0	--	--
Washington	0	--	--	321	0.47	8.8	0	--	--
Pacific Noncontiguous	0	--	--	61	0.18	5.0	10	0.12	6.0
Alaska	0	--	--	0	--	--	10	0.12	6.0
Hawaii	0	--	--	61	0.18	5.0	0	--	--
U.S. Total	16,916	2.53	10.5	29,287	0.31	5.7	5,149	0.95	14.2

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Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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, November 2017

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	0	--	--	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	0	--	--	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	0	--	--	0	--	--	0	--	--
East North Central	3,183	2.86	8.5	4,045	0.24	4.7	0	--	--
Illinois	163	3.08	10.3	490	0.19	4.4	0	--	--
Indiana	2,275	2.78	8.5	126	0.21	4.5	0	--	--
Michigan	106	2.51	7.6	1,643	0.25	4.7	0	--	--
Ohio	576	3.12	8.2	0	--	--	0	--	--
Wisconsin	63	3.33	7.7	1,786	0.25	4.9	0	--	--
West North Central	31	3.24	11.1	7,947	0.27	5.0	2,052	0.78	9.6
Iowa	0	--	--	1,273	0.25	4.7	0	--	--
Kansas	15	3.67	14.2	1,092	0.32	4.9	0	--	--
Minnesota	0	--	--	1,286	0.35	6.4	0	--	--
Missouri	16	2.85	8.2	3,165	0.23	4.6	0	--	--
Nebraska	0	--	--	961	0.26	5.0	0	--	--
North Dakota	0	--	--	0	--	--	2,052	0.78	9.6
South Dakota	0	--	--	169	0.36	5.2	0	--	--
South Atlantic	4,793	2.37	10.5	748	0.35	4.8	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	1,145	2.40	8.3	0	--	--	0	--	--
Georgia	484	2.62	7.8	748	0.35	4.8	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	810	1.58	10.3	0	--	--	0	--	--
South Carolina	515	1.72	9.4	0	--	--	0	--	--
Virginia	325	0.90	24.2	0	--	--	0	--	--
West Virginia	1,514	3.14	11.1	0	--	--	0	--	--
East South Central	2,196	2.73	9.0	1,552	0.26	5.0	0	--	--
Alabama	343	1.57	8.7	818	0.28	5.1	0	--	--
Kentucky	1,591	3.07	9.1	441	0.25	5.1	0	--	--
Mississippi	49	2.63	7.4	84	0.29	4.8	0	--	--
Tennessee	213	2.14	8.7	210	0.22	4.6	0	--	--
West South Central	48	2.82	8.2	3,935	0.25	4.9	816	1.46	20.7
Arkansas	0	--	--	1,134	0.21	4.6	0	--	--
Louisiana	48	2.82	8.2	218	0.25	4.9	166	0.54	17.4
Oklahoma	0	--	--	493	0.23	4.6	0	--	--
Texas	0	--	--	2,090	0.28	5.1	651	1.73	21.7
Mountain	2,039	0.60	13.4	4,301	0.51	8.8	0	--	--
Arizona	542	0.65	9.8	877	0.65	11.6	0	--	--
Colorado	122	0.45	10.7	1,389	0.35	5.7	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	0	--	--
Nevada	0	--	--	0	--	--	0	--	--
New Mexico	487	0.72	21.4	324	0.78	20.2	0	--	--
Utah	888	0.52	12.0	73	0.90	8.6	0	--	--
Wyoming	0	--	--	1,637	0.50	7.6	0	--	--
Pacific Contiguous	0	--	--	164	0.23	4.8	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	164	0.23	4.8	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	10	0.12	6.0
Alaska	0	--	--	0	--	--	10	0.12	6.0
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	12,290	2.29	10.1	22,692	0.31	5.7	2,878	0.96	12.5

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 2017 are preliminary. Values for 2016 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, November 2017

	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	6	0.67	7.1	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	6	0.67	7.1	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,034	3.02	8.6	0	--	--	0	--	--
New Jersey	49	1.83	7.8	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	985	3.08	8.7	0	--	--	0	--	--
East North Central	2,400	3.55	12.7	1,753	0.21	4.6	0	--	--
Illinois	641	3.80	27.1	1,738	0.21	4.6	0	--	--
Indiana	151	3.65	9.4	0	--	--	0	--	--
Michigan	30	0.38	5.7	0	--	--	0	--	--
Ohio	1,578	3.52	9.1	15	0.31	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	752	2.84	12.5	14	0.20	4.4	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	294	2.47	10.0	14	0.20	4.4	0	--	--
North Carolina	4	0.64	6.4	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	45	0.81	9.0	0	--	--	0	--	--
West Virginia	408	3.38	15.0	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	173	0.52	13.0
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	173	0.52	13.0
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	33	1.38	22.2	3,239	0.31	5.2	2,098	0.98	16.6
Arkansas	0	--	--	296	0.27	5.0	0	--	--
Louisiana	0	--	--	165	0.31	5.0	0	--	--
Oklahoma	33	1.38	22.2	56	0.19	4.5	0	--	--
Texas	0	--	--	2,722	0.32	5.3	2,098	0.98	16.6
Mountain	0	--	--	914	0.62	9.2	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	823	0.64	9.5	0	--	--
Nevada	0	--	--	45	0.36	5.4	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	45	0.45	6.7	0	--	--
Pacific Contiguous	0	--	--	321	0.47	8.8	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	321	0.47	8.8	0	--	--
Pacific Noncontiguous	0	--	--	61	0.18	5.0	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	61	0.18	5.0	0	--	--
U.S. Total	4,225	3.26	11.6	6,301	0.33	5.8	2,271	0.95	16.4

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 2017 are preliminary. Values for 2016 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, November 2017

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	0	--	--	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	0	--	--	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	0	--	--	0	--	--	0	--	--
East North Central	0	--	--	0	--	--	0	--	--
Illinois	0	--	--	0	--	--	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	1	3.04	8.6	0	--	--	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	1	3.04	8.6	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	1	3.04	8.6	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 2017 are preliminary. Values for 2016 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, November 2017

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	0	--	--	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	8	1.16	7.8	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	8	1.16	7.8	0	--	--	0	--	--
Pennsylvania	0	--	--	0	--	--	0	--	--
East North Central	136	3.69	8.5	31	0.80	6.5	0	--	--
Illinois	136	3.69	8.5	31	0.80	6.5	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	32	3.55	8.0	217	0.22	4.5	0	--	--
Iowa	32	3.55	8.0	154	0.22	4.5	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	64	0.21	4.4	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	82	1.04	10.3	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	11	0.70	7.5	0	--	--	0	--	--
Georgia	10	1.40	10.6	0	--	--	0	--	--
Maryland	18	1.79	21.9	0	--	--	0	--	--
North Carolina	20	0.87	6.9	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	23	0.74	7.1	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	80	0.95	8.1	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	80	0.95	8.1	0	--	--	0	--	--
West South Central	6	0.62	10.7	45	0.20	4.7	0	--	--
Arkansas	6	0.62	10.7	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	45	0.20	4.7	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	0.55	10.6	0	--	--	0	--	--
California	55	0.55	10.6	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	401	1.97	9.1	294	0.28	4.7	0	--	--

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

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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 5.1. Sales of Electricity to Ultimate Customers:
Total by End-Use Sector, 2007 - November 2017 (Thousand Megawatthours)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2007	1,392,241	1,336,315	1,027,832	8,173	3,764,561
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
Year 2015					
January	137,765	111,620	79,609	673	329,666
February	123,838	105,482	76,749	699	306,768
March	117,167	107,796	79,709	679	305,352
April	90,199	104,168	80,489	620	275,475
May	95,161	109,406	82,916	609	288,091
June	120,300	119,270	86,218	609	326,397
July	146,038	128,504	87,747	648	362,938
August	144,515	128,519	88,373	625	362,032
Sept	125,417	122,195	84,730	615	332,958
October	99,349	112,821	83,249	636	296,055
November	92,678	104,140	78,495	604	275,917
December	111,670	106,829	78,224	619	297,344
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	128,998	108,928	75,783	666	314,375
February	101,149	99,207	71,933	636	272,925
March	103,205	106,683	77,550	644	288,082
April	90,781	101,372	75,851	590	268,593
May	98,757	109,456	80,072	583	288,868
June	121,782	118,815	82,147	629	323,373
July	148,890	127,902	84,213	630	361,635
August	141,745	127,573	85,814	641	355,773
Sept	118,803	118,293	80,163	619	317,879
October	102,984	113,035	79,432	626	296,077
November	97,532	104,796	76,180	598	279,106
Year to Date					
2015	1,292,426	1,253,922	908,283	7,017	3,461,649
2016	1,289,777	1,257,019	898,099	6,844	3,451,739
2017	1,254,626	1,236,061	869,137	6,862	3,366,686
Rolling 12 Months Ending in November					
2016	1,401,448	1,363,849	976,323	7,463	3,749,083
2017	1,375,907	1,346,233	947,753	7,515	3,677,408

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 2016 and prior years are final. Values for 2017 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, 2007 - November 2017 (Million Dollars)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2007	148,295	128,903	65,712	792	343,703
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
Year 2015					
January	16,665	11,506	5,310	70	33,551
February	15,215	11,203	5,277	73	31,768
March	14,450	11,460	5,441	69	31,419
April	11,379	10,803	5,323	60	27,566
May	12,300	11,456	5,589	60	29,405
June	15,537	12,992	6,133	62	34,725
July	18,904	14,229	6,538	67	39,738
August	18,659	14,065	6,493	63	39,280
Sept	16,347	13,420	6,107	63	35,937
October	12,633	12,100	5,728	63	30,524
November	11,775	10,722	5,185	58	27,740
December	13,759	10,825	5,043	61	29,688
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	15,757	11,140	4,984	62	31,944
February	12,932	10,396	4,760	60	28,148
March	13,309	11,174	5,220	61	29,764
April	11,523	10,540	5,015	56	27,135
May	12,857	11,586	5,453	56	29,952
June	16,098	13,062	5,926	64	35,149
July	19,534	14,065	6,180	64	39,843
August	18,699	14,086	6,215	65	39,064
Sept	15,801	13,087	5,783	62	34,733
October	13,220	12,230	5,524	60	31,034
November	12,692	11,056	5,171	57	28,976
Year to Date					
2015	163,864	133,956	63,123	710	361,654
2016	162,247	131,437	60,827	660	355,170
2017	162,422	132,422	60,232	666	355,742
Rolling 12 Months Ending in November					
2016	176,006	142,262	65,869	721	384,857
2017	177,252	143,628	65,473	728	387,081

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 2016 and prior years are final. Values for 2017 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, 2007 - November 2017 (Cents per Kilowatthour)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2007	10.65	9.65	6.39	9.70	9.13
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
Year 2015					
January	12.10	10.31	6.67	10.45	10.18
February	12.29	10.62	6.88	10.49	10.36
March	12.33	10.63	6.83	10.12	10.29
April	12.62	10.37	6.61	9.76	10.01
May	12.93	10.47	6.74	9.87	10.21
June	12.92	10.89	7.11	10.15	10.64
July	12.94	11.07	7.45	10.34	10.95
August	12.91	10.94	7.35	10.14	10.85
Sept	13.03	10.98	7.21	10.29	10.79
October	12.72	10.73	6.88	9.91	10.31
November	12.71	10.30	6.61	9.63	10.05
December	12.32	10.13	6.45	9.81	9.98
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	12.22	10.23	6.58	9.38	10.16
February	12.78	10.48	6.62	9.47	10.31
March	12.90	10.47	6.73	9.47	10.33
April	12.69	10.40	6.61	9.44	10.10
May	13.02	10.59	6.81	9.58	10.37
June	13.22	10.99	7.21	10.14	10.87
July	13.12	11.00	7.34	10.13	11.02
August	13.19	11.04	7.24	10.07	10.98
Sept	13.30	11.06	7.21	10.01	10.93
October	12.84	10.82	6.95	9.57	10.48
November	13.01	10.55	6.79	9.49	10.38
Year to Date					
2015	12.68	10.68	6.95	10.11	10.45
2016	12.58	10.46	6.77	9.64	10.29
2017	12.95	10.71	6.93	9.71	10.57
Rolling 12 Months Ending in November					
2016	12.56	10.43	6.75	9.65	10.27
2017	12.88	10.67	6.91	9.69	10.53

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors. NA = Not available. See Glossary for definitions.
Geographic coverage is the 50 States and the District of Columbia. Values include energy service provider (power marketer) data.
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Sources: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Industry Power Report.
Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report;
Form EIA-861, Annual Electric Power Industry Report; and Form EIA-861S, Annual Electric Power Industry Report (Short Form).

Table 5.4.A. Sales of Electricity to Ultimate Customers by End-Use Sector, by State, November 2017 and 2016 (Thousand Megawatthours)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	3,613	3,235	4,522	3,973	1,446	1,449	44	44	9,625	8,702
Connecticut	918	866	976	923	266	275	14	15	2,173	2,079
Maine	340	329	322	291	269	237	0	0	931	856
Massachusetts	1,632	1,350	2,442	1,991	581	603	28	27	4,682	3,971
New Hampshire	340	317	345	331	156	158	0	0	841	806
Rhode Island	224	214	284	282	56	61	2	2	566	560
Vermont	159	159	154	155	119	116	0	0	432	430
Middle Atlantic	9,162	9,015	12,158	12,122	5,940	5,691	301	317	27,561	27,145
New Jersey	1,848	1,816	2,853	2,923	544	568	24	23	5,270	5,330
New York	3,593	3,513	5,991	5,849	1,495	1,476	229	232	11,308	11,070
Pennsylvania	3,720	3,686	3,314	3,351	3,900	3,647	48	61	10,982	10,745
East North Central	13,707	12,591	14,227	14,016	14,722	15,492	43	40	42,699	42,139
Illinois	3,313	2,983	3,901	3,818	3,266	3,323	39	35	10,519	10,160
Indiana	2,319	2,147	1,852	1,830	3,252	3,637	2	2	7,424	7,616
Michigan	2,509	2,384	2,949	2,917	2,468	2,535	1	0	7,926	7,837
Ohio	3,803	3,471	3,686	3,642	3,868	4,077	2	3	11,359	11,192
Wisconsin	1,763	1,607	1,839	1,809	1,868	1,920	0	0	5,470	5,336
West North Central	7,383	6,715	7,944	7,894	7,170	7,485	4	4	22,500	22,097
Iowa	998	905	994	981	1,885	1,918	0	0	3,877	3,804
Kansas	846	801	1,188	1,200	868	954	0	0	2,902	2,956
Minnesota	1,703	1,589	1,808	1,787	1,726	1,760	2	2	5,239	5,138
Missouri	2,296	2,083	2,243	2,306	998	1,074	2	2	5,537	5,465
Nebraska	709	617	770	718	832	913	0	0	2,311	2,248
North Dakota	456	382	553	534	645	631	0	0	1,654	1,547
South Dakota	376	337	389	367	216	233	0	0	981	938
South Atlantic	24,433	23,588	23,925	23,875	11,248	11,316	104	100	59,711	58,877
Delaware	312	298	321	322	178	191	0	0	811	810
District of Columbia	173	141	605	637	15	13	30	25	823	816
Florida	8,167	8,291	7,237	7,359	1,275	1,353	6	7	16,686	17,010
Georgia	3,775	3,581	3,508	3,534	2,545	2,552	13	13	9,841	9,679
Maryland	1,931	1,787	2,202	2,241	311	322	42	42	4,486	4,392
North Carolina	4,042	3,785	3,729	3,660	2,250	2,192	0	0	10,021	9,637
South Carolina	2,044	1,943	1,605	1,659	2,172	2,224	0	0	5,821	5,826
Virginia	3,127	2,975	4,115	3,850	1,315	1,390	14	12	8,570	8,227
West Virginia	862	787	602	612	1,187	1,080	0	0	2,652	2,480
East South Central	7,840	7,310	6,766	7,063	7,959	8,173	0	0	22,565	22,545
Alabama	2,093	1,962	1,689	1,742	2,694	2,610	0	0	6,476	6,315
Kentucky	1,821	1,639	1,458	1,506	2,256	2,336	0	0	5,535	5,481
Mississippi	1,209	1,180	1,062	1,108	1,374	1,308	0	0	3,644	3,596
Tennessee	2,717	2,529	2,558	2,706	1,635	1,919	0	0	6,911	7,153
West South Central	13,592	13,627	14,440	15,278	14,476	14,891	18	18	42,525	43,814
Arkansas	1,138	1,091	919	956	1,383	1,355	0	0	3,440	3,403
Louisiana	2,066	2,037	1,969	1,998	2,841	2,971	1	1	6,876	7,007
Oklahoma	1,376	1,292	1,554	1,579	1,411	1,478	0	0	4,340	4,350
Texas	9,012	9,207	9,998	10,744	8,841	9,087	16	17	27,868	29,055
Mountain	6,421	6,315	7,322	7,298	6,243	6,405	13	11	19,999	20,030
Arizona	1,929	1,919	2,168	2,208	1,001	1,145	1	1	5,098	5,273
Colorado	1,359	1,336	1,567	1,606	1,254	1,277	8	5	4,187	4,224
Idaho	697	654	508	492	499	486	0	0	1,704	1,631
Montana	415	382	396	384	343	366	0	0	1,155	1,133
Nevada	704	726	796	742	974	922	1	1	2,475	2,392
New Mexico	443	437	673	693	612	631	0	0	1,728	1,762
Utah	642	645	910	878	714	744	4	5	2,270	2,272
Wyoming	232	217	303	293	847	833	0	0	1,382	1,343
Pacific Contiguous	10,978	10,457	13,011	13,056	6,570	7,103	72	58	30,631	30,674
California	6,296	6,188	9,278	9,448	3,804	4,050	69	55	19,447	19,741
Oregon	1,647	1,474	1,354	1,301	906	1,001	2	2	3,910	3,778
Washington	3,034	2,795	2,379	2,308	1,860	2,051	1	1	7,274	7,154
Pacific Noncontiguous	403	391	480	484	406	418	0	0	1,290	1,293
Alaska	186	NM	233	235	118	117	0	0	536	534
Hawaii	218	209	247	249	289	301	0	0	753	759
U.S. Total	97,532	93,244	104,796	105,060	76,180	78,421	598	592	279,106	277,317

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 2016 are final. Values for 2017 are preliminary estimates based on a cutoff model sample.
See Technical Notes for a discussion of the sample design for the Form EIA-826.
Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule.
Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.
Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 5.4.B. Sales of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through November 2017 and 2016 (Thousand Megawatthours)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	41,807	42,470	48,000	48,499	15,340	16,513	504	499	105,651	107,981
Connecticut	11,162	11,580	11,271	11,671	2,879	3,107	164	167	25,477	26,524
Maine	4,166	4,141	3,676	3,638	2,528	2,636	0	0	10,369	10,415
Massachusetts	17,946	17,996	23,943	23,876	6,195	6,906	315	308	48,398	49,087
New Hampshire	3,990	4,059	4,003	4,110	1,790	1,847	0	0	9,782	10,016
Rhode Island	2,734	2,835	3,302	3,358	672	702	25	25	6,733	6,920
Vermont	1,809	1,859	1,806	1,845	1,277	1,315	0	0	4,892	5,019
Middle Atlantic	116,521	122,418	142,210	145,868	65,694	66,121	3,502	3,528	327,928	337,934
New Jersey	25,416	26,804	34,551	35,565	6,406	6,700	280	278	66,653	69,346
New York	44,735	46,709	68,711	70,361	15,720	16,251	2,535	2,524	131,700	135,844
Pennsylvania	46,370	48,905	38,948	39,943	43,569	43,170	688	726	129,575	132,744
East North Central	161,386	170,283	166,888	170,388	168,464	179,561	523	522	497,262	520,753
Illinois	39,647	41,858	45,707	46,588	37,948	39,957	465	462	123,767	128,864
Indiana	27,939	29,829	21,771	22,289	37,127	42,766	18	19	86,855	94,902
Michigan	29,866	31,414	35,436	35,804	27,234	28,513	5	4	92,541	95,735
Ohio	44,645	47,515	42,338	43,853	43,989	46,201	35	36	131,007	137,606
Wisconsin	19,290	19,667	21,636	21,855	22,167	22,124	0	0	63,093	63,646
West North Central	91,276	92,666	92,963	94,048	80,063	82,277	42	41	264,344	269,032
Iowa	12,418	12,626	11,098	11,192	20,660	20,203	0	0	44,177	44,020
Kansas	11,901	12,362	14,215	14,628	9,982	10,477	0	0	36,098	37,467
Minnesota	19,409	19,605	21,009	21,482	19,081	19,452	22	22	59,521	60,560
Missouri	30,256	31,069	27,777	28,230	10,852	12,477	21	19	68,905	71,794
Nebraska	8,886	8,733	8,737	8,501	9,851	10,276	0	0	27,475	27,510
North Dakota	4,227	4,152	5,689	5,725	7,089	6,807	0	0	17,005	16,685
South Dakota	4,180	4,120	4,437	4,290	2,546	2,586	0	0	11,163	10,995
South Atlantic	316,361	331,743	284,333	288,773	126,526	128,884	1,185	1,218	728,405	750,619
Delaware	4,210	4,369	3,824	3,899	1,943	2,079	0	0	9,977	10,346
District of Columbia	2,206	2,309	7,332	7,709	163	179	307	308	10,008	10,505
Florida	110,885	114,681	87,049	88,042	15,014	15,405	80	87	213,029	218,215
Georgia	50,271	53,341	42,803	44,148	28,815	29,772	154	156	122,042	127,417
Maryland	23,379	24,782	26,403	27,245	3,431	3,509	478	493	53,691	56,030
North Carolina	50,229	53,200	44,099	44,823	24,687	25,165	3	6	119,018	123,195
South Carolina	26,647	28,108	19,936	20,652	24,720	24,621	0	0	71,304	73,382
Virginia	39,230	40,812	45,986	45,075	15,362	16,328	163	168	100,740	102,383
West Virginia	9,306	10,140	6,901	7,179	12,390	11,826	0	0	28,597	29,146
East South Central	102,783	108,874	81,700	86,482	91,024	92,194	0	0	275,507	287,550
Alabama	27,699	29,476	20,743	21,861	30,448	29,846	0	0	78,890	81,183
Kentucky	22,524	23,929	17,282	18,388	25,470	25,904	0	0	65,276	68,220
Mississippi	16,359	17,094	12,791	13,454	15,139	14,751	0	0	44,289	45,298
Tennessee	36,201	38,375	30,883	32,779	19,968	21,694	0	0	87,052	92,848
West South Central	195,146	201,120	176,222	181,782	165,379	168,605	180	179	536,927	551,687
Arkansas	15,722	16,371	11,014	11,269	15,482	14,939	0	0	42,219	42,579
Louisiana	27,355	28,494	22,673	23,025	31,650	33,150	12	11	81,690	84,679
Oklahoma	20,269	20,821	18,523	19,022	15,876	16,536	0	0	54,668	56,380
Texas	131,799	135,434	124,011	128,466	102,371	103,981	168	167	358,349	368,049
Mountain	90,862	88,820	89,156	87,783	75,009	76,863	132	125	255,158	253,591
Arizona	32,165	31,438	27,546	27,422	12,431	13,835	7	7	72,149	72,701
Colorado	17,173	17,136	18,627	19,039	14,271	13,847	65	59	50,136	50,081
Idaho	7,720	7,151	5,808	5,690	8,092	8,108	0	0	21,620	20,948
Montana	4,634	4,314	4,570	4,402	3,986	4,047	0	0	13,191	12,763
Nevada	12,030	11,760	10,377	9,107	11,523	12,493	8	8	33,938	33,368
New Mexico	6,076	6,064	8,206	8,102	6,915	6,972	0	0	21,197	21,138
Utah	8,589	8,528	10,622	10,600	8,420	8,384	52	52	27,682	27,563
Wyoming	2,474	2,429	3,400	3,423	9,371	9,176	0	0	15,245	15,028
Pacific Contiguous	134,215	127,222	149,257	148,055	77,038	82,398	794	733	361,304	358,409
California	83,853	81,003	106,809	107,192	44,214	47,191	765	705	235,641	236,090
Oregon	17,665	16,277	15,125	14,577	10,825	11,641	23	22	43,638	42,516
Washington	32,697	29,943	27,323	26,287	21,999	23,567	6	5	82,024	79,803
Pacific Noncontiguous	4,270	4,161	5,331	5,341	4,598	4,682	0	0	14,199	14,185
Alaska	1,856	NM	2,500	2,482	1,267	1,264	0	0	5,623	5,528
Hawaii	2,414	2,379	2,831	2,859	3,332	3,418	0	0	8,577	8,657
U.S. Total	1,254,626	1,289,777	1,236,061	1,257,019	869,137	898,099	6,862	6,844	3,366,686	3,451,739

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

Table 5.5.A. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State, November 2017 and 2016 (Million Dollars)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	702	611	680	592	177	175	4	3	1,563	1,381
Connecticut	190	171	157	147	36	35	2	1	385	354
Maine	55	53	39	36	24	21	0	0	118	111
Massachusetts	316	258	364	297	79	80	2	1	761	636
New Hampshire	68	60	51	49	19	19	0	0	138	128
Rhode Island	46	39	45	41	8	8	0	0	99	89
Vermont	28	28	23	23	12	12	0	0	63	63
Middle Atlantic	1,463	1,421	1,459	1,464	398	400	33	33	3,353	3,319
New Jersey	284	277	330	340	52	55	2	2	668	674
New York	640	623	833	818	86	97	28	26	1,587	1,564
Pennsylvania	539	521	295	307	259	248	3	4	1,097	1,080
East North Central	1,846	1,691	1,435	1,422	1,030	1,081	3	3	4,313	4,196
Illinois	446	392	340	347	204	214	3	2	992	955
Indiana	287	275	194	195	246	268	0	0	727	738
Michigan	382	366	328	320	178	177	0	0	888	863
Ohio	475	431	369	369	258	280	0	0	1,103	1,081
Wisconsin	255	226	203	192	144	141	0	0	602	558
West North Central	856	796	734	732	496	501	0	0	2,087	2,030
Iowa	120	105	89	84	103	98	0	0	313	288
Kansas	113	106	120	121	66	70	0	0	300	298
Minnesota	220	208	181	182	131	129	0	0	532	519
Missouri	240	232	193	199	66	72	0	0	498	504
Nebraska	75	66	65	60	58	63	0	0	198	190
North Dakota	44	39	48	49	55	52	0	0	147	139
South Dakota	44	40	37	35	17	17	0	0	98	92
South Atlantic	2,929	2,729	2,281	2,204	706	709	8	8	5,924	5,649
Delaware	43	41	32	32	13	14	0	0	88	88
District of Columbia	24	18	74	75	1	1	2	2	101	97
Florida	1,019	918	722	664	103	105	1	1	1,843	1,688
Georgia	415	394	347	351	142	144	1	1	905	889
Maryland	258	256	235	247	26	25	3	3	521	532
North Carolina	445	420	310	305	125	130	0	0	880	856
South Carolina	260	248	167	170	128	125	0	0	554	543
Virginia	365	341	336	299	90	90	1	1	792	731
West Virginia	101	92	59	60	79	73	0	0	239	225
East South Central	896	833	723	738	471	476	0	0	2,090	2,048
Alabama	262	240	197	198	166	155	0	0	626	593
Kentucky	200	184	145	149	126	133	0	0	470	466
Mississippi	138	129	112	110	81	77	0	0	331	316
Tennessee	295	279	269	282	98	111	0	0	663	672
West South Central	1,484	1,446	1,212	1,247	778	793	1	1	3,476	3,487
Arkansas	117	110	77	78	79	79	0	0	274	267
Louisiana	192	191	176	174	156	154	0	0	523	519
Oklahoma	148	123	119	111	72	71	0	0	339	305
Texas	1,027	1,022	840	884	471	489	1	1	2,340	2,396
Mountain	755	725	684	672	379	370	1	1	1,819	1,768
Arizona	236	223	215	211	61	65	0	0	513	499
Colorado	163	164	153	158	90	95	1	1	407	417
Idaho	70	66	40	39	29	28	0	0	140	132
Montana	46	42	41	39	17	18	0	0	104	99
Nevada	91	86	65	57	49	29	0	0	204	172
New Mexico	55	52	67	65	35	36	0	0	157	154
Utah	68	69	74	74	40	42	0	1	182	185
Wyoming	26	24	29	29	57	57	0	0	112	110
Pacific Contiguous	1,653	1,537	1,734	1,664	645	635	6	5	4,039	3,840
California	1,182	1,110	1,406	1,350	497	479	6	5	3,092	2,944
Oregon	176	159	121	117	58	62	0	0	356	338
Washington	295	268	207	197	90	93	0	0	591	559
Pacific Noncontiguous	107	98	115	106	90	84	0	0	312	288
Alaska	41	NM	45	42	19	19	0	0	105	98
Hawaii	67	60	70	65	71	66	0	0	207	190
U.S. Total	12,692	11,886	11,056	10,840	5,171	5,225	57	55	28,976	28,007

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.
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Notes: - See Glossary for definitions. - Values for 2016 are final. Values for 2017 are preliminary estimates based on a cutoff model sample.
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Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.
Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 5.5.B. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through November 2017 and 2016 (Million Dollars)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	8,098	8,003	7,341	7,383	1,903	2,013	42	41	17,384	17,441
Connecticut	2,275	2,328	1,818	1,842	384	398	18	18	4,495	4,587
Maine	668	656	448	440	230	235	0	0	1,345	1,332
Massachusetts	3,568	3,423	3,719	3,738	843	923	19	18	8,149	8,102
New Hampshire	766	745	589	593	220	227	0	0	1,575	1,565
Rhode Island	501	528	503	501	98	95	5	5	1,107	1,129
Vermont	320	323	264	269	129	135	0	0	713	726
Middle Atlantic	18,757	19,241	18,006	18,280	4,529	4,658	396	384	41,688	42,563
New Jersey	3,990	4,224	4,277	4,380	653	683	25	24	8,944	9,311
New York	8,113	8,226	10,222	10,209	933	983	322	304	19,591	19,722
Pennsylvania	6,654	6,791	3,507	3,690	2,943	2,993	49	56	13,153	13,529
East North Central	21,412	22,289	16,851	16,969	11,828	12,433	35	36	50,127	51,727
Illinois	5,042	5,271	4,065	4,211	2,417	2,613	30	31	11,553	12,126
Indiana	3,361	3,517	2,244	2,224	2,749	2,967	2	2	8,357	8,710
Michigan	4,629	4,784	3,908	3,800	1,994	1,967	1	0	10,532	10,551
Ohio	5,540	5,936	4,232	4,374	2,940	3,222	3	3	12,714	13,534
Wisconsin	2,841	2,781	2,402	2,360	1,728	1,663	0	0	6,971	6,805
West North Central	11,110	11,042	9,169	9,025	5,891	5,887	4	4	26,174	25,957
Iowa	1,580	1,530	1,078	1,038	1,317	1,240	0	0	3,975	3,809
Kansas	1,586	1,624	1,497	1,538	754	786	0	0	3,837	3,949
Minnesota	2,572	2,501	2,243	2,130	1,491	1,437	2	2	6,308	6,071
Missouri	3,454	3,525	2,613	2,629	771	889	2	2	6,840	7,045
Nebraska	983	958	786	751	748	796	0	0	2,517	2,505
North Dakota	445	428	525	526	612	542	0	0	1,582	1,496
South Dakota	490	476	426	412	199	196	0	0	1,115	1,084
South Atlantic	38,030	38,496	26,960	26,716	8,193	8,321	92	97	73,275	73,630
Delaware	568	588	382	394	150	169	0	0	1,099	1,152
District of Columbia	285	285	856	904	14	16	27	29	1,181	1,233
Florida	13,167	12,602	8,376	7,841	1,189	1,184	7	7	22,739	21,634
Georgia	5,985	6,185	4,274	4,334	1,685	1,737	8	8	11,953	12,263
Maryland	3,290	3,532	2,838	2,988	285	277	36	39	6,449	6,835
North Carolina	5,624	5,910	3,784	3,876	1,512	1,593	0	0	10,920	11,379
South Carolina	3,420	3,568	2,090	2,120	1,504	1,498	0	0	7,014	7,186
Virginia	4,605	4,664	3,698	3,588	1,028	1,072	13	13	9,345	9,337
West Virginia	1,086	1,163	663	672	825	776	0	0	2,574	2,611
East South Central	11,608	11,815	8,648	8,794	5,454	5,334	0	0	25,710	25,943
Alabama	3,514	3,535	2,413	2,421	1,905	1,795	0	0	7,832	7,751
Kentucky	2,402	2,509	1,678	1,760	1,420	1,463	0	0	5,500	5,731
Mississippi	1,835	1,787	1,316	1,283	928	850	0	0	4,078	3,920
Tennessee	3,858	3,985	3,241	3,330	1,202	1,226	0	0	8,300	8,541
West South Central	21,109	21,335	14,761	14,970	9,117	8,945	15	14	45,003	45,264
Arkansas	1,614	1,631	931	928	920	907	0	0	3,465	3,467
Louisiana	2,614	2,660	2,023	1,970	1,723	1,669	1	1	6,362	6,300
Oklahoma	2,144	2,139	1,486	1,461	839	827	0	0	4,469	4,427
Texas	14,737	14,905	10,321	10,611	5,635	5,541	14	13	30,707	31,070
Mountain	10,877	10,391	8,665	8,371	4,911	4,923	13	12	24,466	23,697
Arizona	4,025	3,842	2,927	2,874	810	842	1	1	7,764	7,558
Colorado	2,090	2,072	1,860	1,831	1,045	1,016	6	6	5,002	4,925
Idaho	781	717	467	443	546	535	0	0	1,794	1,696
Montana	516	474	467	449	205	205	0	0	1,188	1,128
Nevada	1,440	1,343	827	726	716	747	1	1	2,984	2,817
New Mexico	788	729	849	790	419	406	0	0	2,055	1,925
Utah	954	943	936	935	520	536	5	5	2,415	2,419
Wyoming	283	272	332	323	649	636	0	0	1,264	1,230
Pacific Contiguous	20,311	18,618	20,778	19,792	7,439	7,418	69	71	48,597	45,900
California	15,277	14,033	17,111	16,278	5,740	5,664	66	69	38,194	36,044
Oregon	1,895	1,737	1,345	1,298	672	708	2	2	3,914	3,744
Washington	3,138	2,849	2,322	2,216	1,027	1,046	1	0	6,488	6,111
Pacific Noncontiguous	1,110	1,015	1,242	1,138	968	896	0	0	3,319	3,049
Alaska	400	NM	487	436	210	191	0	0	1,097	989
Hawaii	709	653	754	702	758	704	0	0	2,222	2,059
U.S. Total	162,422	162,247	132,422	131,437	60,232	60,827	666	660	355,742	355,170

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

Table 5.6.A. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, November 2017 and 2016 (Cents per Kilowatthour)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	19.44	18.87	15.03	14.91	12.26	12.07	8.38	7.21	16.24	15.87
Connecticut	20.70	19.76	16.12	15.90	13.50	12.61	12.51	8.99	17.71	17.02
Maine	16.05	16.21	12.22	12.39	8.79	9.04	--	--	12.63	12.93
Massachusetts	19.36	19.14	14.92	14.91	13.56	13.20	5.59	5.27	16.25	16.02
New Hampshire	19.88	19.05	14.76	14.67	12.19	12.32	--	--	16.36	15.94
Rhode Island	20.48	18.14	15.83	14.59	14.59	13.40	16.93	19.18	17.55	15.83
Vermont	17.87	17.88	14.91	14.82	9.88	10.08	--	--	14.62	14.68
Middle Atlantic	15.97	15.77	12.00	12.08	6.70	7.04	11.05	10.25	12.17	12.23
New Jersey	15.34	15.26	11.58	11.62	9.60	9.71	8.08	8.39	12.68	12.64
New York	17.81	17.73	13.90	13.99	5.78	6.59	12.21	11.23	14.04	14.13
Pennsylvania	14.50	14.14	8.92	9.15	6.65	6.80	7.02	7.27	9.99	10.06
East North Central	13.47	13.43	10.08	10.14	7.00	6.98	6.85	7.21	10.10	9.96
Illinois	13.47	13.14	8.71	9.08	6.24	6.45	6.57	6.91	9.43	9.40
Indiana	12.38	12.83	10.49	10.63	7.55	7.38	11.61	11.35	9.79	9.70
Michigan	15.24	15.37	11.11	10.96	7.22	7.00	11.18	12.10	11.21	11.02
Ohio	12.49	12.42	10.02	10.14	6.68	6.88	7.15	7.99	9.71	9.66
Wisconsin	14.47	14.07	11.06	10.59	7.70	7.33	14.50	15.00	11.01	10.47
West North Central	11.59	11.86	9.24	9.27	6.92	6.70	8.41	8.70	9.27	9.18
Iowa	12.03	11.63	8.99	8.60	5.47	5.11	--	--	8.06	7.56
Kansas	13.37	13.29	10.13	10.12	7.63	7.33	--	--	10.33	10.08
Minnesota	12.92	13.07	10.03	10.21	7.58	7.31	9.44	10.13	10.16	10.10
Missouri	10.46	11.14	8.59	8.63	6.58	6.74	7.17	7.17	9.00	9.21
Nebraska	10.53	10.70	8.49	8.41	7.01	6.94	--	--	8.58	8.44
North Dakota	9.69	10.26	8.67	9.10	8.52	8.17	--	--	8.89	9.01
South Dakota	11.60	11.74	9.63	9.64	7.96	7.45	--	--	10.02	9.85
South Atlantic	11.99	11.57	9.53	9.23	6.28	6.26	7.21	7.89	9.92	9.60
Delaware	13.81	13.83	9.99	10.02	7.43	7.60	--	--	10.90	10.85
District of Columbia	14.00	13.08	12.18	11.77	8.20	8.55	7.76	9.43	12.33	11.88
Florida	12.47	11.08	9.97	9.03	8.06	7.75	8.88	8.50	11.05	9.92
Georgia	10.99	11.00	9.89	9.92	5.59	5.65	4.76	4.66	9.19	9.19
Maryland	13.35	14.31	10.67	11.04	8.27	7.81	6.90	7.89	11.62	12.11
North Carolina	11.02	11.11	8.30	8.34	5.54	5.94	8.08	8.44	8.78	8.88
South Carolina	12.70	12.75	10.41	10.24	5.87	5.63	--	--	9.52	9.32
Virginia	11.67	11.45	8.16	7.77	6.85	6.51	8.51	7.82	9.24	8.89
West Virginia	11.67	11.73	9.82	9.77	6.64	6.79	--	--	9.00	9.09
East South Central	11.43	11.40	10.69	10.45	5.92	5.83	--	--	9.26	9.08
Alabama	12.54	12.24	11.69	11.34	6.17	5.95	--	--	9.67	9.39
Kentucky	10.97	11.23	9.93	9.90	5.58	5.70	--	--	8.50	8.51
Mississippi	11.44	10.96	10.52	9.91	5.89	5.90	--	--	9.08	8.80
Tennessee	10.87	11.05	10.52	10.41	6.02	5.78	--	--	9.60	9.39
West South Central	10.92	10.61	8.39	8.16	5.38	5.33	8.18	8.15	8.17	7.96
Arkansas	10.28	10.11	8.40	8.12	5.74	5.86	12.14	11.64	7.95	7.86
Louisiana	9.29	9.38	8.91	8.71	5.49	5.18	10.23	9.60	7.61	7.41
Oklahoma	10.76	9.54	7.66	7.01	5.09	4.80	--	--	7.81	7.01
Texas	11.40	11.10	8.40	8.23	5.33	5.38	8.04	8.05	8.40	8.25
Mountain	11.76	11.48	9.34	9.20	6.07	5.78	9.43	9.86	9.10	8.83
Arizona	12.26	11.60	9.94	9.57	6.13	5.70	8.60	9.57	10.07	9.47
Colorado	12.02	12.27	9.78	9.81	7.16	7.45	8.96	10.15	9.72	9.88
Idaho	10.08	10.02	7.91	7.86	5.85	5.71	--	--	8.19	8.09
Montana	11.05	10.95	10.25	10.23	5.07	4.85	--	--	9.00	8.74
Nevada	12.89	11.79	8.11	7.62	5.00	3.19	8.16	7.34	8.25	7.18
New Mexico	12.48	11.98	9.89	9.44	5.70	5.74	--	--	9.07	8.75
Utah	10.52	10.67	8.14	8.45	5.65	5.60	10.60	9.94	8.04	8.15
Wyoming	11.16	11.26	9.64	9.74	6.74	6.85	--	--	8.12	8.19
Pacific Contiguous	15.06	14.70	13.33	12.74	9.82	8.94	8.90	9.03	13.19	12.52
California	18.77	17.93	15.16	14.29	13.08	11.84	8.88	9.02	15.90	14.91
Oregon	10.70	10.76	8.96	8.98	6.45	6.23	9.48	9.34	9.11	8.95
Washington	9.73	9.60	8.68	8.54	4.81	4.53	9.70	9.16	8.13	7.81
Pacific Noncontiguous	26.59	24.97	23.86	21.94	22.13	20.18	--	--	24.17	22.28
Alaska	21.90	20.93	19.13	17.69	16.45	15.80	--	--	19.50	18.38
Hawaii	30.58	28.48	28.32	25.94	24.45	21.88	--	--	27.49	25.03
U.S. Total	13.01	12.75	10.55	10.32	6.79	6.66	9.49	9.22	10.38	10.10

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

Table 5.6.B. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through November 2017 and 2016 (Cents per Kilowatthour)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD	November 2017 YTD	November 2016 YTD
New England	19.37	18.85	15.29	15.22	12.40	12.19	8.28	8.19	16.45	16.15
Connecticut	20.38	20.10	16.13	15.79	13.32	12.82	10.93	10.94	17.64	17.29
Maine	16.03	15.85	12.18	12.10	9.08	8.93	--	--	12.97	12.79
Massachusetts	19.88	19.02	15.53	15.66	13.61	13.36	6.03	5.86	16.84	16.50
New Hampshire	19.20	18.36	14.73	14.42	12.29	12.31	--	--	16.10	15.63
Rhode Island	18.34	18.64	15.23	14.93	14.53	13.48	19.23	18.73	16.44	16.31
Vermont	17.69	17.38	14.62	14.56	10.07	10.23	--	--	14.57	14.47
Middle Atlantic	16.10	15.72	12.66	12.53	6.89	7.04	11.32	10.89	12.71	12.59
New Jersey	15.70	15.76	12.38	12.32	10.19	10.19	8.88	8.74	13.42	13.43
New York	18.14	17.61	14.88	14.51	5.94	6.05	12.71	12.06	14.88	14.52
Pennsylvania	14.35	13.89	9.00	9.24	6.76	6.93	7.18	7.65	10.15	10.19
East North Central	13.27	13.09	10.10	9.96	7.02	6.92	6.73	6.93	10.08	9.93
Illinois	12.72	12.59	8.89	9.04	6.37	6.54	6.43	6.70	9.33	9.41
Indiana	12.03	11.79	10.31	9.98	7.40	6.94	11.22	9.73	9.62	9.18
Michigan	15.50	15.23	11.03	10.61	7.32	6.90	12.04	11.59	11.38	11.02
Ohio	12.41	12.49	9.99	9.97	6.68	6.97	7.56	7.96	9.70	9.84
Wisconsin	14.73	14.14	11.10	10.80	7.80	7.52	14.29	14.59	11.05	10.69
West North Central	12.17	11.92	9.86	9.60	7.36	7.15	9.10	9.34	9.90	9.65
Iowa	12.72	12.12	9.71	9.28	6.37	6.14	--	--	9.00	8.65
Kansas	13.32	13.14	10.53	10.52	7.56	7.51	--	--	10.63	10.54
Minnesota	13.25	12.76	10.68	9.91	7.81	7.39	9.58	10.11	10.60	10.02
Missouri	11.42	11.35	9.41	9.31	7.10	7.13	8.60	8.48	9.93	9.81
Nebraska	11.06	10.97	9.00	8.83	7.59	7.74	--	--	9.16	9.10
North Dakota	10.53	10.31	9.23	9.19	8.63	7.96	--	--	9.30	8.97
South Dakota	11.73	11.55	9.59	9.60	7.80	7.58	--	--	9.98	9.86
South Atlantic	12.02	11.60	9.48	9.25	6.48	6.46	7.76	7.94	10.06	9.81
Delaware	13.48	13.46	9.98	10.11	7.69	8.15	--	--	11.01	11.13
District of Columbia	12.91	12.33	11.67	11.72	8.27	8.82	8.89	9.50	11.80	11.74
Florida	11.87	10.99	9.62	8.91	7.92	7.69	8.62	8.33	10.67	9.91
Georgia	11.91	11.60	9.99	9.82	5.85	5.83	5.40	5.10	9.79	9.62
Maryland	14.07	14.25	10.75	10.97	8.32	7.88	7.57	7.87	12.01	12.20
North Carolina	11.20	11.11	8.58	8.65	6.13	6.33	8.53	7.84	9.18	9.24
South Carolina	12.84	12.69	10.48	10.27	6.08	6.08	--	--	9.84	9.79
Virginia	11.74	11.43	8.04	7.96	6.69	6.56	7.94	7.75	9.28	9.12
West Virginia	11.67	11.47	9.60	9.36	6.66	6.56	--	--	9.00	8.96
East South Central	11.29	10.85	10.58	10.17	5.99	5.79	--	--	9.33	9.02
Alabama	12.69	11.99	11.63	11.08	6.26	6.01	--	--	9.93	9.55
Kentucky	10.67	10.48	9.71	9.57	5.57	5.65	--	--	8.43	8.40
Mississippi	11.21	10.45	10.29	9.54	6.13	5.76	--	--	9.21	8.65
Tennessee	10.66	10.38	10.49	10.16	6.02	5.65	--	--	9.53	9.20
West South Central	10.82	10.61	8.38	8.24	5.51	5.31	8.27	7.97	8.38	8.20
Arkansas	10.26	9.96	8.46	8.24	5.94	6.07	12.10	10.21	8.21	8.14
Louisiana	9.56	9.33	8.92	8.56	5.44	5.04	9.97	9.01	7.79	7.44
Oklahoma	10.58	10.27	8.02	7.68	5.28	5.00	--	--	8.17	7.85
Texas	11.18	11.01	8.32	8.26	5.50	5.33	8.14	7.89	8.57	8.44
Mountain	11.97	11.70	9.72	9.54	6.55	6.40	9.92	9.73	9.59	9.34
Arizona	12.51	12.22	10.63	10.48	6.52	6.09	9.70	10.02	10.76	10.40
Colorado	12.17	12.09	9.99	9.62	7.32	7.33	9.85	9.77	9.98	9.83
Idaho	10.11	10.03	8.04	7.79	6.75	6.60	--	--	8.30	8.09
Montana	11.13	10.99	10.21	10.20	5.15	5.07	--	--	9.00	8.84
Nevada	11.97	11.42	7.97	7.97	6.21	5.98	8.61	7.86	8.79	8.44
New Mexico	12.97	12.03	10.34	9.75	6.06	5.82	--	--	9.70	9.11
Utah	11.11	11.05	8.81	8.82	6.18	6.39	10.23	9.94	8.73	8.77
Wyoming	11.44	11.19	9.77	9.43	6.92	6.93	--	--	8.29	8.19
Pacific Contiguous	15.13	14.63	13.92	13.37	9.66	9.00	8.68	9.76	13.45	12.81
California	18.22	17.32	16.02	15.19	12.98	12.00	8.66	9.78	16.21	15.27
Oregon	10.73	10.67	8.90	8.90	6.20	6.08	9.35	9.26	8.97	8.81
Washington	9.60	9.51	8.50	8.43	4.67	4.44	9.03	8.90	7.91	7.66
Pacific Noncontiguous	25.99	24.39	23.29	21.30	21.04	19.13	--	--	23.38	21.49
Alaska	21.57	NM	19.50	17.56	16.54	15.13	--	--	19.52	17.90
Hawaii	29.39	27.45	26.65	24.55	22.75	20.61	--	--	25.91	23.79
U.S. Total	12.95	12.58	10.71	10.46	6.93	6.77	9.71	9.64	10.57	10.29

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 2016 are final. Values for 2017 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 - November 2017

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	125,037,870	17,582,277	774,817	726	143,395,691
2009	125,208,777	17,562,150	757,497	703	143,529,126
2010	125,717,767	17,674,167	747,691	238	144,139,862
2011	126,143,072	17,637,928	727,889	92	144,508,982
2012	126,832,252	17,728,903	732,344	83	145,293,583
2013	127,776,941	17,679,466	831,734	74	146,288,214
2014	128,680,294	17,853,836	839,154	79	147,373,362
2015	129,811,667	17,985,582	835,527	78	148,632,855
2016	131,068,719	18,148,290	838,099	83	150,055,191
Year 2015					
January	129,177,100	17,924,312	814,536	77	147,916,025
February	128,836,192	17,854,428	808,801	77	147,499,498
March	129,858,190	17,975,571	823,107	78	148,656,946
April	129,607,349	17,955,904	823,833	78	148,387,164
May	129,550,528	17,675,632	828,518	79	148,054,757
June	129,833,960	18,042,403	851,608	79	148,728,050
July	130,322,224	18,099,332	860,552	79	149,282,187
August	129,696,710	18,013,711	849,033	78	148,559,532
Sept	130,004,031	18,059,742	851,435	78	148,915,286
October	130,277,004	18,087,524	851,293	78	149,215,899
November	129,722,466	17,995,604	825,647	78	148,543,795
December	130,854,255	18,142,822	837,966	78	149,835,121
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	131,864,153	18,225,715	808,008	89	150,897,965
February	131,377,352	18,137,089	797,400	89	150,311,930
March	132,759,395	18,322,577	816,055	89	151,898,116
April	131,802,906	18,162,692	803,220	90	150,768,908
May	133,094,840	18,323,970	829,713	90	152,248,613
June	132,811,865	18,339,933	837,430	90	151,989,318
July	132,297,247	18,345,116	831,767	90	151,474,220
August	132,982,288	18,428,021	847,845	90	152,258,244
Sept	132,409,361	18,344,472	826,683	90	151,580,606
October	133,098,368	18,424,450	829,164	85	152,352,067
November	132,997,492	18,413,050	815,382	85	152,226,009
Rolling 12 Months Ending in November					
2016	130,984,952	18,139,818	838,563	83	149,963,415
2017	132,446,227	18,309,298	822,923	88	151,578,536

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 2016 and prior years are final. Values for 2017 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:
November 2017 and 2016

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	6,388,648	6,299,487	897,329	874,766	26,847	26,396	6	7	7,312,830	7,200,656
Connecticut	1,499,318	1,491,423	153,615	152,441	4,436	4,457	3	4	1,657,372	1,648,325
Maine	714,595	683,385	100,606	96,083	3,166	2,961	0	0	818,367	782,429
Massachusetts	2,795,678	2,755,691	418,996	403,837	14,019	13,669	2	2	3,228,695	3,173,199
New Hampshire	619,094	614,019	107,295	106,670	3,219	3,255	0	0	729,608	723,944
Rhode Island	445,568	442,851	60,477	59,526	1,784	1,825	1	1	507,830	504,203
Vermont	314,395	312,118	56,340	56,209	223	229	0	0	370,958	368,556
Middle Atlantic	16,095,797	15,982,904	2,316,521	2,286,463	42,134	42,661	20	19	18,454,472	18,312,047
New Jersey	3,559,700	3,519,892	518,385	514,798	11,816	11,835	6	6	4,089,907	4,046,531
New York	7,160,812	7,118,471	1,097,261	1,076,795	7,572	7,576	8	7	8,265,653	8,202,849
Pennsylvania	5,375,285	5,344,541	700,875	694,870	22,746	23,250	6	6	6,098,912	6,062,667
East North Central	20,174,278	19,975,383	2,493,886	2,473,964	52,793	54,735	9	8	22,720,966	22,504,090
Illinois	5,286,451	5,242,039	611,668	607,481	5,685	6,044	3	3	5,903,807	5,855,567
Indiana	2,840,526	2,825,806	351,169	350,893	17,721	18,038	1	1	3,209,417	3,194,738
Michigan	4,369,399	4,322,536	547,740	541,483	NM	6,112	2	1	4,922,805	4,870,132
Ohio	4,969,593	4,920,403	626,885	624,218	18,952	19,033	2	2	5,615,432	5,563,656
Wisconsin	2,708,309	2,664,599	356,424	349,889	NM	5,508	1	1	3,069,505	3,019,997
West North Central	9,488,916	9,370,191	1,457,830	1,437,831	112,182	123,639	3	3	11,058,931	10,931,664
Iowa	1,387,780	1,363,499	243,792	237,154	NM	7,667	0	0	1,638,341	1,608,320
Kansas	1,273,486	1,254,169	235,778	233,796	25,310	23,509	0	0	1,534,574	1,511,474
Minnesota	2,396,305	2,386,597	289,740	293,362	NM	8,899	1	1	2,694,042	2,688,859
Missouri	2,794,684	2,755,123	380,345	377,623	8,425	10,119	2	2	3,183,456	3,142,867
Nebraska	857,818	837,405	161,491	150,506	51,955	60,946	0	0	1,071,264	1,048,857
North Dakota	379,059	379,479	73,421	74,318	7,959	8,688	0	0	460,439	462,485
South Dakota	399,784	393,919	73,263	71,072	NM	3,811	0	0	476,815	468,802
South Atlantic	27,727,422	27,489,839	3,792,654	3,739,886	79,255	82,096	13	13	31,599,344	31,311,834
Delaware	425,100	420,643	53,876	53,592	1,189	871	0	0	480,165	475,106
District of Columbia	269,477	261,681	26,164	25,973	1	1	3	3	295,645	287,658
Florida	9,295,372	9,356,236	1,232,724	1,218,559	20,472	21,264	2	2	10,548,570	10,596,061
Georgia	4,345,354	4,258,276	582,615	569,376	19,373	21,765	1	1	4,947,343	4,849,418
Maryland	2,322,176	2,296,315	252,299	251,287	8,830	8,844	5	5	2,583,310	2,556,451
North Carolina	4,523,226	4,442,469	705,153	675,454	9,893	9,988	1	1	5,238,273	5,127,912
South Carolina	2,271,052	2,220,293	365,799	371,147	4,232	4,036	0	0	2,641,083	2,595,476
Virginia	3,416,991	3,375,283	429,524	431,507	3,751	3,691	1	1	3,850,267	3,810,482
West Virginia	858,674	858,643	144,500	142,991	11,514	11,636	0	0	1,014,688	1,013,270
East South Central	8,418,957	8,259,395	1,395,784	1,384,574	24,934	26,862	0	0	9,839,675	9,670,831
Alabama	2,245,268	2,205,997	370,396	368,123	8,162	7,254	0	0	2,623,826	2,581,374
Kentucky	1,991,774	1,960,016	301,535	302,797	7,660	7,191	0	0	2,300,969	2,270,004
Mississippi	1,310,070	1,281,414	239,585	233,717	7,707	11,239	0	0	1,557,362	1,526,370
Tennessee	2,871,845	2,811,968	484,268	479,937	1,405	1,178	0	0	3,357,518	3,293,083
West South Central	15,926,814	15,704,318	2,244,276	2,206,343	189,155	177,916	6	6	18,360,251	18,088,583
Arkansas	1,387,605	1,371,364	192,172	190,964	36,210	36,564	2	2	1,615,989	1,598,894
Louisiana	2,087,509	2,064,287	293,317	290,056	18,584	19,175	1	1	2,399,411	2,373,519
Oklahoma	1,773,251	1,740,041	284,625	278,923	17,845	19,024	0	0	2,075,721	2,037,988
Texas	10,678,449	10,528,626	1,474,162	1,446,400	116,516	103,153	3	3	12,269,130	12,078,182
Mountain	9,708,385	9,576,531	1,383,525	1,389,986	86,519	93,635	5	5	11,178,434	11,060,157
Arizona	2,772,734	2,740,740	320,296	319,219	6,708	8,234	2	2	3,099,740	3,068,195
Colorado	2,301,514	2,271,616	360,422	368,654	14,044	15,961	1	1	2,675,981	2,656,232
Idaho	732,729	719,483	109,234	108,047	28,209	27,792	0	0	870,172	855,322
Montana	508,348	499,584	109,422	106,452	NM	8,835	0	0	624,418	614,871
Nevada	1,164,512	1,147,600	163,260	162,119	NM	3,461	1	1	1,330,930	1,313,181
New Mexico	897,090	878,301	138,708	142,023	8,512	9,284	0	0	1,044,310	1,029,608
Utah	1,059,431	1,049,057	123,446	125,741	9,499	9,531	1	1	1,192,377	1,184,330
Wyoming	272,027	270,150	58,737	57,731	9,742	10,537	0	0	340,506	338,418
Pacific Contiguous	18,346,329	17,951,416	2,317,154	2,275,607	199,408	194,438	23	23	20,862,914	20,421,484
California	13,567,385	13,239,239	1,684,593	1,667,297	147,382	142,533	15	15	15,399,375	15,049,084
Oregon	1,744,484	1,713,597	239,612	233,340	24,053	23,416	2	2	2,008,151	1,970,355
Washington	3,034,460	2,998,580	392,949	374,970	27,973	28,489	6	6	3,455,388	3,402,045
Pacific Noncontiguous	721,946	715,954	114,091	114,326	NM	NM	0	0	838,192	832,412
Alaska	287,796	NM	53,536	NM	NM	NM	0	0	342,702	NM
Hawaii	434,150	431,935	60,555	60,962	785	800	0	0	495,490	493,697
U.S. Total	132,997,492	131,325,418	18,413,050	18,183,746	815,382	824,510	85	84	152,226,009	150,333,758

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 2016 are final. Values for 2017 are preliminary estimates based on a cutoff model sample.
NM = Not Meaningful due to large relative standard error or excessive percentage change.
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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 6.1. Electric Generating Summer Capacity Changes (MW), October 2017 to November 2017

		As of End of October 2017	Activity During November 2017 as Reported to EIA		As of End of November 2017	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	84,383.6	963.9	0.0	85,347.5	963.9	4,090.2	8,993.2	2,631.2	5,794.6	0.0	17.0	2,631.2	5,777.6	87,978.7	91,125.1
..... Offshore Wind (Summer Capacity)	Utility Scale Facilities	29.3	0.0	0.0	29.3	0.0	0.0	29.3	0.0	0.0	0.0	0.0	0.0	0.0	29.3	29.3
..... Wind (Summer Capacity)	Utility Scale Facilities	84,412.9	963.9	0.0	85,376.8	963.9	4,090.2	9,022.5	2,631.2	5,794.6	0.0	17.0	2,631.2	5,777.6	88,008.0	91,154.4
..... Solar Photovoltaic	Utility Scale Facilities	22,911.0	563.5	0.0	23,474.5	563.5	3,281.6	6,282.5	2,003.5	4,004.5	0.0	0.5	2,003.5	4,004.0	25,478.0	27,478.5
..... 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	24,668.9	563.5	0.0	25,232.4	563.5	3,281.6	6,282.5	2,003.5	4,004.5	0.0	0.5	2,003.5	4,004.0	27,235.9	29,236.4
..... Conventional Hydroelectric	Utility Scale Facilities	80,019.2	38.6	0.0	80,057.8	38.6	144.9	146.9	0.0	191.4	0.0	6.2	0.0	185.2	80,057.8	80,243.0
..... Wood/Wood Waste Biomass	Utility Scale Facilities	9,016.8	0.0	5.8	9,011.0	-5.8	74.9	33.8	0.0	94.4	0.0	0.0	0.0	94.4	9,011.0	9,105.4
..... Landfill Gas	Utility Scale Facilities	2,112.8	0.0	0.0	2,112.8	0.0	23.3	12.6	0.0	0.0	2.3	2.3	-2.3	-2.3	2,110.5	2,110.5
..... Municipal Solid Waste	Utility Scale Facilities	2,246.8	0.0	0.0	2,246.8	0.0	-1.6	-1.6	0.0	0.0	0.0	0.0	0.0	0.0	2,246.8	2,246.8
..... Other Waste Biomass	Utility Scale Facilities	788.5	0.0	0.0	788.5	0.0	37.6	-9.3	1.0	57.2	0.0	0.0	1.0	57.2	789.5	845.7
..... Biomass Sources Subtotal	Utility Scale Facilities	14,164.9	0.0	5.8	14,159.1	-5.8	134.2	35.5	1.0	151.6	2.3	2.3	-1.3	149.3	14,157.8	14,308.4
..... Geothermal	Utility Scale Facilities	2,456.6	0.0	0.0	2,456.6	0.0	-60.0	-60.0	37.0	37.0	0.0	0.0	37.0	37.0	2,493.6	2,493.6
... Renewable Sources Subtotal	**Utility Scale Facilities**	**205,722.5**	**1,566.0**	**5.8**	**207,282.7**	**1,560.2**	**7,590.9**	**15,427.4**	**4,672.7**	**10,179.1**	**2.3**	**26.0**	**4,670.4**	**10,153.1**	**211,953.1**	**217,435.8**
..... Natural Gas Fired Combined Cycle	Utility Scale Facilities	245,126.9	22.4	0.0	245,149.3	22.4	6,667.2	6,683.4	2,057.0	16,878.7	26.0	189.0	2,031.0	16,689.7	247,180.3	261,839.0
..... Natural Gas Fired Combustion Turbine	Utility Scale Facilities	127,060.0	77.2	4.3	127,132.9	72.9	575.2	1,023.2	621.0	3,859.2	133.9	186.3	487.1	3,672.9	127,620.0	130,805.8
..... Natural Gas Steam Turbine	Utility Scale Facilities	75,355.5	126.6	98.4	75,383.7	28.2	-2,179.3	-4,096.3	0.0	0.0	1,232.4	1,804.0	-1,232.4	-1,804.0	74,151.3	73,579.7
..... Natural Gas Internal Combustion Engine	Utility Scale Facilities	4,305.0	0.2	0.0	4,305.2	0.2	316.2	538.0	38.8	124.2	0.9	0.9	37.9	123.3	4,343.1	4,428.5
..... 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	121.8	0.0	0.0	121.8	0.0	0.4	4.0	0.0	5.1	0.0	0.0	0.0	5.1	121.8	126.9
..... Natural Gas Subtotal	Utility Scale Facilities	452,079.2	226.4	102.7	452,202.9	123.7	5,379.7	4,152.3	2,716.8	20,867.2	1,393.2	2,180.2	1,323.6	18,687.0	453,526.5	470,889.9
..... Conventional Steam Coal	Utility Scale Facilities	261,953.4	0.0	850.6	261,102.8	-850.6	-4,702.1	-5,491.1	0.0	0.0	1,751.0	11,646.0	-1,751.0	-11,646.0	259,351.8	249,456.8
..... Coal Integrated Gasification Combined Cycle	Utility Scale Facilities	815.0	0.0	0.0	815.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	815.0	815.0
..... Coal Subtotal	Utility Scale Facilities	262,768.4	0.0	850.6	261,917.8	-850.6	-4,702.1	-5,491.1	0.0	0.0	1,751.0	11,646.0	-1,751.0	-11,646.0	260,166.8	250,271.8
..... Petroleum Coke	Utility Scale Facilities	1,466.7	0.0	0.0	1,466.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,466.7	1,466.7
..... Petroleum Liquids	Utility Scale Facilities	32,287.6	17.6	59.5	32,245.7	-41.9	-670.0	-1,277.2	13.9	23.2	43.8	127.9	-29.9	-104.7	32,215.8	32,141.0
..... Other Gases	Utility Scale Facilities	2,456.9	0.0	0.0	2,456.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,456.9	2,456.9
... Fossil Fuels Subtotal	**Utility Scale Facilities**	**751,058.8**	**244.0**	**1,012.8**	**750,290.0**	**-768.8**	**7.6**	**-2,616.0**	**2,730.7**	**20,890.4**	**3,188.0**	**13,954.1**	**-457.3**	**6,936.3**	**749,832.7**	**757,226.3**
..... Hydroelectric Pumped Storage	Utility Scale Facilities	22,808.7	0.0	0.0	22,808.7	0.0	30.0	30.0	0.0	57.0	0.0	0.0	0.0	57.0	22,808.7	22,865.7
..... Flywheels	Utility Scale Facilities	42.0	0.0	0.0	42.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.0	42.0
..... Batteries	Utility Scale Facilities	692.8	2.0	0.0	694.8	2.0	135.7	214.7	20.3	74.4	0.0	0.0	20.3	74.4	715.1	769.2
... Energy Storage Subtotal	**Utility Scale Facilities**	**23,543.5**	**2.0**	**0.0**	**23,545.5**	**2.0**	**165.7**	**244.7**	**20.3**	**131.4**	**0.0**	**0.0**	**20.3**	**131.4**	**23,565.8**	**23,676.9**
... Nuclear	**Utility Scale Facilities**	**99,581.8**	**1.9**	**11.7**	**99,572.0**	**-9.8**	**7.2**	**7.2**	**0.0**	**22.0**	**0.0**	**0.0**	**0.0**	**22.0**	**99,572.0**	**99,594.0**
... All Other	**Utility Scale Facilities**	**1,414.0**	**0.0**	**0.0**	**1,414.0**	**0.0**	**0.0**	**0.0**	**6.9**	**54.8**	**0.0**	**0.0**	**6.9**	**54.8**	**1,420.9**	**1,468.8**
TOTAL	**UTILITY SCALE FACILITIES**	**1,081,320.6**	**1,813.9**	**1,030.3**	**1,082,104.2**	**783.6**	**7,771.4**	**13,063.3**	**7,430.6**	**31,277.7**	**3,190.3**	**13,980.1**	**4,240.3**	**17,297.6**	**1,086,344.5**	**1,099,401.8**
..... Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	15,609.4			15,905.0	295.6	3,140.0	3,458.6								
..... Estimated Total Solar Photovoltaic	All Facilities	38,520.4			39,379.5	859.1	6,421.6	9,741.1								
... Estimated Total Solar	**All Facilities**	**40,278.3**			**41,137.4**	**859.1**	**6,421.6**	**9,741.1**								

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

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

Table 6.1.A. Estimated Net Summer Solar Photovoltaic Capacity From Utility and Small Scale Facilities (Megawatts)
2008 - November 2017

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
Year 2015			
January	8,873.2	7,369.4	16,242.6
February	9,027.0	7,529.1	16,556.1
March	9,088.1	7,696.7	16,784.8
April	9,154.4	7,860.3	17,014.7
May	9,368.0	8,050.6	17,418.6
June	9,638.9	8,235.9	17,874.8
July	9,714.8	8,479.1	18,193.9
August	9,945.4	8,700.9	18,646.3
Sept	10,050.2	8,951.5	19,001.7
October	10,156.7	9,188.4	19,345.1
November	10,478.7	9,416.7	19,895.4
December	11,905.4	9,778.5	21,683.9
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	20,437.7	12,906.9	33,344.6
February	20,624.2	13,448.6	34,072.8
March	20,955.7	13,728.4	34,684.1
April	21,460.0	13,981.9	35,441.9
May	21,849.6	14,270.3	36,119.9
June	22,069.1	14,549.5	36,618.6
July	22,172.0	14,815.8	36,987.8
August	22,346.1	15,108.1	37,454.2
Sept	22,545.1	15,332.7	37,877.8
October	22,911.0	15,609.4	38,520.4
November	23,474.5	15,905.0	39,379.5

Values for 2016 are final. Values for 2017 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 - November 2017

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
Year 2015				
January	3,424.8	3,227.0	717.6	7,369.4
February	3,550.2	3,245.1	733.7	7,529.1
March	3,689.3	3,268.3	739.1	7,696.7
April	3,816.3	3,294.6	749.4	7,860.3
May	3,949.5	3,336.6	764.5	8,050.6
June	4,110.7	3,356.2	768.9	8,235.9
July	4,275.5	3,414.5	789.1	8,479.1
August	4,440.5	3,455.9	804.5	8,700.9
Sept	4,635.1	3,498.9	817.4	8,951.5
October	4,815.7	3,540.5	832.2	9,188.4
November	4,972.5	3,593.4	850.8	9,416.7
December	5,191.5	3,706.7	880.3	9,778.5
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	7,640.7	4,044.9	1,221.3	12,906.9
February	7,965.1	4,206.2	1,277.2	13,448.6
March	8,130.4	4,292.5	1,305.4	13,728.4
April	8,282.5	4,381.5	1,317.9	13,981.9
May	8,463.7	4,465.0	1,341.6	14,270.3
June	8,619.3	4,561.5	1,368.7	14,549.5
July	8,777.4	4,644.0	1,394.5	14,815.8
August	8,956.6	4,738.2	1,413.3	15,108.1
Sept	9,096.7	4,799.5	1,436.5	15,332.7
October	9,253.9	4,912.3	1,443.3	15,609.4
November	9,428.3	5,003.6	1,473.2	15,905.0

Values for 2016 are final. Values for 2017 are preliminary.
Final data for 2016 monthly has changed based on new data elements collected from EIA-861 Schedule 7B. Data is now collected by sector, previously it was allocated to the commercial sector.
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, November 2017 and 2016 (Megawatts)

Census Division and State	Renewable Sources		Fossil Fuels		Hydroelectric Pumped Storage		Other Energy Storage		Nuclear		All Other Sources		All Sources	
	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	5,641.8	5,183.0	21,324.9	22,689.1	1,797.4	1,797.4	22.3	2.0	4,015.9	4,015.9	48.0	48.0	32,850.3	33,735.4
Connecticut	358.0	342.0	6,339.7	6,311.4	29.4	29.4	1.6	0.0	2,087.8	2,087.8	26.0	26.0	8,842.5	8,796.6
Maine	2,442.5	2,189.0	2,442.5	2,442.5	0.0	0.0	16.2	0.0	0.0	0.0	22.0	22.0	4,923.2	4,653.5
Massachusetts	1,211.7	1,079.3	8,376.3	9,765.7	1,768.0	1,768.0	2.5	0.0	677.2	677.2	0.0	0.0	12,035.7	13,290.2
New Hampshire	928.9	928.9	2,262.9	2,266.0	0.0	0.0	0.0	0.0	1,250.9	1,250.9	0.0	0.0	4,442.7	4,445.8
Rhode Island	104.8	70.8	1,805.6	1,805.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,910.4	1,876.4
Vermont	595.9	573.0	97.9	97.9	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	695.8	672.9
Middle Atlantic	10,965.9	10,827.4	68,286.9	69,370.6	3,409.1	3,409.1	71.4	70.4	19,294.5	19,304.3	11.2	11.2	102,039.0	102,993.0
New Jersey	890.6	838.2	12,323.9	13,515.1	420.0	420.0	1.0	0.0	4,107.9	4,107.9	11.2	11.2	17,754.6	18,892.4
New York	7,192.8	7,127.2	26,144.2	26,129.2	1,406.1	1,406.1	20.0	20.0	5,389.6	5,399.4	0.0	0.0	40,152.7	40,081.9
Pennsylvania	2,882.5	2,862.0	29,818.8	29,726.3	1,583.0	1,583.0	50.4	50.4	9,797.0	9,797.0	0.0	0.0	44,131.7	44,018.7
East North Central	11,128.1	10,229.6	113,299.2	113,405.6	2,133.0	2,103.0	187.4	187.4	19,019.3	19,019.3	110.1	110.1	145,877.1	145,055.0
Illinois	4,172.4	3,988.4	28,967.7	28,928.6	0.0	0.0	112.4	112.4	11,587.3	11,587.3	0.0	0.0	44,839.8	44,616.7
Indiana	2,308.8	2,181.6	23,121.0	23,353.4	0.0	0.0	22.0	22.0	0.0	0.0	89.0	89.0	25,540.8	25,646.0
Michigan	2,569.8	2,220.8	20,624.1	20,800.7	2,133.0	2,103.0	0.0	0.0	4,105.4	4,105.4	0.0	0.0	29,432.3	29,229.9
Ohio	852.2	724.7	26,086.6	25,810.5	0.0	0.0	53.0	53.0	2,134.0	2,134.0	0.0	0.0	29,125.8	28,722.2
Wisconsin	1,224.9	1,114.1	14,499.8	14,512.4	0.0	0.0	0.0	0.0	1,192.6	1,192.6	21.1	21.1	16,938.4	16,840.2
West North Central	26,047.8	22,110.5	60,793.1	60,532.5	657.0	657.0	2.0	2.0	5,394.9	5,394.9	24.5	24.5	92,919.3	88,721.4
Iowa	6,972.9	6,533.8	9,903.7	9,507.5	0.0	0.0	0.0	0.0	601.4	601.4	0.0	0.0	17,478.0	16,642.7
Kansas	5,136.4	3,863.9	9,773.1	9,698.0	0.0	0.0	0.0	0.0	1,175.0	1,175.0	0.8	0.8	16,085.3	14,737.7
Minnesota	4,636.1	3,962.4	10,006.0	10,035.8	0.0	0.0	1.0	1.0	1,657.0	1,657.0	18.4	18.4	16,318.5	15,674.6
Missouri	1,560.6	1,043.6	18,578.4	18,767.4	657.0	657.0	1.0	1.0	1,190.0	1,190.0	0.0	0.0	21,987.0	21,659.0
Nebraska	1,712.2	1,123.5	6,215.5	6,215.5	0.0	0.0	0.0	0.0	771.5	771.5	0.0	0.0	8,699.2	8,110.5
North Dakota	3,592.8	2,894.5	4,624.6	4,621.2	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	8,222.7	7,521.0
South Dakota	2,436.8	2,688.8	1,691.8	1,687.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,128.6	4,375.9
South Atlantic	17,724.8	15,704.0	159,848.0	158,704.3	7,905.2	7,905.2	80.5	77.5	24,598.6	24,598.6	446.7	446.7	210,603.8	207,436.3
Delaware	46.4	44.9	3,329.5	3,364.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,375.9	3,408.9
District of Columbia	12.0	12.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	21.0
Florida	1,835.0	1,434.8	53,297.9	53,393.5	0.0	0.0	0.0	0.0	3,572.0	3,572.0	348.7	348.7	59,053.6	58,749.0
Georgia	3,968.5	3,867.2	26,968.8	26,973.2	1,862.2	1,862.2	1.0	1.0	4,061.0	4,061.0	44.0	44.0	36,905.5	36,808.6
Maryland	1,088.5	1,058.7	10,287.3	9,553.5	0.0	0.0	13.0	11.0	1,707.8	1,707.8	0.0	0.0	13,096.6	12,331.0
North Carolina	5,729.0	4,619.1	21,646.9	21,824.9	86.0	86.0	1.0	0.0	5,113.6	5,113.6	54.0	54.0	32,630.5	31,697.6
South Carolina	1,954.5	1,894.9	11,422.3	11,472.3	2,716.0	2,716.0	0.0	0.0	6,576.2	6,576.2	0.0	0.0	22,669.0	22,659.4
Virginia	2,055.1	1,839.6	18,723.0	17,950.6	3,241.0	3,241.0	0.0	0.0	3,568.0	3,568.0	0.0	0.0	27,587.1	26,599.2
West Virginia	1,035.8	932.8	14,163.3	14,163.3	0.0	0.0	65.5	65.5	0.0	0.0	0.0	0.0	15,264.6	15,161.6
East South Central	8,642.8	8,101.6	65,687.2	65,811.4	1,616.3	1,616.3	0.0	0.0	10,984.1	10,984.1	1.4	1.4	86,931.8	86,514.8
Alabama	4,091.7	3,789.2	20,227.7	20,227.7	0.0	0.0	0.0	0.0	5,060.4	5,060.4	0.0	0.0	29,379.8	29,077.3
Kentucky	1,237.6	1,148.6	18,874.3	19,004.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20,111.9	20,152.9
Mississippi	383.3	274.7	14,278.0	14,278.0	0.0	0.0	0.0	0.0	1,401.0	1,401.0	1.4	1.4	16,063.7	15,955.1
Tennessee	2,930.2	2,889.1	12,307.2	12,301.4	1,616.3	1,616.3	0.0	0.0	4,522.7	4,522.7	0.0	0.0	21,376.4	21,329.5
West South Central	33,973.9	29,932.3	144,279.4	142,001.9	286.0	286.0	73.0	41.0	8,910.7	8,910.7	512.9	512.9	188,035.9	181,684.8
Arkansas	1,620.1	1,620.1	11,245.2	11,245.2	28.0	28.0	0.0	0.0	1,817.8	1,817.8	0.0	0.0	14,711.1	14,711.1
Louisiana	615.7	615.7	21,019.6	21,165.6	0.0	0.0	0.0	0.0	2,132.9	2,132.9	288.9	288.9	24,057.1	24,203.1
Oklahoma	7,683.5	6,389.5	18,404.7	18,175.5	258.0	258.0	0.0	0.0	0.0	0.0	0.0	0.0	26,346.2	24,823.0
Texas	24,054.6	21,307.0	93,609.9	91,415.6	0.0	0.0	73.0	41.0	4,960.0	4,960.0	224.0	224.0	122,921.5	117,947.6
Mountain	25,643.2	24,115.6	63,213.1	63,858.9	778.8	778.8	43.6	2.6	3,937.0	3,937.0	126.3	126.3	93,742.0	92,819.2
Arizona	5,015.3	4,643.2	19,407.3	19,407.3	216.3	216.3	40.0	0.0	3,937.0	3,937.0	0.0	0.0	28,615.9	28,203.8
Colorado	4,191.4	4,107.9	11,161.2	11,355.0	562.5	562.5	1.0	0.0	0.0	0.0	9.3	9.3	15,925.4	16,034.7
Idaho	4,013.3	3,813.3	1,148.1	1,148.1	0.0	0.0	0.0	0.0	0.0	0.0	14.8	14.8	5,176.2	4,976.2
Montana	3,446.3	3,429.3	2,740.4	2,740.4	0.0	0.0	0.0	0.0	0.0	0.0	44.0	44.0	6,230.7	6,213.7
Nevada	3,534.0	3,199.4	7,791.6	8,248.6	0.0	0.0	0.0	0.0	0.0	0.0	6.5	6.5	11,332.1	11,454.5
New Mexico	2,061.0	1,649.3	6,828.3	6,828.3	0.0	0.0	2.6	2.6	0.0	0.0	0.0	0.0	8,891.9	8,480.2
Utah	1,587.5	1,478.8	7,348.2	7,343.2	0.0	0.0	0.0	0.0	0.0	0.0	40.2	40.2	8,975.9	8,862.2
Wyoming	1,794.4	1,794.4	6,788.0	6,788.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5	11.5	8,593.9	8,593.9
Pacific Contiguous	66,386.3	64,534.7	49,341.7	52,219.7	4,225.9	4,225.9	172.1	65.7	3,417.0	3,400.0	106.3	106.3	123,649.3	124,552.3
California	29,434.4	27,769.6	40,267.8	43,157.9	3,911.9	3,911.9	159.5	55.5	2,240.0	2,240.0	106.3	106.3	76,119.9	77,241.2
Oregon	12,117.2	11,991.4	4,318.1	4,318.1	0.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	16,440.3	16,314.5
Washington	24,834.7	24,773.7	4,755.8	4,743.7	314.0	314.0	7.6	5.2	1,177.0	1,160.0	0.0	0.0	31,089.1	30,996.6
Pacific Noncontiguous	1,128.1	1,116.6	4,216.5	4,312.0	0.0	0.0	84.5	73.5	0.0	0.0	26.6	26.6	5,455.7	5,528.7
Alaska	538.0	538.0	2,159.3	2,254.8	0.0	0.0	45.0	45.0	0.0	0.0	0.0	0.0	2,742.3	2,837.8
Hawaii	590.1	578.6	2,057.2	2,057.2	0.0	0.0	39.5	28.5	0.0	0.0	26.6	26.6	2,713.4	2,690.9
U.S. Total	207,282.7	191,855.3	750,290.0	752,906.0	22,808.7	22,778.7	736.8	522.1	99,572.0	99,564.8	1,414.0	1,414.0	1,082,104.2	1,069,040.9

NM = Not meaningful due to large relative standard error.
Values for 2016 are final. Values for 2017 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, November 2017 and 2016 (Megawatts)

	Summer Capacity at Utility Scale Facilities														Small Scale Capacity		Capacity From Utility and Small Scale Facilities			
Census Division and State	Wind		Solar Photovoltaic		Solar Thermal		Conventional Hydroelectric		Biomass Sources		Geothermal		Total Renewable Sources		Estimated Solar Photovoltaic		Estimated Total Solar Photovoltaic		Estimated Total Solar	
	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	1,370.7	1,072.6	688.6	508.5	0.0	0.0	1,957.4	1,957.4	1,625.1	1,644.5	0.0	0.0	5,641.8	5,183.0	1,728.8	1,367.6	2,417.4	1,876.1	2,417.4	1,876.1
Connecticut	1.1	1.1	31.2	15.2	0.0	0.0	122.2	122.2	203.5	203.5	0.0	0.0	358.0	342.0	321.3	257.7	352.5	272.9	352.5	272.9
Maine	921.6	652.7	5.6	0.0	0.0	0.0	732.4	732.4	782.9	803.9	0.0	0.0	2,442.5	2,189.0	31.8	22.2	37.4	22.2	37.4	22.2
Massachusetts	92.9	94.5	569.6	435.6	0.0	0.0	265.9	265.9	283.3	283.3	0.0	0.0	1,211.7	1,079.3	1,176.2	959.8	1,745.8	1,395.4	1,745.8	1,395.4
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	69.0	47.1	69.0	47.1	69.0	47.1
Rhode Island	51.8	21.0	10.2	10.2	0.0	0.0	2.7	2.7	40.1	36.9	0.0	0.0	104.8	70.8	43.3	21.7	53.5	31.9	53.5	31.9
Vermont	120.2	120.2	72.0	47.5	0.0	0.0	329.4	329.4	74.3	75.9	0.0	0.0	595.9	573.0	87.3	59.1	159.3	106.6	159.3	106.6
Middle Atlantic	3,204.1	3,088.1	819.4	742.0	0.0	0.0	5,630.7	5,630.7	1,311.7	1,366.6	0.0	0.0	10,965.9	10,827.4	2,485.1	1,944.8	3,304.5	2,686.8	3,304.5	2,686.8
New Jersey	7.6	7.6	643.4	591.0	0.0	0.0	12.3	12.3	227.3	227.3	0.0	0.0	890.6	838.2	1,256.0	1,033.9	1,899.4	1,624.9	1,899.4	1,624.9
New York	1,824.7	1,747.0	125.2	100.2	0.0	0.0	4,718.8	4,718.8	524.1	561.2	0.0	0.0	7,192.8	7,127.2	955.1	703.8	1,080.3	804.0	1,080.3	804.0
Pennsylvania	1,371.8	1,333.5	50.8	50.8	0.0	0.0	899.6	899.6	560.3	578.1	0.0	0.0	2,882.5	2,862.0	274.0	207.1	324.8	257.9	324.8	257.9
East North Central	8,625.2	7,838.9	354.6	249.3	0.0	0.0	853.1	853.1	1,295.2	1,288.3	0.0	0.0	11,128.1	10,229.6	279.8	180.4	634.4	429.7	634.4	429.7
Illinois	3,983.8	3,799.8	32.8	32.8	0.0	0.0	34.1	34.1	121.7	121.7	0.0	0.0	4,172.4	3,988.4	48.6	26.2	81.4	59.0	81.4	59.0
Indiana	1,989.7	1,889.7	175.9	155.1	0.0	0.0	60.4	60.4	82.8	76.4	0.0	0.0	2,308.8	2,181.6	28.2	12.3	204.1	167.4	204.1	167.4
Michigan	1,683.8	1,384.8	62.5	12.5	0.0	0.0	263.0	263.0	560.5	560.5	0.0	0.0	2,569.8	2,220.8	62.7	39.8	125.2	52.3	125.2	52.3
Ohio	538.4	433.1	67.5	45.8	0.0	0.0	101.9	101.9	144.4	143.9	0.0	0.0	852.2	724.7	98.6	76.3	166.1	122.1	166.1	122.1
Wisconsin	429.5	331.5	15.9	3.1	0.0	0.0	393.7	393.7	385.8	385.8	0.0	0.0	1,224.9	1,114.1	41.7	25.8	57.6	28.9	57.6	28.9
West North Central	21,696.5	18,228.7	508.8	39.3	0.0	0.0	3,289.4	3,289.4	553.1	553.1	0.0	0.0	26,047.8	22,110.5	254.8	185.3	763.6	224.6	763.6	224.6
Iowa	6,798.9	6,364.9	7.7	2.6	0.0	0.0	144.9	144.9	21.4	21.4	0.0	0.0	6,972.9	6,533.8	66.2	42.1	73.9	44.7	73.9	44.7
Kansas	5,117.2	3,846.7	3.2	1.2	0.0	0.0	7.0	7.0	9.0	9.0	0.0	0.0	5,136.4	3,863.9	11.2	5.7	14.4	6.9	14.4	6.9
Minnesota	3,506.5	3,268.2	443.0	7.6	0.0	0.0	205.9	205.9	480.7	480.7	0.0	0.0	4,636.1	3,962.4	44.3	28.4	487.3	36.0	487.3	36.0
Missouri	954.3	458.5	44.1	22.9	0.0	0.0	545.7	545.7	16.5	16.5	0.0	0.0	1,560.6	1,043.6	128.7	106.7	172.8	129.6	172.8	129.6
Nebraska	1,408.8	927.9	9.8	4.0	0.0	0.0	277.9	175.9	15.7	15.7	0.0	0.0	1,712.2	1,123.5	3.7	1.8	13.5	5.8	13.5	5.8
North Dakota	3,073.0	2,374.7	0.0	0.0	0.0	0.0	510.0	510.0	9.8	9.8	0.0	0.0	3,592.8	2,894.5	0.2	0.2	0.2	0.2	0.2	0.2
South Dakota	837.8	987.8	1.0	1.0	0.0	0.0	1,598.0	1,700.0	0.0	0.0	0.0	0.0	2,436.8	2,688.8	0.5	0.5	1.5	1.5	1.5	1.5
South Atlantic	1,086.3	775.3	4,976.1	3,101.8	0.0	0.0	7,270.8	7,498.7	4,391.6	4,328.2	0.0	0.0	17,724.8	15,704.0	1,358.7	971.1	6,334.8	4,072.9	6,334.8	4,072.9
Delaware	2.0	2.0	32.2	30.7	0.0	0.0	0.0	0.0	12.2	12.2	0.0	0.0	46.4	44.9	67.4	50.4	99.6	81.1	99.6	81.1
District of Columbia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	12.0	0.0	0.0	12.0	12.0	36.9	27.1	36.9	27.1	36.9	27.1
Florida	0.0	0.0	490.3	98.5	0.0	0.0	54.5	54.5	1,290.2	1,281.8	0.0	0.0	1,835.0	1,434.8	200.2	128.6	690.5	227.1	690.5	227.1
Georgia	0.0	0.0	973.4	699.2	0.0	0.0	2,047.2	2,275.1	947.9	892.9	0.0	0.0	3,968.5	3,867.2	NM	NM	NM	NM	NM	NM
Maryland	190.0	190.0	166.5	136.7	0.0	0.0	590.0	590.0	142.0	142.0	0.0	0.0	1,088.5	1,058.7	611.9	469.7	778.4	606.4	778.4	606.4
North Carolina	208.0	0.0	2,954.9	2,053.0	0.0	0.0	2,002.0	2,002.0	564.1	564.1	0.0	0.0	5,729.0	4,619.1	125.6	109.1	3,080.5	2,162.1	3,080.5	2,162.1
South Carolina	0.0	0.0	62.1	2.5	0.0	0.0	1,361.6	1,361.6	530.8	530.8	0.0	0.0	1,954.5	1,894.9	119.4	38.8	181.5	41.3	181.5	41.3
Virginia	0.0	0.0	296.7	81.2	0.0	0.0	866.0	866.0	892.4	892.4	0.0	0.0	2,055.1	1,839.6	45.7	28.7	342.4	109.9	342.4	109.9
West Virginia	686.3	583.3	0.0	0.0	0.0	0.0	349.5	349.5	0.0	0.0	0.0	0.0	1,035.8	932.8	5.7	4.0	5.7	4.0	5.7	4.0
East South Central	29.1	29.1	306.4	130.2	0.0	0.0	7,035.7	6,727.3	1,271.6	1,215.0	0.0	0.0	8,642.8	8,101.6	83.9	75.1	390.3	205.3	390.3	205.3
Alabama	0.0	0.0	93.0	75.0	0.0	0.0	3,270.2	3,042.3	728.5	671.9	0.0	0.0	4,091.7	3,789.2	NM	4.7	NM	79.7	NM	79.7
Kentucky	0.0	0.0	18.5	10.0	0.0	0.0	1,146.9	1,066.4	72.2	72.2	0.0	0.0	1,237.6	1,148.6	17.7	13.3	36.2	23.3	36.2	23.3
Mississippi	0.0	0.0	108.6	0.0	0.0	0.0	0.0	0.0	274.7	274.7	0.0	0.0	383.3	274.7	6.6	4.1	115.2	4.1	115.2	4.1
Tennessee	29.1	29.1	86.3	45.2	0.0	0.0	2,618.6	2,618.6	196.2	196.2	0.0	0.0	2,930.2	2,889.1	54.4	53.1	140.7	98.3	140.7	98.3
West South Central	28,674.5	25,083.3	1,040.3	591.9	0.0	0.0	2,990.3	2,988.3	1,268.8	1,268.8	0.0	0.0	33,973.9	29,932.3	587.9	389.0	1,628.2	980.9	1,628.2	980.9
Arkansas	0.0	0.0	13.0	13.0	0.0	0.0	1,266.7	1,266.7	340.4	340.4	0.0	0.0	1,620.1	1,620.1	7.7	4.6	20.7	17.6	20.7	17.6
Louisiana	0.0	0.0	0.0	0.0	0.0	0.0	192.0	192.0	423.7	423.7	0.0	0.0	615.7	615.7	125.2	118.2	125.2	118.2	125.2	118.2
Oklahoma	6,743.2	5,451.2	2.5	2.5	0.0	0.0	861.6	859.6	76.2	76.2	0.0	0.0	7,683.5	6,389.5	3.9	2.5	6.4	5.0	6.4	5.0
Texas	21,931.3	19,632.1	1,024.8	576.4	0.0	0.0	670.0	670.0	428.5	428.5	0.0	0.0	24,054.6	21,307.0	451.1	263.7	1,475.9	840.1	1,475.9	840.1
Mountain	8,434.4	8,080.2	5,453.3	4,280.7	473.9	473.9	10,562.8	10,560.4	174.5	176.1	544.3	544.3	25,643.2	24,115.6	1,837.1	1,560.3	7,290.4	5,841.0	7,764.3	6,314.9
Arizona	267.3	267.3	1,701.0	1,328.9	295.4	295.4	2,720.9	2,720.9	30.7	30.7	0.0	0.0	5,015.3	4,643.2	975.9	860.2	2,676.9	2,189.1	2,972.3	2,484.5
Colorado	3,026.1	3,026.1	449.2	368.1	0.0	0.0	687.4	685.0	28.7	28.7	0.0	0.0	4,191.4	4,107.9	322.1	277.8	771.3	645.9	771.3	645.9
Idaho	970.5	970.5	240.0	40.0	0.0	0.0	2,708.9	2,708.9	83.9	83.9	10.0	10.0	4,013.3	3,813.3	12.5	7.0	252.5	47.0	252.5	47.0
Montana	678.5	678.5	17.0	0.0	0.0	0.0	2,747.8	2,747.8	3.0	3.0	0.0	0.0	3,446.3	3,429.3	10.8	7.8	27.8	7.8	27.8	7.8
Nevada	150.0	150.0	1,684.6	1,350.0	178.5	178.5	1,051.4	1,051.4	9.8	9.8	459.7	459.7	3,534.0	3,199.4	216.4	208.5	1,901.0	1,558.5	2,079.5	1,737.0
New Mexico	1,466.5	1,112.3	504.4	446.9	0.0	0.0	82.9	82.9	5.6	5.6	1.6	1.6	2,061.0	1,649.3	112.9	86.0	617.3	532.9	617.3	532.9
Utah	388.2	388.2	857.1	746.8	0.0	0.0	256.4	256.4	12.8	14.4	73.0	73.0	1,587.5	1,478.8	183.5	110.7	1,040.6	857.5	1,040.6	857.5
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	3.1	2.2	3.1	2.2	3.1	2.2
Pacific Contiguous	11,989.8	11,891.9	9,228.7	7,497.6	1,284.0	1,284.0	39,971.3	39,909.3	2,043.2	2,022.6	1,869.3	1,929.3	66,386.3	64,534.7	6,718.8	5,315.8	15,947.5	12,813.4	17,231.5	14,097.4
California	5,706.5	5,658.6	9,072.3	7,417.0	1,284.0	1,284.0	10,197.7	10,190.4	1,324.1	1,309.8	1,849.8	1,909.8	29,434.4	27,769.6	6,488.2	5,125.5	15,560.5	12,542.5	16,844.5	13,826.5
Oregon	3,210.2	3,160.2	155.9	80.1	0.0	0.0	8,423.2	8,423.2	308.4	308.4	19.5	19.5	12,117.2	11,991.4	134.0	115.0	289.9	195.1	289.9	195.1
Washington	3,073.1	3,073.1	0.5	0.5	0.0	0.0	21,350.4	21,295.7	410.7	404.4	0.0	0.0	24,834.7	24,773.7	96.5	75.3	97.0	75.8	97.0	75.8
Pacific Noncontiguous	266.2	266.2	98.3	50.7	0.0	0.0	496.3	496.3	224.3	260.4	43.0	43.0	1,128.1	1,116.6	570.2	457.0	668.5	507.7	668.5	507.7
Alaska	60.6	60.6	0.0	0.0	0.0	0.0	470.4	470.4	7.0	7.0	0.0	0.0	538.0	538.0	2.1	1.3	2.1	1.3	2.1	1.3
Hawaii	205.6	205.6	98.3	50.7	0.0	0.0	25.9	25.9	217.3	253.4	43.0	43.0	590.1	578.6	568.2	455.7	666.5	506.4	666.5	506.4
U.S. Total	85,376.8	76,354.3	23,474.5	17,192.0	1,757.9	1,757.9	80,057.8	79,910.9	14,159.1	14,123.6	2,456.6	2,516.6	207,282.7	191,855.3	15,905.0	12,446.4	39,379.5	29,638.4	41,137.4	31,396.3

NM = Not meaningful due to large relative standard error.
Values for 2016 are final. Values for 2017 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, November 2017 and 2016 (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	
	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016	November 2017	November 2016
New England	12,099.0	12,006.8	1,101.7	1,086.2	1,051.7	1,047.5	917.3	1,955.3	0.0	0.0	6,155.2	6,593.3	0.0	0.0	21,324.9	22,689.1
Connecticut	2,581.4	2,555.3	467.3	467.3	424.6	422.4	383.4	383.4	0.0	0.0	2,483.0	2,483.0	0.0	0.0	6,339.7	6,311.4
Maine	1,250.0	1,250.0	297.1	297.1	14.5	14.5	0.0	0.0	0.0	0.0	880.9	880.9	0.0	0.0	2,442.5	2,442.5
Massachusetts	5,259.4	5,193.3	333.5	318.0	200.0	198.0	0.0	1,038.0	0.0	0.0	2,583.4	3,018.4	0.0	0.0	8,376.3	9,765.7
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	97.1	0.0	0.0	2,262.9	2,266.0
Rhode Island	1,777.2	1,777.2	0.0	0.0	12.4	12.4	0.0	0.0	0.0	0.0	16.0	16.0	0.0	0.0	1,805.6	1,805.6
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	26,351.1	26,300.6	7,711.4	7,716.4	13,658.0	14,070.3	14,982.2	15,721.7	78.6	78.6	5,380.4	5,357.8	125.2	125.2	68,286.9	69,370.6
New Jersey	8,103.2	8,103.2	2,857.3	2,857.3	493.2	1,052.4	613.0	1,245.0	11.6	11.6	222.2	222.2	23.4	23.4	12,323.9	13,515.1
New York	8,128.7	8,128.7	3,174.6	3,179.6	9,653.7	9,548.8	1,639.9	1,747.4	0.0	0.0	3,547.3	3,524.7	0.0	0.0	26,144.2	26,129.2
Pennsylvania	10,119.2	10,068.7	1,679.5	1,679.5	3,511.1	3,469.1	12,729.3	12,729.3	67.0	67.0	1,610.9	1,610.9	101.8	101.8	29,818.8	29,726.3
East North Central	18,058.2	17,080.1	26,438.6	26,295.1	3,955.9	4,108.3	60,773.4	61,822.4	247.6	247.6	2,659.6	2,686.2	1,165.9	1,165.9	113,299.2	113,405.6
Illinois	3,566.3	3,562.9	10,297.9	10,260.2	288.9	290.9	14,015.1	14,015.1	0.0	0.0	685.0	685.0	114.5	114.5	28,967.7	28,928.6
Indiana	2,406.0	2,406.0	3,363.2	3,266.6	725.9	725.9	15,773.8	16,094.8	0.0	0.0	237.8	245.8	614.3	614.3	23,121.0	23,353.4
Michigan	4,421.6	4,294.5	3,964.9	3,955.7	2,184.8	2,340.7	9,263.2	9,414.2	47.2	47.2	492.4	498.4	250.0	250.0	20,624.1	20,800.7
Ohio	4,922.4	4,074.8	5,431.7	5,431.7	158.8	153.3	14,604.6	15,181.6	142.0	142.0	640.0	640.0	187.1	187.1	26,086.6	25,810.5
Wisconsin	2,741.9	2,741.9	3,380.9	3,380.9	597.5	597.5	7,116.7	7,116.7	58.4	58.4	604.4	617.0	0.0	0.0	14,499.8	14,512.4
West North Central	6,641.9	5,988.3	11,554.5	11,341.1	4,224.4	4,155.0	34,470.6	34,955.4	32.0	32.0	3,861.3	4,052.3	8.4	8.4	60,793.1	60,532.5
Iowa	1,774.7	1,121.1	1,256.7	1,140.3	620.7	670.4	5,426.2	5,548.8	32.0	32.0	793.4	994.9	0.0	0.0	9,903.7	9,507.5
Kansas	266.0	266.0	2,169.0	2,169.0	2,113.6	2,057.5	4,683.2	4,672.2	0.0	0.0	541.3	533.3	0.0	0.0	9,773.1	9,698.0
Minnesota	2,172.0	2,172.0	2,454.9	2,437.9	276.7	322.3	4,308.5	4,308.5	0.0	0.0	793.9	795.1	0.0	0.0	10,006.0	10,035.8
Missouri	1,796.6	1,796.6	3,420.5	3,420.5	501.0	504.0	11,726.1	11,912.1	0.0	0.0	1,134.2	1,134.2	0.0	0.0	18,578.4	18,767.4
Nebraska	342.6	342.6	1,150.8	1,150.8	592.1	592.1	3,817.3	3,817.3	0.0	0.0	312.7	312.7	0.0	0.0	6,215.5	6,215.5
North Dakota	0.0	0.0	408.0	328.0	111.6	0.0	4,035.3	4,222.5	0.0	0.0	61.3	62.3	8.4	8.4	4,624.6	4,621.2
South Dakota	290.0	290.0	694.6	694.6	8.7	8.7	474.0	474.0	0.0	0.0	224.5	219.8	0.0	0.0	1,691.8	1,687.1
South Atlantic	52,648.3	50,670.3	32,450.9	31,963.7	7,245.3	7,400.4	56,870.7	57,329.7	83.8	83.8	10,414.0	11,121.4	135.0	135.0	159,848.0	158,704.3
Delaware	1,512.0	1,512.0	315.2	315.2	843.2	877.7	410.0	410.0	0.0	0.0	114.1	114.1	135.0	135.0	3,329.5	3,364.0
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	27,444.7	26,966.7	8,521.5	8,130.5	2,476.7	2,597.3	9,881.0	10,131.0	0.0	0.0	4,974.0	5,568.0	0.0	0.0	53,297.9	53,393.5
Georgia	7,957.7	7,957.7	7,823.8	7,823.8	796.4	796.4	9,360.5	9,360.5	83.8	83.8	946.6	951.0	0.0	0.0	26,968.8	26,973.2
Maryland	976.0	250.0	1,966.2	1,960.0	1,414.2	1,414.2	4,712.0	4,712.0	0.0	0.0	1,218.9	1,217.3	0.0	0.0	10,287.3	9,553.5
North Carolina	4,724.8	4,724.8	6,047.7	5,957.7	0.0	0.0	10,536.8	10,745.8	0.0	0.0	337.6	396.6	0.0	0.0	21,646.9	21,824.9
South Carolina	2,399.0	2,399.0	2,801.9	2,801.9	546.0	546.0	5,212.0	5,212.0	0.0	0.0	463.4	513.4	0.0	0.0	11,422.3	11,472.3
Virginia	7,634.1	6,860.1	3,894.3	3,894.3	1,045.8	1,045.8	3,800.4	3,800.4	0.0	0.0	2,348.4	2,350.0	0.0	0.0	18,723.0	17,950.6
West Virginia	0.0	0.0	1,071.3	1,071.3	123.0	123.0	12,958.0	12,958.0	0.0	0.0	11.0	11.0	0.0	0.0	14,163.3	14,163.3
East South Central	20,197.9	19,097.9	13,008.2	13,002.4	5,338.8	5,338.8	26,980.5	28,210.5	0.0	0.0	142.0	142.0	19.8	19.8	65,687.2	65,811.4
Alabama	9,441.4	9,441.4	2,532.2	2,532.2	1,908.3	1,908.3	6,283.4	6,283.4	0.0	0.0	42.6	42.6	19.8	19.8	20,227.7	20,227.7
Kentucky	1,763.0	663.0	4,976.6	4,976.6	260.0	260.0	11,862.8	13,092.8	0.0	0.0	11.9	11.9	0.0	0.0	18,874.3	19,004.3
Mississippi	7,590.5	7,590.5	1,718.9	1,718.9	3,104.3	3,104.3	1,820.0	1,820.0	0.0	0.0	44.3	44.3	0.0	0.0	14,278.0	14,278.0
Tennessee	1,403.0	1,403.0	3,780.5	3,774.7	66.2	66.2	7,014.3	7,014.3	0.0	0.0	43.2	43.2	0.0	0.0	12,307.2	12,301.4
West South Central	60,192.2	58,389.5	13,818.5	13,425.8	32,052.7	31,970.6	36,423.7	36,423.7	955.7	955.7	181.3	181.3	655.3	655.3	144,279.4	142,001.9
Arkansas	4,620.5	4,620.5	702.8	702.8	793.7	793.7	5,116.0	5,116.0	0.0	0.0	12.2	12.2	0.0	0.0	11,245.2	11,245.2
Louisiana	7,552.8	7,552.8	2,372.8	2,372.8	6,896.3	7,042.3	2,852.9	2,852.9	891.9	891.9	45.5	45.5	407.4	407.4	21,019.6	21,165.6
Oklahoma	6,783.7	6,783.7	1,515.9	1,295.2	5,164.9	5,156.4	4,865.8	4,865.8	0.0	0.0	74.4	74.4	0.0	0.0	18,404.7	18,175.5
Texas	41,235.2	39,432.5	9,227.0	9,055.0	19,197.8	18,978.2	23,589.0	23,589.0	63.8	63.8	49.2	49.2	247.9	247.9	93,609.9	91,415.6
Mountain	22,494.2	22,494.2	8,659.0	8,819.0	3,341.9	3,336.9	28,183.6	28,674.4	52.0	52.0	370.8	370.8	111.6	111.6	63,213.1	63,858.9
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	2,532.3	329.0	329.0	4,851.0	5,084.8	0.0	0.0	168.4	168.4	0.0	0.0	11,161.2	11,355.0
Idaho	558.1	558.1	562.1	562.1	14.0	14.0	8.5	8.5	0.0	0.0	5.4	5.4	0.0	0.0	1,148.1	1,148.1
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	5,415.0	5,415.0	1,185.6	1,385.6	444.6	444.6	740.4	997.4	0.0	0.0	6.0	6.0	0.0	0.0	7,791.6	8,248.6
New Mexico	1,465.0	1,465.0	976.0	976.0	849.4	849.4	3,471.0	3,471.0	0.0	0.0	66.9	66.9	0.0	0.0	6,828.3	6,828.3
Utah	1,830.0	1,830.0	520.2	520.2	316.2	311.2	4,654.0	4,654.0	0.0	0.0	27.8	27.8	0.0	0.0	7,348.2	7,343.2
Wyoming	94.0	94.0	153.6	153.6	12.9	12.9	6,411.6	6,411.6	0.0	0.0	5.8	5.8	110.1	110.1	6,788.0	6,788.0
Pacific Contiguous	25,987.3	25,891.2	11,763.8	11,805.7	8,877.0	11,872.2	1,982.0	1,982.0	17.0	17.0	485.3	422.3	229.3	229.3	49,341.7	52,219.7
California	19,962.8	19,878.8	10,910.6	10,952.5	8,621.0	11,616.2	57.0	57.0	17.0	17.0	470.1	407.1	229.3	229.3	40,267.8	43,157.9
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	2,649.6	2,637.5	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	4,755.8	4,743.7
Pacific Noncontiguous	479.2	547.0	626.3	654.3	175.0	175.0	333.8	333.8	0.0	0.0	2,595.8	2,595.5	6.4	6.4	4,216.5	4,312.0
Alaska	479.2	547.0	626.3	654.3	175.0	175.0	153.8	153.8	0.0	0.0	725.0	724.7	0.0	0.0	2,159.3	2,254.8
Hawaii	0.0	0.0	0.0	0.0	0.0	0.0	180.0	180.0	0.0	0.0	1,870.8	1,870.8	6.4	6.4	2,057.2	2,057.2
U.S. Total	245,149.3	238,465.9	127,132.9	126,109.7	79,920.7	83,475.0	261,917.8	267,408.9	1,466.7	1,466.7	32,245.7	33,522.9	2,456.9	2,456.9	750,290.0	752,906.0

NM = Not meaningful due to large relative standard error.
Values for 2016 are final. Values for 2017 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, 2017

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
2017	1	60639	AEP Renewables	IPP	Boulder Solar II, LLC	NV	60885	BSII	50.0	Solar Photovoltaic	SUN	PV
2017	1	59050	Algonquin Power Co	IPP	Algonquin SKIC 10 Solar, LLC	CA	60242	SKI10	10.0	Solar Photovoltaic	SUN	PV
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	11	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	12	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	13	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	14	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	15	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	16	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	17	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	18	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	19	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	20	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	21	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	22	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	58540	California PV Energy LLC	IPP	CA Department of Public Health at Richmo	CA	60428	PV1	2.2	Solar Photovoltaic	SUN	PV
2017	1	3892	City of Coffeyville - (KS)	Electric Utility	CML&P Generating Facility No. 2	KS	59726	10	18.7	Natural Gas Internal Combustion Engine	NG	IC
2017	1	3892	City of Coffeyville - (KS)	Electric Utility	CML&P Generating Facility No. 2	KS	59726	8	18.7	Natural Gas Internal Combustion Engine	NG	IC
2017	1	3892	City of Coffeyville - (KS)	Electric Utility	CML&P Generating Facility No. 2	KS	59726	9	18.7	Natural Gas Internal Combustion Engine	NG	IC
2017	1	56769	Consolidated Edison Development Inc.	IPP	CED Avenal	CA	60077	AVCA	15.8	Solar Photovoltaic	SUN	PV
2017	1	56769	Consolidated Edison Development Inc.	IPP	Oro Loma	CA	59915	ORCA	20.0	Solar Photovoltaic	SUN	PV
2017	1	58549	County of Alameda GSA	Electric CHP	Santa Rita Jail	CA	58625	SRFC2	1.4	Other Natural Gas	NG	FC
2017	1	58549	County of Alameda GSA	Electric CHP	Santa Rita Jail	CA	58625	SRPV3	0.5	Solar Photovoltaic	SUN	PV
2017	1	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Bowling Green	OH	60622	AMPBG	20.0	Solar Photovoltaic	SUN	PV
2017	1	61024	Deep Branch Farm, LLC	IPP	Deep Branch Farm	NC	61403	1	5.0	Solar Photovoltaic	SUN	PV
2017	1	15470	Duke Energy Indiana, LLC	Electric Utility	Crane Solar Facility	IN	60435	XXXXX	7.1	Solar Photovoltaic	SUN	PV
2017	1	60793	EE Waianae Solar Project LLC	IPP	EE Waianae Solar Project	HI	61172	WAIAN	27.6	Solar Photovoltaic	SUN	PV
2017	1	61077	IGS ORIX Solar I, LLC	IPP	IOS - MEW Phase 1	ME	61460	MEW1	4.1	Solar Photovoltaic	SUN	PV
2017	1	9234	Indiana Municipal Power Agency	Electric Utility	IMPA Anderson Solar Park	IN	60253	SANDE	5.0	Solar Photovoltaic	SUN	PV
2017	1	60304	Innovative Solar 31, LLC	IPP	Innovative Solar 31	NC	60540	IS031	35.0	Solar Photovoltaic	SUN	PV
2017	1	49893	Invenergy Services LLC	IPP	Bethel Wind Farm LLC	TX	60414	GEN1	276.0	Onshore Wind Turbine	WND	WT
2017	1	59973	Marshall Solar Energy Project	IPP	Marshall Solar Energy Project	MN	59875	PV1	62.3	Solar Photovoltaic	SUN	PV
2017	1	59483	Metropolitan Airports Commission	IPP	St. Paul Intl Airport Red & Blue Parking	MN	59709	PV2	0.9	Solar Photovoltaic	SUN	PV
2017	1	60471	Mt. Tom Solar, LLC	IPP	Mt. Tom Solar Project	MA	60906	PV1	4.5	Solar Photovoltaic	SUN	PV
2017	1	13683	North Carolina El Member Corp	Electric Utility	Ocracoke	NC	6377	BAT	1.0	Batteries	MWH	BA
2017	1	60562	Oliver Wind III, LLC	IPP	Oliver Wind III, LLC	ND	60905	WT1	99.3	Onshore Wind Turbine	WND	WT
2017	1	60439	Orion Community Solar	IPP	Orion Community Solar	MN	60716	OCS1	0.9	Solar Photovoltaic	SUN	PV
2017	1	60439	Orion Community Solar	IPP	Orion Community Solar	MN	60716	OCS2	0.9	Solar Photovoltaic	SUN	PV
2017	1	60439	Orion Community Solar	IPP	Orion Community Solar	MN	60716	OCS3	0.9	Solar Photovoltaic	SUN	PV
2017	1	60438	Paynesville Community Solar	IPP	Paynesville Community Solar	MN	60715	PCS5	0.9	Solar Photovoltaic	SUN	PV
2017	1	60834	Pima Energy Storage System	IPP	Pima Energy Storage System	AZ	61197	PIMA	10.0	Batteries	MWH	BA
2017	1	57440	SABIC IP Mt. Vernon, LLC	Industrial	SABIC Innovative Plastics Mt. Vernon	IN	58063	COGN1	78.6	Natural Gas Fired Combustion Turbine	NG	GT
2017	1	60520	SoCore Energy LLC	IPP	Mt. Hope DPC Solar	WI	60893	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	1	60520	SoCore Energy LLC	IPP	Sauk DPC Solar	WI	60887	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	1	60970	SunShare Management	IPP	WakeSun, LLC CSG	MN	60694	MLC27	1.0	Solar Photovoltaic	SUN	PV
2017	1	60970	SunShare Management	IPP	WakeSun, LLC CSG	MN	60694	MLC28	1.0	Solar Photovoltaic	SUN	PV
2017	1	60970	SunShare Management	IPP	WakeSun, LLC CSG	MN	60694	MLC29	1.0	Solar Photovoltaic	SUN	PV
2017	1	60046	TPE Alta Luna, LLC	IPP	Alta Luna	NM	60258	ALPV1	28.1	Solar Photovoltaic	SUN	PV
2017	1	18454	Tampa Electric Co	Electric Utility	Polk	FL	7242	2CC	459.0	Natural Gas Fired Combined Cycle	NG	CA
2017	1	60947	Tesla Inc.	IPP	Weber State University - Davis Campus Solar	UT	60821	PV1	1.3	Solar Photovoltaic	SUN	PV
2017	1	24211	Tucson Electric Power Co	Electric Utility	Demoss Petrie	AZ	124	BA1	10.0	Batteries	MWH	BA
2017	1	24211	Tucson Electric Power Co	Electric Utility	Fort Huachuca Solar PV Project	AZ	58972	FHUA2	4.1	Solar Photovoltaic	SUN	PV
2017	1	60435	Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS1	0.9	Solar Photovoltaic	SUN	PV
2017	1	60435	Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS2	0.9	Solar Photovoltaic	SUN	PV
2017	1	60435	Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS3	0.9	Solar Photovoltaic	SUN	PV
2017	1	60435	Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS4	0.9	Solar Photovoltaic	SUN	PV
2017	1	60435	Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS5	0.9	Solar Photovoltaic	SUN	PV
2017	1	40211	Wabash Valley Power Assn, Inc	Electric Utility	Liberty I & II LFGTE	IN	56465	1-III	1.6	Landfill Gas	LFG	IC
2017	1	40211	Wabash Valley Power Assn, Inc	Electric Utility	Liberty I & II LFGTE	IN	56465	2-III	1.6	Landfill Gas	LFG	IC
2017	1	40211	Wabash Valley Power Assn, Inc	Electric Utility	Liberty I & II LFGTE	IN	56465	3-III	1.6	Landfill Gas	LFG	IC
2017	1	40211	Wabash Valley Power Assn, Inc	Electric Utility	Liberty I & II LFGTE	IN	56465	4-III	1.6	Landfill Gas	LFG	IC
2017	1	58918	West Siler Farm LLC	IPP	West Siler Farm LLC	NC	59112	1	5.0	Solar Photovoltaic	SUN	PV
2017	1	60607	Wildwood Solar II, LLC	IPP	Wildwood Solar II	CA	59253	PV1	14.7	Solar Photovoltaic	SUN	PV
2017	2	55918	Acciona Wind Energy USA LLC	IPP	San Roman Wind I, LLC	TX	59712	SRWI	95.3	Onshore Wind Turbine	WND	WT
2017	2	59050	Algonquin Power Co	IPP	Luning Energy	NV	61084	LNING	50.0	Solar Photovoltaic	SUN	PV
2017	2	599	Anchorage Municipal Light and Power	Electric Utility	George M Sullivan Generation Plant 2	AK	6559	10	50.0	Natural Gas Fired Combined Cycle	NG	CT
2017	2	599	Anchorage Municipal Light and Power	Electric Utility	George M Sullivan Generation Plant 2	AK	6559	11	29.0	Natural Gas Fired Combined Cycle	NG	CA
2017	2	599	Anchorage Municipal Light and Power	Electric Utility	George M Sullivan Generation Plant 2	AK	6559	9	50.0	Natural Gas Fired Combined Cycle	NG	CT

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2017

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
2017	2	803	Arizona Public Service Co	Electric Utility	Red Rock	AZ	60467	PV1	40.0	Solar Photovoltaic	SUN	PV
2017	2	60865	CD Global Solar Holdings, LLC	IPP	Innovative Solar 35, LLC	NC	61258	ISS35	1.9	Solar Photovoltaic	SUN	PV
2017	2	60865	CD Global Solar Holdings, LLC	IPP	Innovative Solar 59, LLC	NC	61259	ISS59	1.9	Solar Photovoltaic	SUN	PV
2017	2	60865	CD Global Solar Holdings, LLC	IPP	Innovative Solar 60, LLC	NC	61260	ISS60	1.9	Solar Photovoltaic	SUN	PV
2017	2	56031	CPV Maryland LLC	IPP	CPV St Charles Energy Center	MD	56846	GTG1	205.0	Natural Gas Fired Combined Cycle	NG	CT
2017	2	56031	CPV Maryland LLC	IPP	CPV St Charles Energy Center	MD	56846	GTG2	205.0	Natural Gas Fired Combined Cycle	NG	CT
2017	2	56031	CPV Maryland LLC	IPP	CPV St Charles Energy Center	MD	56846	STGEN	316.0	Natural Gas Fired Combined Cycle	NG	CA
2017	2	60537	Deerfield Wind Energy, LLC	IPP	Deerfield Wind Energy, LLC	MI	60883	WT1	41.6	Onshore Wind Turbine	WND	WT
2017	2	60537	Deerfield Wind Energy, LLC	IPP	Deerfield Wind Energy, LLC	MI	60883	WT2	74.5	Onshore Wind Turbine	WND	WT
2017	2	60537	Deerfield Wind Energy, LLC	IPP	Deerfield Wind Energy, LLC	MI	60883	WT3	32.9	Onshore Wind Turbine	WND	WT
2017	2	60501	Farmington Holdco LLC	IPP	Farmington Holdco Solar	MN	60832	FARMI	5.0	Solar Photovoltaic	SUN	PV
2017	2	60507	Fresh Air Energy XXXV, LLC	IPP	Turkey Creek PV1	NC	60000	TRKCK	13.5	Solar Photovoltaic	SUN	PV
2017	2	60888	GCL New Energy, Inc.	IPP	Wilson Solar Farm 2	NC	61275	WILS2	3.8	Solar Photovoltaic	SUN	PV
2017	2	61077	IGS ORIX Solar I, LLC	IPP	IGS Solar I - BWI2	MD	61465	BWI2	1.4	Solar Photovoltaic	SUN	PV
2017	2	4361	Ingredion Inc - Stockton	Industrial	Ingredion Stockton	CA	52115	GEN2	6.5	Natural Gas Fired Combustion Turbine	NG	GT
2017	2	60618	Lindberg Field Solar 2, LLC	IPP	Lindberg Field Solar 2	CA	60984	PV1	1.9	Solar Photovoltaic	SUN	PV
2017	2	58887	Michelangelo Wind 3 LLC	IPP	Michelangelo Wind 3 LLC	IA	59053	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	2	12667	Minnesota Municipal Power Agny	Electric Utility	Shakopee Energy Park	MN	60647	SQA01	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	2	12667	Minnesota Municipal Power Agny	Electric Utility	Shakopee Energy Park	MN	60647	SQA02	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	2	12667	Minnesota Municipal Power Agny	Electric Utility	Shakopee Energy Park	MN	60647	SQA03	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	2	12667	Minnesota Municipal Power Agny	Electric Utility	Shakopee Energy Park	MN	60647	SQA04	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	2	12667	Minnesota Municipal Power Agny	Electric Utility	Shakopee Energy Park	MN	60647	SQA05	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	2	58159	Penn State University	Commercial	West Campus Steam Plant	PA	58194	WC 4	0.6	Natural Gas Steam Turbine	NG	ST
2017	2	58159	Penn State University	Commercial	West Campus Steam Plant	PA	58194	WC 5	0.6	Natural Gas Steam Turbine	NG	ST
2017	2	60490	Pine Island Holdco, LLC	IPP	Pine Island Solar	MN	60835	PINEI	3.9	Solar Photovoltaic	SUN	PV
2017	2	60412	Portal Ridge Solar, LLC	IPP	Portal Ridge Solar B, LLC	CA	60310	GEN01	20.0	Solar Photovoltaic	SUN	PV
2017	2	60412	Portal Ridge Solar, LLC	IPP	Portal Ridge Solar C, LLC	CA	60311	GEN01	11.4	Solar Photovoltaic	SUN	PV
2017	2	60336	SDGE Batteries	Electric Utility	El Cajon Energy Storage	CA	60569	SES	7.5	Batteries	MWH	BA
2017	2	58544	Sierra Nevada Brewing Co	Industrial	Sierra Nevada Brewing Co	CA	58585	BESS	0.5	Batteries	MWH	BA
2017	2	60520	SoCore Energy LLC	IPP	Bandera Electric Coop PV	TX	61205	PV1	1.5	Solar Photovoltaic	SUN	PV
2017	2	60520	SoCore Energy LLC	IPP	Downsville DPC Solar	WI	60892	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	2	60520	SoCore Energy LLC	IPP	Medford DPC Solar	WI	60894	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	2	18454	Tampa Electric Co	Electric Utility	Big Bend	FL	645	1	19.0	Solar Photovoltaic	SUN	PV
2017	2	60947	Tesla Inc.	IPP	CMEEC - Rogers Rd Solar	CT	60605	PV1	1.5	Solar Photovoltaic	SUN	PV
2017	2	57081	WGL Energy Systems, Inc	IPP	Lind Solar CSG	MN	60966	S0222	4.9	Solar Photovoltaic	SUN	PV
2017	3	60571	AEP Onsite Partners	IPP	Canandaigua Westbrook Solar Array	NY	61042	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	3	60281	Altus Power America Management, LLC	IPP	Aloha Solar Energy Fund 1 PK1	HI	58659	PK-1	5.0	Solar Photovoltaic	SUN	PV
2017	3	60281	Altus Power America Management, LLC	IPP	Spartan	NJ	60755	PV1	8.3	Solar Photovoltaic	SUN	PV
2017	3	59758	American Falls Solar II, LLC	IPP	American Falls Solar II	ID	60012	IPAF2	20.0	Solar Photovoltaic	SUN	PV
2017	3	59757	American Falls Solar LLC	IPP	American Falls Solar	ID	60011	IPAF	20.0	Solar Photovoltaic	SUN	PV
2017	3	59308	Bearford Farm, LLC	IPP	Bearford Farm Solar Project	NC	59567	PV1	5.0	Solar Photovoltaic	SUN	PV
2017	3	59861	Benson Creek	IPP	Benson Creek Windfarm	OR	59491	BCW	10.0	Onshore Wind Turbine	WND	WT
2017	3	60429	Chicago Bridge & Iron Company	IPP	JED Solid Waste Mgmt Renewable LFG Energy	FL	60701	00603	1.4	Landfill Gas	LFG	IC
2017	3	60429	Chicago Bridge & Iron Company	IPP	JED Solid Waste Mgmt Renewable LFG Energy	FL	60701	00696	1.4	Landfill Gas	LFG	IC
2017	3	60429	Chicago Bridge & Iron Company	IPP	JED Solid Waste Mgmt Renewable LFG Energy	FL	60701	00697	1.4	Landfill Gas	LFG	IC
2017	3	60429	Chicago Bridge & Iron Company	IPP	JED Solid Waste Mgmt Renewable LFG Energy	FL	60701	00698	1.4	Landfill Gas	LFG	IC
2017	3	60429	Chicago Bridge & Iron Company	IPP	JED Solid Waste Mgmt Renewable LFG Energy	FL	60701	00699	1.4	Landfill Gas	LFG	IC
2017	3	60429	Chicago Bridge & Iron Company	IPP	JED Solid Waste Mgmt Renewable LFG Energy	FL	60701	00700	1.4	Landfill Gas	LFG	IC
2017	3	60407	Cimarron Bend Wind Project II, LLC	IPP	Cimarron Bend Wind Project II, LLC	KS	60688	1	200.0	Onshore Wind Turbine	WND	WT
2017	3	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant South Sub	KS	60750	CAT4	2.0	Petroleum Liquids	DFO	IC
2017	3	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant South Sub	KS	60750	CAT5	2.0	Petroleum Liquids	DFO	IC
2017	3	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant South Sub	KS	60750	CAT6	2.0	Petroleum Liquids	DFO	IC
2017	3	59979	Cotton Plains Wind I, LLC	IPP	Cotton Plains Wind Farm	TX	60210	CPWF	50.4	Onshore Wind Turbine	WND	WT
2017	3	61060	Cypress Creek Renewables	IPP	Franklinton Solar	NC	59708	5MWPV	5.0	Solar Photovoltaic	SUN	PV
2017	3	60814	Drop 5 Hydro LLC	IPP	Drop 5	CO	61191	GEN1	2.4	Conventional Hydroelectric	WAT	HY
2017	3	5416	Duke Energy Carolinas, LLC	Electric Utility	Monroe Solar Facility	NC	60383	MONPV	27.6	Solar Photovoltaic	SUN	PV
2017	3	59862	Durbin Creek	IPP	Durbin Creek Windfarm	OR	59492	DCW	10.0	Onshore Wind Turbine	WND	WT
2017	3	59380	Enel Green Power NA, Inc.	IPP	Lindahl Wind Project, LLC	ND	59684	LWP01	150.0	Onshore Wind Turbine	WND	WT
2017	3	60888	GCL New Energy, Inc.	IPP	Jackson Solar Farm	NC	61292	JAKSN	8.6	Solar Photovoltaic	SUN	PV
2017	3	55932	Georgia-Pacific Brewton LLC	Industrial	Georgia-Pacific Brewton Mill	AL	54789	4TG	62.0	Wood/Wood Waste Biomass	BLQ	ST
2017	3	60343	Hector Farm, LLC	IPP	Hector Farm	NC	60577	1	5.0	Solar Photovoltaic	SUN	PV
2017	3	59977	Hemlock Solar LLC	IPP	Hemlock Solar	NC	60207	HEMLK	5.0	Solar Photovoltaic	SUN	PV
2017	3	59860	Jett Creek	IPP	Jett Creek Windfarm	OR	59490	JCW	10.0	Onshore Wind Turbine	WND	WT
2017	3	11208	Los Angeles Department of Water & Power	Electric Utility	Westmont 300A	CA	61249	W5531	2.9	Solar Photovoltaic	SUN	PV
2017	3	58822	MC Power Companies Inc	IPP	Independence Solar Farm	MO	61092	IPL1	3.0	Solar Photovoltaic	SUN	PV
2017	3	59026	Michelangelo Wind 1 LLC	IPP	Michelangelo Wind 1 LLC	IA	59231	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	3	58689	Milan Energy LLC	IPP	Milan	PA	58818	1	6.8	Natural Gas Internal Combustion Engine	NG	IC

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2017

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
2017	3	58689	Milan Energy LLC	IPP	Milan	PA	58818	2	6.8	Natural Gas Internal Combustion Engine	NG	IC
2017	3	58689	Milan Energy LLC	IPP	Milan	PA	58818	3	6.8	Natural Gas Internal Combustion Engine	NG	IC
2017	3	59469	Mt. Home Solar 1, LLC	IPP	Mt. Home Solar 1, LLC	ID	59695	MHPV1	20.0	Solar Photovoltaic	SUN	PV
2017	3	58489	OCI Solar Power	IPP	OCI Alamo 6 LLC	TX	59206	OCIA6	105.0	Solar Photovoltaic	SUN	PV
2017	3	59025	Optimum Wind 3 LLC	IPP	Optimum Wind 3 LLC	IA	59227	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	3	59024	Optimum Wind 4 LLC	IPP	Optimum Wind 4 LLC	IA	59226	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	3	59017	Optimum Wind 5 LLC	IPP	Optimum Wind 5 LLC	IA	59223	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	3	59018	Optimum Wind 6 LLC	IPP	Optimum Wind 6 LLC	IA	59224	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	3	59019	Optimum Wind 7 LLC	IPP	Optimum Wind 7 LLC	IA	59225	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	3	59756	Orchard Ranch Solar, LLC	IPP	Orchard Ranch Solar	ID	60010	IPOR	20.0	Solar Photovoltaic	SUN	PV
2017	3	56545	Pattern Operators LP	IPP	Broadview Energy JN, LLC	NM	60145	1	181.7	Onshore Wind Turbine	WND	WT
2017	3	56545	Pattern Operators LP	IPP	Broadview Energy KW, LLC	NM	60152	1	142.6	Onshore Wind Turbine	WND	WT
2017	3	59863	Prospector	IPP	Prospector Windfarm	OR	59493	PW	10.0	Onshore Wind Turbine	WND	WT
2017	3	60336	SDGE Batteries	Electric Utility	Escondido Energy Storage	CA	60570	SES	30.0	Batteries	MWH	BA
2017	3	60448	Simcoe Solar	IPP	Simcoe Solar	ID	60748	IDSS	20.0	Solar Photovoltaic	SUN	PV
2017	3	60651	Spring Street Solar 1, LLC	IPP	Spring Street Solar 1 CSG	MA	61009	SPRIN	2.0	Solar Photovoltaic	SUN	PV
2017	3	19728	UNS Electric, Inc	Electric Utility	Jacobson 5 MW Solar	AZ	60603	PV1	4.1	Solar Photovoltaic	SUN	PV
2017	3	59021	Venus Wind 3 LLC	IPP	Venus Wind 3 LLC	IA	59230	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	3	59116	WED Coventry Five, LLC	IPP	WED Coventry 5	RI	59313	COV5	1.5	Onshore Wind Turbine	WND	WT
2017	3	60487	Wabasha Holdco LLC	IPP	Wabasha Holdco Solar	MN	60838	WABAS	3.0	Solar Photovoltaic	SUN	PV
2017	3	22500	Westar Energy Inc	Electric Utility	Western Plains Wind Farm	KS	60689	1	280.0	Onshore Wind Turbine	WND	WT
2017	3	60614	Westside Solar, LLC	IPP	NextEra Westside PV	CA	60981	WS526	20.0	Solar Photovoltaic	SUN	PV
2017	3	60619	Whitney Point Solar, LLC	IPP	Whitney Point Solar	CA	60975	WS532	20.0	Solar Photovoltaic	SUN	PV
2017	3	59864	Willow Spring	IPP	Willow Spring Windfarm	OR	59494	WSW	10.0	Onshore Wind Turbine	WND	WT
2017	4	195	Alabama Power Co	Electric Utility	Fort Rucker Solar Array	AL	60679	1	10.6	Solar Photovoltaic	SUN	PV
2017	4	58686	Alpaca Energy LLC	IPP	Alpaca	PA	58813	1	6.8	Natural Gas Internal Combustion Engine	NG	IC
2017	4	58686	Alpaca Energy LLC	IPP	Alpaca	PA	58813	2	6.8	Natural Gas Internal Combustion Engine	NG	IC
2017	4	58686	Alpaca Energy LLC	IPP	Alpaca	PA	58813	3	6.8	Natural Gas Internal Combustion Engine	NG	IC
2017	4	60484	Bashaw Solar 1, LLC	IPP	Bashaw Solar CSG 1, LLC	MA	60866	4MID	2.0	Solar Photovoltaic	SUN	PV
2017	4	60816	Boston Medical Center	Commercial	Boston Medical Center CHP Plant	MA	61186	COGEN	2.0	Natural Gas Internal Combustion Engine	NG	IC
2017	4	60396	Constellation New Energy Inc.	IPP	Hyperion Treatment Plant CHP Plant	CA	60960	CTG1	10.0	Other Waste Biomass	OBG	GT
2017	4	60396	Constellation New Energy Inc.	IPP	Hyperion Treatment Plant CHP Plant	CA	60960	CTG2	10.0	Other Waste Biomass	OBG	GT
2017	4	60396	Constellation New Energy Inc.	IPP	Hyperion Treatment Plant CHP Plant	CA	60960	STG1	2.0	Other Waste Biomass	OBG	GT
2017	4	59997	Customized Energy Solutions	IPP	NA 1(Hagerstown)	MD	60213	MPSHG	2.0	Batteries	MWH	BA
2017	4	60496	Enerparc Inc.	IPP	Green Meadow Solar, LLC	MT	61291	GMSMT	3.0	Solar Photovoltaic	SUN	PV
2017	4	60496	Enerparc Inc.	IPP	River Bend Solar, LLC	MT	61289	RBSMT	2.0	Solar Photovoltaic	SUN	PV
2017	4	60496	Enerparc Inc.	IPP	South Mills Solar, LLC	MT	61290	SMSMT	3.0	Solar Photovoltaic	SUN	PV
2017	4	60888	GCL New Energy, Inc.	IPP	Wilson Solar Farm 1	NC	61274	WISL1	3.3	Solar Photovoltaic	SUN	PV
2017	4	60888	GCL New Energy, Inc.	IPP	Wilson Solar Farm 3	NC	61276	WILS3	9.0	Solar Photovoltaic	SUN	PV
2017	4	60888	GCL New Energy, Inc.	IPP	Wilson Solar Farm 4	NC	61277	WILS4	9.0	Solar Photovoltaic	SUN	PV
2017	4	60888	GCL New Energy, Inc.	IPP	Wilson Solar Farm 7	NC	61280	WILS7	9.2	Solar Photovoltaic	SUN	PV
2017	4	58848	Green Energy Partners LLC	IPP	Stonewall	VA	59004	GEN1	230.0	Natural Gas Fired Combined Cycle	NG	CT
2017	4	58848	Green Energy Partners LLC	IPP	Stonewall	VA	59004	GEN2	230.0	Natural Gas Fired Combined Cycle	NG	CT
2017	4	58848	Green Energy Partners LLC	IPP	Stonewall	VA	59004	GEN3	314.0	Natural Gas Fired Combined Cycle	NG	CA
2017	4	59436	Innovative Solar 47, LLC	IPP	Innovative Solar 47	NC	59666	IS047	33.8	Solar Photovoltaic	SUN	PV
2017	4	9417	Interstate Power and Light Co	Electric Utility	Marshalltown Generating Station	IA	58236	CTG1	211.7	Natural Gas Fired Combined Cycle	NG	CT
2017	4	9417	Interstate Power and Light Co	Electric Utility	Marshalltown Generating Station	IA	58236	CTG2	211.8	Natural Gas Fired Combined Cycle	NG	CT
2017	4	9417	Interstate Power and Light Co	Electric Utility	Marshalltown Generating Station	IA	58236	STG1	230.1	Natural Gas Fired Combined Cycle	NG	CA
2017	4	60633	Iron Horse Battery Storage, LLC	IPP	Iron Horse Battery Storage	AZ	60996	BA1	10.0	Batteries	MWH	BA
2017	4	60633	Iron Horse Battery Storage, LLC	IPP	Iron Horse Battery Storage	AZ	60996	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	4	60198	Kennedy Solar, LLC	IPP	Kennedy Solar, LLC	NC	60397	FLS1	4.9	Solar Photovoltaic	SUN	PV
2017	4	11208	Los Angeles Department of Water & Power	Electric Utility	Maclay Solar Project	CA	57308	1	2.2	Solar Photovoltaic	SUN	PV
2017	4	60592	Morgan Community Solar	IPP	Morgan Community Solar	MN	60942	BMCS1	0.9	Solar Photovoltaic	SUN	PV
2017	4	60592	Morgan Community Solar	IPP	Morgan Community Solar	MN	60942	BMCS2	0.9	Solar Photovoltaic	SUN	PV
2017	4	60592	Morgan Community Solar	IPP	Morgan Community Solar	MN	60942	BMCS3	0.9	Solar Photovoltaic	SUN	PV
2017	4	59755	Murphy Flat Power, LLC	IPP	Murphy Flat Solar	ID	60009	IPMF	20.0	Solar Photovoltaic	SUN	PV
2017	4	60307	NRG Solar Blythe II LLC	IPP	Solar Blythe 2	CA	60558	PV1	20.0	Solar Photovoltaic	SUN	PV
2017	4	60155	Old Settler Wind, LLC	IPP	Old Settler Wind	TX	60366	OSWF	151.2	Onshore Wind Turbine	WND	WT
2017	4	60584	Onyx Asset Services Group	IPP	Onyx - Allen Harim	DE	61206	10021	1.5	Solar Photovoltaic	SUN	PV
2017	4	60920	Peterson Road Solar, LLC	IPP	Peterson Road Solar	MA	61307	02076	2.5	Solar Photovoltaic	SUN	PV
2017	4	60400	Phantom Solar, LLC	IPP	Phantom Solar	TX	60774	GEN1	15.4	Solar Photovoltaic	SUN	PV
2017	4	16609	San Diego Gas & Electric Co	Electric Utility	Ramona Solar Energy	CA	60995	1	3.8	Solar Photovoltaic	SUN	PV
2017	4	60636	SolaireHolman 1, LLC	IPP	SolaireHolman Solar Project	TX	60989	PV1	50.0	Solar Photovoltaic	SUN	PV
2017	4	17650	Southern Power Co	IPP	East Pecos Solar	TX	60436	1	118.5	Solar Photovoltaic	SUN	PV
2017	4	17650	Southern Power Co	IPP	Lamesa Solar	TX	60372	LSPV1	100.0	Solar Photovoltaic	SUN	PV
2017	4	60848	Spencer Farm, LLC	IPP	Spencer Farm, LLC	NC	61220	1	5.0	Solar Photovoltaic	SUN	PV
2017	4	59338	Spring Valley Farm 2, LLC	IPP	Spring Valley Farm 2, LLC	NC	59593	PV1	5.0	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
2017	4	60197	St. Pauls Solar 1, LLC	IPP	St. Pauls Solar 1, LLC	NC	60396	FLS1	4.9	Solar Photovoltaic	SUN	PV
2017	4	58375	Sterling Municipal Light Department	Electric Utility	Chocksett Rd Energy Storage Project	MA	60959	BA1	2.0	Batteries	MWH	BA
2017	4	58661	Sustainable Power Group, LLC	IPP	Hecate Energy Beacon Solar 1	CA	59315	BEAC1	56.0	Solar Photovoltaic	SUN	PV
2017	4	58661	Sustainable Power Group, LLC	IPP	Lancaster WAD B	CA	59739	LWADB	5.0	Solar Photovoltaic	SUN	PV
2017	4	18642	Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	CTG1	211.0	Natural Gas Fired Combined Cycle	NG	CT
2017	4	18642	Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	CTG2	211.0	Natural Gas Fired Combined Cycle	NG	CT
2017	4	18642	Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	CTG3	211.0	Natural Gas Fired Combined Cycle	NG	CT
2017	4	18642	Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	STG1	467.0	Natural Gas Fired Combined Cycle	NG	CA
2017	4	24211	Tucson Electric Power Co	Electric Utility	UASTP II	AZ	57717	UABA	10.0	Batteries	MWH	BA
2017	5	60019	96WI 8ME, LLC	IPP	Midway Solar Farm II	CA	60237	MSF2	30.0	Solar Photovoltaic	SUN	PV
2017	5	60571	AEP Onsite Partners	IPP	AEP Jacksonville Solar Project	FL	61388	PV1	7.1	Solar Photovoltaic	SUN	PV
2017	5	61012	AES Distributed Energy	IPP	Amazon - Patterson PV	CA	61377	PATT1	2.5	Solar Photovoltaic	SUN	PV
2017	5	60281	Altus Power America Management, LLC	IPP	Shirley Landfill	MA	60753	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	5	60515	Astra Wind LLC	IPP	Astra Wind Farm	TX	60856	ASTRA	163.0	Onshore Wind Turbine	WND	WT
2017	5	1307	Basin Electric Power Coop	Electric Utility	Lonesome Creek Station	ND	57943	04	40.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	5	1307	Basin Electric Power Coop	Electric Utility	Lonesome Creek Station	ND	57943	05	40.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	5	60369	City of Worcester DPW	IPP	Worcester Landfill	MA	60621	WL	6.5	Solar Photovoltaic	SUN	PV
2017	5	58519	Clean Energy Collective LLC	IPP	Fairhaven C	MA	60423	FCPV	1.6	Solar Photovoltaic	SUN	PV
2017	5	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Front Royal	VA	61055	AMPFR	2.5	Solar Photovoltaic	SUN	PV
2017	5	5109	DTE Electric Company	Electric Utility	Demille Solar Farm	MI	60346	1	28.4	Solar Photovoltaic	SUN	PV
2017	5	5109	DTE Electric Company	Electric Utility	Turrill Solar Farm	MI	60347	1	19.6	Solar Photovoltaic	SUN	PV
2017	5	5701	El Paso Electric Co	Electric Utility	Montana Solar Facility	TX	60300	IMPV1	3.0	Solar Photovoltaic	SUN	PV
2017	5	60888	GCL New Energy, Inc.	IPP	Wilson Solar Farm 5	NC	61278	WILS5	9.5	Solar Photovoltaic	SUN	PV
2017	5	60888	GCL New Energy, Inc.	IPP	Wilson Solar Farm 6	NC	61279	WILS6	9.7	Solar Photovoltaic	SUN	PV
2017	5	7049	General Electric Aircraft Engines	Industrial	General Electric Aircraft Engines	MA	10029	PV	2.1	Solar Photovoltaic	SUN	PV
2017	5	61077	IGS ORIX Solar I, LLC	IPP	City of Lexington	NE	61467	LXNE1	3.5	Solar Photovoltaic	SUN	PV
2017	5	59435	Innovative Solar 37, LLC	IPP	Innovative Solar 37	NC	59665	IS037	100.0	Solar Photovoltaic	SUN	PV
2017	5	60879	NGI-Kayenta Solar Lessor I, LLC	IPP	Kayenta Solar Project	AZ	61268	PV1	27.3	Solar Photovoltaic	SUN	PV
2017	5	61061	Panasonic Battery Project	Electric Utility	Panasonic Carport Solar	CO	61439	PANPV	1.3	Solar Photovoltaic	SUN	PV
2017	5	60962	Saluda Solar II, LLC	IPP	Saluda Solar II	SC	61323	PGRB5	3.4	Solar Photovoltaic	SUN	PV
2017	5	60520	SoCore Energy LLC	IPP	Liberty Pole DPC Solar	WI	60891	PV1	1.1	Solar Photovoltaic	SUN	PV
2017	5	60520	SoCore Energy LLC	IPP	T0588 Phoenix - AZ	AZ	61199	PV1	1.2	Solar Photovoltaic	SUN	PV
2017	5	60520	SoCore Energy LLC	IPP	Warren DPC Solar	WI	60890	PV1	2.2	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	Garrett County - DPU Treatment Plant	MD	60847	PV1	1.2	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	Genentech Vacaville Meter #1	CA	60844	PV1	3.8	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	Genentech Vacaville Meter #1	CA	60844	PV2	2.3	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	Hampshire College	MA	60815	BA1	0.5	Batteries	MWH	BA
2017	5	60947	Tesla Inc.	IPP	Hampshire College	MA	60815	PV1	1.7	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	KIUC Kapaia PV and BA Storage Project	HI	60546	BA1	11.0	Batteries	MWH	BA
2017	5	60947	Tesla Inc.	IPP	KIUC Kapaia PV and BA Storage Project	HI	60546	PV1	15.0	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	Orange County Solar Farm (NY)	NY	60229	PV1	1.5	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	Sullivan County - Adult Care Solar	NY	60817	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	Town of Lexington Solar	MA	60816	PV1	1.6	Solar Photovoltaic	SUN	PV
2017	5	57081	WGL Energy Systems, Inc	IPP	Gulfport Naval Base CSG PV System	MS	61208	PV1	3.5	Solar Photovoltaic	SUN	PV
2017	5	54842	WM Renewable Energy LLC	IPP	Waste Mangement Redwood LFGTE	CA	59299	RED1	2.0	Landfill Gas	LFG	IC
2017	5	54842	WM Renewable Energy LLC	IPP	Waste Mangement Redwood LFGTE	CA	59299	RED2	2.0	Landfill Gas	LFG	IC
2017	6	60571	AEP Onsite Partners	IPP	Letchworth Solar Project	NY	61389	PV1	1.2	Solar Photovoltaic	SUN	PV
2017	6	61012	AES Distributed Energy	IPP	Cedar Creek PV	NY	61376	CEDR1	1.8	Solar Photovoltaic	SUN	PV
2017	6	57369	Apple, Inc	Industrial	Apple Campus 2 Fuel Cell	CA	59557	AC2FC	4.0	Other Waste Biomass	OBG	FC
2017	6	57369	Apple, Inc	Industrial	Apple Campus 2 PV	CA	59473	AC2PV	14.4	Solar Photovoltaic	SUN	PV
2017	6	60966	Barnwell Solar, LLC	IPP	Barnwell Solar	SC	61327	PGRB1	5.4	Solar Photovoltaic	SUN	PV
2017	6	59365	Capital Power Corporation	IPP	CP Bloom Wind LLC	KS	59888	GEN	178.2	Onshore Wind Turbine	WND	WT
2017	6	8723	City of Holland	Electric Utility	Holland Energy Park	MI	59093	10	43.1	Natural Gas Fired Combined Cycle	NG	CT
2017	6	8723	City of Holland	Electric Utility	Holland Energy Park	MI	59093	11	43.1	Natural Gas Fired Combined Cycle	NG	CT
2017	6	8723	City of Holland	Electric Utility	Holland Energy Park	MI	59093	12	40.9	Natural Gas Fired Combined Cycle	NG	CA
2017	6	58519	Clean Energy Collective LLC	IPP	West Bridgewater AB	MA	60424	WBAB	1.7	Solar Photovoltaic	SUN	PV
2017	6	55858	Energy Developments Inc	IPP	Brown County LFGTE Power Station	OH	61145	GM01	1.5	Landfill Gas	LFG	IC
2017	6	55858	Energy Developments Inc	IPP	Brown County LFGTE Power Station	OH	61145	GM02	1.5	Landfill Gas	LFG	IC
2017	6	55858	Energy Developments Inc	IPP	Brown County LFGTE Power Station	OH	61145	GM03	1.5	Landfill Gas	LFG	IC
2017	6	6035	Exelon Power	IPP	Colorado Bend II	TX	60122	CT7	313.2	Natural Gas Fired Combined Cycle	NG	CT
2017	6	6035	Exelon Power	IPP	Colorado Bend II	TX	60122	CT8	313.2	Natural Gas Fired Combined Cycle	NG	CT
2017	6	6035	Exelon Power	IPP	Colorado Bend II	TX	60122	STG9	461.4	Natural Gas Fired Combined Cycle	NG	CA
2017	6	6035	Exelon Power	IPP	Wolf Hollow II	TX	59812	CGT4	307.2	Natural Gas Fired Combined Cycle	NG	CT
2017	6	6035	Exelon Power	IPP	Wolf Hollow II	TX	59812	CGT5	307.2	Natural Gas Fired Combined Cycle	NG	CT
2017	6	6035	Exelon Power	IPP	Wolf Hollow II	TX	59812	STG6	454.9	Natural Gas Fired Combined Cycle	NG	CA
2017	6	60670	Floyd Road Solar Farm, LLC	IPP	Floyd Road Solar Farm	NC	61031	PV1	5.0	Solar Photovoltaic	SUN	PV
2017	6	25438	Friant Power Authority	IPP	Friant Hydro Facility	CA	50393	RO2	7.3	Conventional Hydroelectric	WAT	HY

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2017

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
2017	6	59257	Giffen Solar Park, LLC	IPP	Giffen Solar Park	CA	59522	FRGSP	20.0	Solar Photovoltaic	SUN	PV
2017	6	60738	Gulf Coast Solar Center I (CA)	IPP	Gulf Coast Solar Center I	FL	59689	GCSC1	30.0	Solar Photovoltaic	SUN	PV
2017	6	19547	Hawaiian Electric Co Inc	Electric Utility	HNL Emergency Power Facility	HI	58469	AP1	2.5	Other Waste Biomass	OBL	IC
2017	6	19547	Hawaiian Electric Co Inc	Electric Utility	HNL Emergency Power Facility	HI	58469	AP2	2.5	Other Waste Biomass	OBL	IC
2017	6	19547	Hawaiian Electric Co Inc	Electric Utility	HNL Emergency Power Facility	HI	58469	AP3	2.5	Other Waste Biomass	OBL	IC
2017	6	19547	Hawaiian Electric Co Inc	Electric Utility	HNL Emergency Power Facility	HI	58469	AP4	2.5	Other Waste Biomass	OBL	IC
2017	6	60479	Iron Horse Solar 4, LLC	IPP	Iron Horse Solar 4, LLC	MA	60799	PV1	4.5	Solar Photovoltaic	SUN	PV
2017	6	60695	Lemond Solar Center LLC	IPP	Lemond Solar	MN	61072	LEMND	5.0	Solar Photovoltaic	SUN	PV
2017	6	60098	MS Solar 2, LLC	IPP	Sumrall I Solar Farm	MS	60306	SUM1	52.0	Solar Photovoltaic	SUN	PV
2017	6	60591	Mapleton Community Solar	IPP	Mapleton Community Solar	MN	60941	DMCS1	0.9	Solar Photovoltaic	SUN	PV
2017	6	60591	Mapleton Community Solar	IPP	Mapleton Community Solar	MN	60941	DMCS2	0.9	Solar Photovoltaic	SUN	PV
2017	6	60591	Mapleton Community Solar	IPP	Mapleton Community Solar	MN	60941	DMCS3	0.9	Solar Photovoltaic	SUN	PV
2017	6	56990	NJR Clean Energy Ventures Corporation	IPP	Pemberton Road I	NJ	61073	PEMB1	9.9	Solar Photovoltaic	SUN	PV
2017	6	56990	NJR Clean Energy Ventures Corporation	IPP	Pemberton Road II	NJ	61074	PEMB2	9.9	Solar Photovoltaic	SUN	PV
2017	6	60365	NRG Renew Canal 1 LLC	IPP	NRG Renew Canal 1 CSG LLC	MA	60625	CANAL	1.2	Solar Photovoltaic	SUN	PV
2017	6	60455	PVN Milliken, LLC	IPP	PVN Milliken, LLC	CA	60790	PV	3.0	Solar Photovoltaic	SUN	PV
2017	6	60393	Ridgeland Solar Farm I, LLC	IPP	Ridgeland Solar Project	SC	60659	PV1	10.0	Solar Photovoltaic	SUN	PV
2017	6	60520	SoCore Energy LLC	IPP	Conrath DPC Solar	WI	60889	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	6	60520	SoCore Energy LLC	IPP	Lafayette DPC Solar	WI	60888	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	6	60520	SoCore Energy LLC	IPP	Whistling Winds DPC Solar	WI	60895	PV1	1.5	Solar Photovoltaic	SUN	PV
2017	6	60246	Sunray Energy 2, LLC	IPP	Sunray 2	CA	10437	SUN2	20.0	Solar Photovoltaic	SUN	PV
2017	6	60247	Sunray Energy 3 LLC	IPP	Sunray 3	CA	10438	SUN3	13.8	Solar Photovoltaic	SUN	PV
2017	6	60947	Tesla Inc.	IPP	CMEEC - Navy NE Trident	CT	60608	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	6	60947	Tesla Inc.	IPP	Hewlett-Packard (HP) - Andover, MA	MA	60099	PV1	1.7	Solar Photovoltaic	SUN	PV
2017	6	60947	Tesla Inc.	IPP	Town of Halfmoon	NY	60115	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	6	60723	VRF Battery Plant	Electric Utility	Vanadium Redox Flow Battery Plant	CA	61107	VRF	2.0	Batteries	MWH	BA
2017	6	19876	Virginia Electric & Power Co	Electric Utility	Merck	VA	59905	1	0.8	Solar Photovoltaic	SUN	PV
2017	7	60634	AEM Wind LLC	IPP	Sterling I Wind Farm	NM	60991	STER1	29.9	Onshore Wind Turbine	WND	WT
2017	7	195	Alabama Power Co	Electric Utility	ANAD Solar Array	AL	60680	1	7.4	Solar Photovoltaic	SUN	PV
2017	7	221	Alaska Village Elec Coop, Inc	Electric Utility	Noorvik	AK	6330	2B	0.5	Petroleum Liquids	DFO	IC
2017	7	60130	Albany Green Energy, LLC	Electric CHP	Albany Green Energy	GA	60340	1	50.0	Wood/Wood Waste Biomass	WDS	ST
2017	7	60281	Altus Power America Management, LLC	IPP	Cedarville	MA	60757	PV1	0.5	Solar Photovoltaic	SUN	PV
2017	7	60281	Altus Power America Management, LLC	IPP	Cedarville	MA	60757	PV2	1.0	Solar Photovoltaic	SUN	PV
2017	7	60281	Altus Power America Management, LLC	IPP	Cedarville	MA	60757	PV3	1.0	Solar Photovoltaic	SUN	PV
2017	7	40577	American Mun Power-Ohio, Inc	Electric Utility	Smithland Hydroelectric Plant	KY	57400	SG1	25.3	Conventional Hydroelectric	WAT	HY
2017	7	40577	American Mun Power-Ohio, Inc	Electric Utility	Smithland Hydroelectric Plant	KY	57400	SG2	25.3	Conventional Hydroelectric	WAT	HY
2017	7	60500	Bluesphere Corporate	IPP	Orbit Energy RI	RI	60831	1	3.2	Other Waste Biomass	OBG	IC
2017	7	60518	California PV Energy 2, LLC	IPP	Dept of General Services -FTB	CA	60861	PV1	2.7	Solar Photovoltaic	SUN	PV
2017	7	60965	Cameron Solar II, LLC	IPP	Cameron Solar II	SC	61326	PGRB2	4.1	Solar Photovoltaic	SUN	PV
2017	7	57319	Constellation Solar Massachusetts LLC	IPP	Smith & Wesson at Springfield MA PV	MA	61367	PV1	1.9	Solar Photovoltaic	SUN	PV
2017	7	5109	DTE Electric Company	Electric Utility	O'Shea Solar Farm	MI	60348	1	2.0	Solar Photovoltaic	SUN	PV
2017	7	60543	Dermott Wind, LLC	IPP	Dermott Wind	TX	60902	DERM	253.0	Onshore Wind Turbine	WND	WT
2017	7	60485	Dodge Holdco LLC	IPP	Dodge Holdco Solar	MN	60833	DODGE	5.0	Solar Photovoltaic	SUN	PV
2017	7	3046	Duke Energy Progress - (NC)	Electric Utility	L V Sutton Combined Cycle	NC	58697	CT004	45.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	7	3046	Duke Energy Progress - (NC)	Electric Utility	L V Sutton Combined Cycle	NC	58697	CT005	45.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	7	60491	Forest Lake Holdco LLC	IPP	Forest Lake Solar	MN	60837	FORES	5.0	Solar Photovoltaic	SUN	PV
2017	7	6909	Gainesville Regional Utilities	Electric Utility	South Energy Center	FL	56518	REG1	7.4	Natural Gas Internal Combustion Engine	NG	IC
2017	7	61021	Hecate Energy Clarke County, LLC	Electric Utility	Clarke Solar Power Facility	VA	61374	PV1	10.0	Solar Photovoltaic	SUN	PV
2017	7	60488	Hwy 14 Holdco, LLC	IPP	Hwy 14 Holdco Solar	MN	60834	HWY14	5.0	Solar Photovoltaic	SUN	PV
2017	7	60598	Jacumba Solar, LLC	IPP	Jacumba Solar Farm	CA	60947	Q644A	20.0	Solar Photovoltaic	SUN	PV
2017	7	11208	Los Angeles Department of Water & Power	Electric Utility	Westmont 400A	CA	61348	W5691	2.3	Solar Photovoltaic	SUN	PV
2017	7	11208	Los Angeles Department of Water & Power	Electric Utility	Westmont 400B	CA	61349	W5694	2.2	Solar Photovoltaic	SUN	PV
2017	7	58822	MC Power Companies Inc	IPP	Chillicothe Solar Farm	MO	61223	CHSF1	2.5	Solar Photovoltaic	SUN	PV
2017	7	56941	Meadow Lake Wind Farm V LLC	IPP	Meadow Lake Wind Farm V LLC	IN	57628	GEN1	100.0	Onshore Wind Turbine	WND	WT
2017	7	12258	Medical Area Total Egy Plt Inc	Commercial	Medical Area Total Energy Plant	MA	10883	CT3	12.8	Natural Gas Fired Combustion Turbine	NG	GT
2017	7	59534	Oregon Clean Energy Center	IPP	Oregon Clean Energy Center	OH	59764	CTG11	256.5	Natural Gas Fired Combined Cycle	NG	CT
2017	7	59534	Oregon Clean Energy Center	IPP	Oregon Clean Energy Center	OH	59764	CTG12	256.5	Natural Gas Fired Combined Cycle	NG	CT
2017	7	59534	Oregon Clean Energy Center	IPP	Oregon Clean Energy Center	OH	59764	EDG13	1.5	Natural Gas Internal Combustion Engine	NG	IC
2017	7	59534	Oregon Clean Energy Center	IPP	Oregon Clean Energy Center	OH	59764	STG10	334.6	Natural Gas Fired Combined Cycle	NG	CA
2017	7	17470	PUD 1 of Snohomish County	Electric Utility	MESA 2	WA	60021	MESA2	2.4	Batteries	MWH	BA
2017	7	58245	Patua Acquisition Company, LLC	IPP	Patua Geothermal Project Phase 1A	NV	58319	PV-01	10.6	Solar Photovoltaic	SUN	PV
2017	7	60859	Redbed Plains Wind Farm LLC	IPP	Redbed Plains Wind Farm	OK	61221	WT1	99.1	Onshore Wind Turbine	WND	WT
2017	7	60520	SoCore Energy LLC	IPP	Westar Cities Solar	KS	60956	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	7	60947	Tesla Inc.	IPP	BJ's Wholesale Club, Inc- Uxbridge	MA	60116	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	7	60947	Tesla Inc.	IPP	Onondaga County- Clearwater	NY	60462	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	7	60950	USPS LA Solar FiT A & B	Electric Utility	USPS PV	CA	61250	USPS1	10.7	Solar Photovoltaic	SUN	PV
2017	7	19724	Vanderbilt University	Commercial	Vanderbilt University Power Plant	TN	52048	GT1B	5.8	Natural Gas Fired Combustion Turbine	NG	GT

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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
2017	7	60486	Webster Holdco LLC	IPP	Webster Holdco Solar	MN	60830	WEBST	5.0	Solar Photovoltaic	SUN	PV
2017	8	60248	Agilon Energy LLC	IPP	Port Comfort Power LLC	TX	60459	PC1	43.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	8	60248	Agilon Energy LLC	IPP	Port Comfort Power LLC	TX	60459	PC2	43.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	8	40577	American Mun Power-Ohio, Inc	Electric Utility	Smithland Hydroelectric Plant	KY	57400	SG3	25.3	Conventional Hydroelectric	WAT	HY
2017	8	60513	Bird Machine Solar Farm, LLC	IPP	Bird Machine Solar Farm	MA	60854	BRDMA	4.6	Solar Photovoltaic	SUN	PV
2017	8	60409	Blue Summit Storage, LLC	IPP	Blue Summit Storage, LLC	TX	60690	WBSS	30.0	Batteries	MWH	BA
2017	8	60650	Brook Street Solar 1, LLC	IPP	Brook Street Solar 1	MA	61008	BROOK	5.0	Solar Photovoltaic	SUN	PV
2017	8	60865	CD Global Solar Holdings, LLC	IPP	Bizzell Church Solar 2	NC	61158	BIZZE	5.0	Solar Photovoltaic	SUN	PV
2017	8	60865	CD Global Solar Holdings, LLC	IPP	St. Pauls Solar 2	NC	61156	STPAU	5.0	Solar Photovoltaic	SUN	PV
2017	8	60865	CD Global Solar Holdings, LLC	IPP	ZV Solar 2, LLC	NC	61257	ZV204	4.9	Solar Photovoltaic	SUN	PV
2017	8	11701	City of Marquette - (MI)	Electric Utility	Marquette Energy Center	MI	60559	MEC1	16.7	Natural Gas Internal Combustion Engine	NG	IC
2017	8	11701	City of Marquette - (MI)	Electric Utility	Marquette Energy Center	MI	60559	MEC2	16.7	Natural Gas Internal Combustion Engine	NG	IC
2017	8	11701	City of Marquette - (MI)	Electric Utility	Marquette Energy Center	MI	60559	MEC3	16.7	Natural Gas Internal Combustion Engine	NG	IC
2017	8	61062	Denver Braswell	IPP	Denver Braswell PV	GA	61441	GPDB1	1.4	Solar Photovoltaic	SUN	PV
2017	8	61000	Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens	MN	61363	CSG1	1.0	Solar Photovoltaic	SUN	PV
2017	8	61000	Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens	MN	61363	CSG2	1.0	Solar Photovoltaic	SUN	PV
2017	8	61000	Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens	MN	61363	CSG3	1.0	Solar Photovoltaic	SUN	PV
2017	8	61000	Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens	MN	61363	CSG4	1.0	Solar Photovoltaic	SUN	PV
2017	8	61000	Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens	MN	61363	CSG5	1.0	Solar Photovoltaic	SUN	PV
2017	8	60921	Farley Road Solar, LLC	IPP	Farley Road Solar	MA	61294	02419	1.9	Solar Photovoltaic	SUN	PV
2017	8	59745	First Solar Asset Management	IPP	Playa Solar 2	NV	60261	GEN1	100.0	Solar Photovoltaic	SUN	PV
2017	8	60964	Hampton Solar I, LLC	IPP	Hampton Solar I	SC	61325	PGRB3	6.8	Solar Photovoltaic	SUN	PV
2017	8	61077	IGS ORIX Solar I, LLC	IPP	IOS - ERW9	NJ	61466	EWR9	5.3	Solar Photovoltaic	SUN	PV
2017	8	61077	IGS ORIX Solar I, LLC	IPP	Valdosta Prison	GA	61468	GPVP1	1.0	Solar Photovoltaic	SUN	PV
2017	8	12869	Monterey Regional Waste Mgmt	Commercial	Marina Landfill Gas	CA	10748	U3J16	0.9	Landfill Gas	LFG	IC
2017	8	13511	New York State Elec & Gas Corp	Electric Utility	Harris Lake	NY	2528	2	2.3	Petroleum Liquids	DFO	IC
2017	8	60963	Odyssey Solar, LLC	IPP	Odyssey Solar	SC	61324	PGRB4	8.2	Solar Photovoltaic	SUN	PV
2017	8	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	3A	122.0	Conventional Hydroelectric	WAT	HY
2017	8	61061	Panasonic Battery Project	Electric Utility	Panasonic Carport Solar	CO	61439	PANBS	1.0	Batteries	MWH	BA
2017	8	60823	Pegasus Community Solar	IPP	Pegasus Community Solar	MN	61175	CPCS1	0.9	Solar Photovoltaic	SUN	PV
2017	8	60823	Pegasus Community Solar	IPP	Pegasus Community Solar	MN	61175	CPCS2	0.9	Solar Photovoltaic	SUN	PV
2017	8	60916	SR Kersey, LLC	IPP	SR Kersey	CO	61314	KERS	3.5	Solar Photovoltaic	SUN	PV
2017	8	61090	San Luis Solar Garden LLC	IPP	San Luis Solar Garden	CO	61472	ANTO2	1.2	Solar Photovoltaic	SUN	PV
2017	8	60163	Soltage LLC	IPP	231 Dixon 74 Solar I, LLC	NC	61195	DIXON	2.0	Solar Photovoltaic	SUN	PV
2017	8	60593	Spica Community Solar	IPP	Spica Community Solar	MN	60943	MSCS1	0.9	Solar Photovoltaic	SUN	PV
2017	8	60593	Spica Community Solar	IPP	Spica Community Solar	MN	60943	MSCS2	0.9	Solar Photovoltaic	SUN	PV
2017	8	60073	St. Matthews Solar, LLC	IPP	St. Matthews Solar	SC	60293	PV1	4.9	Solar Photovoltaic	SUN	PV
2017	8	60947	Tesla Inc.	IPP	CMEEC - Polaris Park Solar	CT	60607	BA1	0.8	Batteries	MWH	BA
2017	8	60947	Tesla Inc.	IPP	CMEEC - Polaris Park Solar	CT	60607	PV1	3.5	Solar Photovoltaic	SUN	PV
2017	8	60947	Tesla Inc.	IPP	Pima Community College	AZ	61104	PV1	1.3	Solar Photovoltaic	SUN	PV
2017	9	60863	ACE-Stanton A, LLC	IPP	ACE-Stanton A PV	FL	61247	ASA1	4.1	Solar Photovoltaic	SUN	PV
2017	9	60862	ACE-Stanton, LLC	IPP	ACE-Stanton PV	FL	61246	ASLF1	4.8	Solar Photovoltaic	SUN	PV
2017	9	60587	Antlia Community Solar	IPP	Antlia Community Solar	MN	60937	IACS1	0.9	Solar Photovoltaic	SUN	PV
2017	9	60587	Antlia Community Solar	IPP	Antlia Community Solar	MN	60937	IACS2	0.9	Solar Photovoltaic	SUN	PV
2017	9	796	Arizona Electric Pwr Coop Inc	Electric Utility	SunAnza	CA	60791	ANZA1	2.0	Solar Photovoltaic	SUN	PV
2017	9	60489	Big Lake Holdco LLC	IPP	Big Lake Holdco Solar	MN	60836	BLAKE	5.0	Solar Photovoltaic	SUN	PV
2017	9	60865	CD Global Solar Holdings, LLC	IPP	Ayrshire	NC	58792	PV1	19.4	Solar Photovoltaic	SUN	PV
2017	9	60865	CD Global Solar Holdings, LLC	IPP	Boaz Farm Solar	NC	61157	BOAZF	5.0	Solar Photovoltaic	SUN	PV
2017	9	60865	CD Global Solar Holdings, LLC	IPP	Haywood Farm Solar, LLC	NC	61255	HAY02	4.9	Solar Photovoltaic	SUN	PV
2017	9	60865	CD Global Solar Holdings, LLC	IPP	Hood Farm Solar, LLC	NC	61256	HOF05	4.9	Solar Photovoltaic	SUN	PV
2017	9	60589	Centaurus Community Solar	IPP	Centaurus Community Solar	MN	60939	KCCS1	0.9	Solar Photovoltaic	SUN	PV
2017	9	60589	Centaurus Community Solar	IPP	Centaurus Community Solar	MN	60939	KCCS2	0.9	Solar Photovoltaic	SUN	PV
2017	9	58519	Clean Energy Collective LLC	IPP	Arapahoe 3 Community Solar Array	CO	60724	ARAP3	1.8	Solar Photovoltaic	SUN	PV
2017	9	58519	Clean Energy Collective LLC	IPP	Xcel Adams 1 Community Solar Array	CO	60726	ADCO1	1.8	Solar Photovoltaic	SUN	PV
2017	9	60990	Cline Solar, LLC	IPP	Cline Solar Farm, LLC	NC	59929	NB007	4.9	Solar Photovoltaic	SUN	PV
2017	9	61060	Cypress Creek Renewables	IPP	Ajax Solar	NC	60288	PV1	4.9	Solar Photovoltaic	SUN	PV
2017	9	61060	Cypress Creek Renewables	IPP	Daystar Solar	NC	60179	PV1	5.0	Solar Photovoltaic	SUN	PV
2017	9	61060	Cypress Creek Renewables	IPP	Long Henry Solar	NC	61347	GEN1	2.0	Solar Photovoltaic	SUN	PV
2017	9	61060	Cypress Creek Renewables	IPP	Scarlet Solar	NC	60921	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	9	60496	Enerparc Inc.	IPP	Black Eagle Solar, LLC	MT	61336	BESMT	3.0	Solar Photovoltaic	SUN	PV
2017	9	60496	Enerparc Inc.	IPP	Great Divide Solar, LLC	MT	61335	GDSMT	3.0	Solar Photovoltaic	SUN	PV
2017	9	60496	Enerparc Inc.	IPP	Magpie Solar, LLC	MT	61337	MSMT	3.0	Solar Photovoltaic	SUN	PV
2017	9	60690	Foundation CA Fund VIII Manager, LLC	IPP	Foundation Scheid Vineyards	CA	61067	WTG1	1.9	Onshore Wind Turbine	WND	WT
2017	9	60590	Gemini Community Solar	IPP	Gemini Community Solar	MN	60940	LGCS1	0.9	Solar Photovoltaic	SUN	PV
2017	9	60590	Gemini Community Solar	IPP	Gemini Community Solar	MN	60940	LGCS2	0.9	Solar Photovoltaic	SUN	PV
2017	9	60590	Gemini Community Solar	IPP	Gemini Community Solar	MN	60940	LGCS3	0.9	Solar Photovoltaic	SUN	PV
2017	9	60917	Golden Hills Solar, LLC	IPP	Golden Hills Solar	MA	61315	02196	4.7	Solar Photovoltaic	SUN	PV

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2017

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
2017	9	60926	Hatfield Renewables, LLC	IPP	Hatfield Renewables	MA	61299	02599	1.9	Solar Photovoltaic	SUN	PV
2017	9	9267	Hoosier Energy R E C, Inc	Electric Utility	Decatur Co. Solar RES (IN)	IN	59988	PV1	1.1	Solar Photovoltaic	SUN	PV
2017	9	9267	Hoosier Energy R E C, Inc	Electric Utility	Jackson Co. Solar RES	IN	59989	PV1	1.1	Solar Photovoltaic	SUN	PV
2017	9	9267	Hoosier Energy R E C, Inc	Electric Utility	Spring Mill Solar RES	IN	59987	PV1	1.1	Solar Photovoltaic	SUN	PV
2017	9	60303	Innovative Solar 42, LLC	IPP	Innovative Solar 42	NC	60539	IS042	71.0	Solar Photovoltaic	SUN	PV
2017	9	9417	Interstate Power and Light Co	Electric Utility	West Dubuque Solar	IA	60951	PV1	3.8	Solar Photovoltaic	SUN	PV
2017	9	58822	MC Power Companies Inc	IPP	BPU Solar Farm	KS	61313	BPU1	1.0	Solar Photovoltaic	SUN	PV
2017	9	58822	MC Power Companies Inc	IPP	Lebanon Solar Farm (MO)	MO	61135	LSF1	2.5	Solar Photovoltaic	SUN	PV
2017	9	61040	Moorings Farm 2, LLC	IPP	Moorings Farm 2	NC	61405	1	5.0	Solar Photovoltaic	SUN	PV
2017	9	56990	NJR Clean Energy Ventures Corporation	IPP	Princeton Solar Project	NJ	61354	STONY	2.5	Solar Photovoltaic	SUN	PV
2017	9	60363	NRG Solar Mule, LLC	IPP	NRG Solar Mule, LLC	ME	60640	COLBY	1.5	Solar Photovoltaic	SUN	PV
2017	9	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT1	57.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	9	61058	One Ten Partner, LLC	IPP	One Ten Partners PV	CA	61419	OTP	2.0	Solar Photovoltaic	SUN	PV
2017	9	60925	Pleasantdale Road Solar, LLC	IPP	Pleasantdale Road Solar	MA	61298	02112	1.0	Solar Photovoltaic	SUN	PV
2017	9	56424	Quilt Block Wind Farm LLC	IPP	Quilt Block Wind Farm LLC	WI	57116	GEN 1	98.0	Onshore Wind Turbine	WND	WT
2017	9	59999	Rocksprings Val Verde Wind, LLC	IPP	Rocksprings	TX	60217	RKSP	149.3	Onshore Wind Turbine	WND	WT
2017	9	58661	Sustainable Power Group, LLC	IPP	Aspiration G	CA	59737	ASPRG	9.0	Solar Photovoltaic	SUN	PV
2017	9	60924	Upton Solar, LLC	IPP	Upton Solar	MA	61297	02567	2.0	Solar Photovoltaic	SUN	PV
2017	10	60248	Agilon Energy LLC	IPP	Chamon Power LLC	TX	60460	CH1	43.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	10	60248	Agilon Energy LLC	IPP	Chamon Power LLC	TX	60460	CH2	43.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	10	60828	Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS1	0.9	Solar Photovoltaic	SUN	PV
2017	10	60828	Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS2	0.9	Solar Photovoltaic	SUN	PV
2017	10	60828	Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS3	0.9	Solar Photovoltaic	SUN	PV
2017	10	60828	Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS4	0.9	Solar Photovoltaic	SUN	PV
2017	10	60828	Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS5	0.9	Solar Photovoltaic	SUN	PV
2017	10	60588	Aries Community Solar	IPP	Aries Community Solar	MN	60938	AACS1	0.9	Solar Photovoltaic	SUN	PV
2017	10	60588	Aries Community Solar	IPP	Aries Community Solar	MN	60938	AACS2	0.9	Solar Photovoltaic	SUN	PV
2017	10	60588	Aries Community Solar	IPP	Aries Community Solar	MN	60938	AACS3	0.9	Solar Photovoltaic	SUN	PV
2017	10	60588	Aries Community Solar	IPP	Aries Community Solar	MN	60938	AACS4	0.9	Solar Photovoltaic	SUN	PV
2017	10	796	Arizona Electric Pwr Coop Inc	Electric Utility	Apache Solar 1	AZ	60964	AEPS1	20.0	Solar Photovoltaic	SUN	PV
2017	10	15399	Avangrid Renewables LLC	IPP	Gala Solar	OR	61048	PV1	56.0	Solar Photovoltaic	SUN	PV
2017	10	60829	Caelum Community Solar	IPP	Caelum Community Solar	MN	61180	PCCS1	0.9	Solar Photovoltaic	SUN	PV
2017	10	60829	Caelum Community Solar	IPP	Caelum Community Solar	MN	61180	PCCS2	0.9	Solar Photovoltaic	SUN	PV
2017	10	60826	Capella Community Solar	IPP	Capella Community Solar	MN	61178	HCCS1	0.9	Solar Photovoltaic	SUN	PV
2017	10	60826	Capella Community Solar	IPP	Capella Community Solar	MN	61178	HCCS2	0.9	Solar Photovoltaic	SUN	PV
2017	10	60826	Capella Community Solar	IPP	Capella Community Solar	MN	61178	HCCS3	0.9	Solar Photovoltaic	SUN	PV
2017	10	60826	Capella Community Solar	IPP	Capella Community Solar	MN	61178	HCCS4	0.9	Solar Photovoltaic	SUN	PV
2017	10	60826	Capella Community Solar	IPP	Capella Community Solar	MN	61178	HCCS5	0.9	Solar Photovoltaic	SUN	PV
2017	10	58998	Chapman Ranch Wind LLC	IPP	Chapman Ranch Wind I	TX	59193	CHA1	236.0	Onshore Wind Turbine	WND	WT
2017	10	7294	City of Glendale - (CA)	Electric Utility	Glendale Battery Energy Storage System	CA	60974	2BESS	2.0	Batteries	MWH	BA
2017	10	58519	Clean Energy Collective LLC	IPP	Logan 1 Community Solar Array	CO	60722	LOGA1	1.7	Solar Photovoltaic	SUN	PV
2017	10	58519	Clean Energy Collective LLC	IPP	Weld 1 Community Solar Array	CO	60720	WELD1	1.5	Solar Photovoltaic	SUN	PV
2017	10	61060	Cypress Creek Renewables	IPP	Bear Creek Solar	NC	61351	GEN1	2.0	Solar Photovoltaic	SUN	PV
2017	10	61060	Cypress Creek Renewables	IPP	Lillington Solar	NC	59921	5MWPV	5.0	Solar Photovoltaic	SUN	PV
2017	10	61060	Cypress Creek Renewables	IPP	Ruskin Solar	NC	60922	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	10	61060	Cypress Creek Renewables	IPP	Viper Solar	NC	60920	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	10	58970	Ecoplexus, Inc	IPP	Flat Meeks PV 1	NC	59514	FLAT1	5.0	Solar Photovoltaic	SUN	PV
2017	10	59745	First Solar Asset Management	IPP	Playa Solar	NV	59827	GEN01	79.0	Solar Photovoltaic	SUN	PV
2017	10	60326	Hattiesburg Farm, LLC	IPP	Hattiesburg Solar Farm	MS	60552	HATTI	50.0	Solar Photovoltaic	SUN	PV
2017	10	19558	Homer Electric Assn Inc	Electric Utility	Seldovia	AK	6283	7	1.0	Petroleum Liquids	DFO	IC
2017	10	58489	OCI Solar Power	IPP	Pearl Solar	TX	60682	PEARL	50.0	Solar Photovoltaic	SUN	PV
2017	10	60645	OEE XXIII LLC	Industrial	Whirlpool Corporation - Marion Wind Farm	OH	61005	W1	1.5	Onshore Wind Turbine	WND	WT
2017	10	60645	OEE XXIII LLC	Industrial	Whirlpool Corporation - Marion Wind Farm	OH	61005	W2	1.5	Onshore Wind Turbine	WND	WT
2017	10	60645	OEE XXIII LLC	Industrial	Whirlpool Corporation - Marion Wind Farm	OH	61005	W3	1.5	Onshore Wind Turbine	WND	WT
2017	10	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT2	57.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	10	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT3	57.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	10	15257	Poudre Valley REA, Inc	Electric Utility	Coyote Ridge Community Solar	CO	61425	COYCS	1.5	Solar Photovoltaic	SUN	PV
2017	10	60125	Providence Solar Center, LLC	IPP	Providence Solar	TN	60337	PROV	16.0	Solar Photovoltaic	SUN	PV
2017	10	60649	Redbrook Solar 1, LLC	IPP	Redbrook Community Solar 1	MA	61007	REDBR	4.0	Solar Photovoltaic	SUN	PV
2017	10	60648	SCDA Solar 1, LLC	IPP	SCDA Solar 1	CA	61006	SCAIR	7.0	Solar Photovoltaic	SUN	PV
2017	10	60163	Soltage LLC	IPP	Mill Pond Solar Farm, LLC	NC	61196	MILLL	5.0	Solar Photovoltaic	SUN	PV
2017	10	60947	Tesla Inc.	IPP	Oneida County- DPW	NY	60114	PV1	1.5	Solar Photovoltaic	SUN	PV
2017	10	60594	Vega Community Solar	IPP	Vega Community Solar	MN	60944	NVCS1	0.9	Solar Photovoltaic	SUN	PV
2017	10	60594	Vega Community Solar	IPP	Vega Community Solar	MN	60944	NVCS2	0.9	Solar Photovoltaic	SUN	PV
2017	10	60594	Vega Community Solar	IPP	Vega Community Solar	MN	60944	NVCS3	0.9	Solar Photovoltaic	SUN	PV
2017	10	60594	Vega Community Solar	IPP	Vega Community Solar	MN	60944	NVCS4	0.9	Solar Photovoltaic	SUN	PV
2017	10	60594	Vega Community Solar	IPP	Vega Community Solar	MN	60944	NVCS5	0.9	Solar Photovoltaic	SUN	PV

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2017

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
2017	10	19876	Virginia Electric & Power Co	Electric Utility	Remington Solar Facility	VA	59685	01	20.0	Solar Photovoltaic	SUN	PV
2017	11	60281	Altus Power America Management, LLC	IPP	DDR Shoppers World	MA	60754	PV1	1.3	Solar Photovoltaic	SUN	PV
2017	11	60692	Ameresco BWC Wading River LLC	IPP	BWC Wading River One, Two, Three	MA	61069	62381	3.0	Solar Photovoltaic	SUN	PV
2017	11	60541	Ameresco Glendale Road Solar PV LLC	IPP	Northampton Landfill Solar PV	MA	60908	62380	2.4	Solar Photovoltaic	SUN	PV
2017	11	60456	Apple Blossom Wind, LLC	IPP	Apple Blossom Wind Farm	MI	58690	APLB1	100.0	Onshore Wind Turbine	WND	WT
2017	11	58574	Canton Mountain Wind LLC	IPP	Canton Mountain Wind	ME	58620	1	22.8	Onshore Wind Turbine	WND	WT
2017	11	58519	Clean Energy Collective LLC	IPP	Conejos 1 Community Solar Array	CO	60723	CONEJ	1.5	Solar Photovoltaic	SUN	PV
2017	11	59007	Clipperton Holdings LLC	IPP	Clipperton Holdings	NC	59213	PV1	5.0	Solar Photovoltaic	SUN	PV
2017	11	61032	Constellation Solar Georgia 2, LLC	IPP	Georgia Power at Swainsboro	GA	61459	PV1	2.9	Solar Photovoltaic	SUN	PV
2017	11	61042	Cottonwood Wind Project	IPP	Cottonwood Wind Energy Center	NE	61407	CTNWD	89.7	Onshore Wind Turbine	WND	WT
2017	11	58468	Dominion Renewable Energy	IPP	Buckingham Solar LLC	VA	60917	PV1	19.8	Solar Photovoltaic	SUN	PV
2017	11	58468	Dominion Renewable Energy	Electric Utility	Cherrydale Solar Power Facility	VA	61375	PV1	20.0	Solar Photovoltaic	SUN	PV
2017	11	58468	Dominion Renewable Energy	IPP	Sappony Solar LLC	VA	60916	PV1	20.0	Solar Photovoltaic	SUN	PV
2017	11	58468	Dominion Renewable Energy	IPP	Southampton Solar, LLC	VA	61422	PV1	100.0	Solar Photovoltaic	SUN	PV
2017	11	6455	Duke Energy Florida, LLC	Electric Utility	Suwannee Solar Facility	FL	60788	XXXXX	8.8	Solar Photovoltaic	SUN	PV
2017	11	5580	East Kentucky Power Coop, Inc	Electric Utility	Cooperative Solar One	KY	60863	PV1	8.5	Solar Photovoltaic	SUN	PV
2017	11	60734	Elizabeth Mines Solar 1, LLC	IPP	Elizabeth Mines Solar 1	VT	61124	EMS1	5.0	Solar Photovoltaic	SUN	PV
2017	11	59380	Enel Green Power NA, Inc.	IPP	Rock Creek Wind Project	MO	60655	WT1	300.0	Onshore Wind Turbine	WND	WT
2017	11	59745	First Solar Asset Management	IPP	CA Flats Solar 130, LLC	CA	60033	GEN01	130.0	Solar Photovoltaic	SUN	PV
2017	11	59745	First Solar Asset Management	IPP	Cuyama Solar, LLC	CA	60043	GEN01	40.0	Solar Photovoltaic	SUN	PV
2017	11	60042	Fluvanna Wind Energy LLC	IPP	Fluvanna	TX	59245	FLUV1	155.4	Onshore Wind Turbine	WND	WT
2017	11	58909	Fremont Farm LLC	IPP	Fremont Farm	NC	59103	1	5.0	Solar Photovoltaic	SUN	PV
2017	11	60811	Golden Hills Interconnection Wind, LLC	IPP	Golden Hills North Wind Energy Center	CA	61222	1	46.0	Onshore Wind Turbine	WND	WT
2017	11	60739	Gulf Coast Solar Center II (CA)	IPP	Gulf Coast Solar Center II	FL	59690	GCSC2	40.0	Solar Photovoltaic	SUN	PV
2017	11	60740	Gulf Coast Solar Center III (CA)	IPP	Gulf Coast Solar Center III	FL	59691	GCSC3	50.0	Solar Photovoltaic	SUN	PV
2017	11	58822	MC Power Companies Inc	IPP	Higginsville Solar Farm	MO	61316	HSF1	2.5	Solar Photovoltaic	SUN	PV
2017	11	61075	Minnesota Solar CSG 19, LLC	IPP	B.R. Corcoran	MN	61453	42278	1.0	Solar Photovoltaic	SUN	PV
2017	11	61075	Minnesota Solar CSG 19, LLC	IPP	B.R. Corcoran	MN	61453	42279	1.0	Solar Photovoltaic	SUN	PV
2017	11	61075	Minnesota Solar CSG 19, LLC	IPP	B.R. Corcoran	MN	61453	42280	1.0	Solar Photovoltaic	SUN	PV
2017	11	61075	Minnesota Solar CSG 19, LLC	IPP	B.R. Corcoran	MN	61453	42281	1.0	Solar Photovoltaic	SUN	PV
2017	11	61075	Minnesota Solar CSG 19, LLC	IPP	B.R. Corcoran	MN	61453	42282	1.0	Solar Photovoltaic	SUN	PV
2017	11	61074	Minnesota Solar CSG 21, LLC	IPP	B.R. Sartell	MN	61454	42286	1.0	Solar Photovoltaic	SUN	PV
2017	11	61074	Minnesota Solar CSG 21, LLC	IPP	B.R. Sartell	MN	61454	42287	1.0	Solar Photovoltaic	SUN	PV
2017	11	61074	Minnesota Solar CSG 21, LLC	IPP	B.R. Sartell	MN	61454	42288	1.0	Solar Photovoltaic	SUN	PV
2017	11	61076	Minnesota Solar CSG 4, LLC	IPP	Montgomery Winsted	MN	61456	41620	1.0	Solar Photovoltaic	SUN	PV
2017	11	61076	Minnesota Solar CSG 4, LLC	IPP	Montgomery Winsted	MN	61456	41621	1.0	Solar Photovoltaic	SUN	PV
2017	11	61076	Minnesota Solar CSG 4, LLC	IPP	Montgomery Winsted	MN	61456	41622	1.0	Solar Photovoltaic	SUN	PV
2017	11	61073	Minnesota Solar CSG 9, LLC	IPP	B.R. Sauk Rapids	MN	61455	42292	1.0	Solar Photovoltaic	SUN	PV
2017	11	61073	Minnesota Solar CSG 9, LLC	IPP	B.R. Sauk Rapids	MN	61455	42294	1.0	Solar Photovoltaic	SUN	PV
2017	11	61073	Minnesota Solar CSG 9, LLC	IPP	B.R. Sauk Rapids	MN	61455	42295	1.0	Solar Photovoltaic	SUN	PV
2017	11	61073	Minnesota Solar CSG 9, LLC	IPP	B.R. Sauk Rapids	MN	61455	42296	1.0	Solar Photovoltaic	SUN	PV
2017	11	61073	Minnesota Solar CSG 9, LLC	IPP	B.R. Sauk Rapids	MN	61455	42297	1.0	Solar Photovoltaic	SUN	PV
2017	11	54888	NRG Texas Power LLC	IPP	NRG Elbow Creek Energy Storage Project	TX	61362	ECBS	2.0	Batteries	MWH	BA
2017	11	60398	Nixa Solar, LLC	IPP	Nixa Solar, LLC	MO	60673	NIXA	7.9	Solar Photovoltaic	SUN	PV
2017	11	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT4	57.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	11	61039	Pikeville Farm, LLC	IPP	Pikeville Farm	NC	61404	1	5.0	Solar Photovoltaic	SUN	PV
2017	11	61081	SR Platte	IPP	SR Platte Solar Farm	CO	61462	PV1	16.0	Solar Photovoltaic	SUN	PV
2017	11	60520	SoCore Energy LLC	IPP	GRE Marshan Solar	MN	60935	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	11	60520	SoCore Energy LLC	IPP	Sand Lake DPC Solar	WI	60957	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	11	60520	SoCore Energy LLC	IPP	Strawberry Point DPC Solar	IA	60955	PV1	1.3	Solar Photovoltaic	SUN	PV
2017	11	60520	SoCore Energy LLC	IPP	VEC Magee Hill Solar	VT	60954	PV1	1.3	Solar Photovoltaic	SUN	PV
2017	11	61016	SunE Koppelman 1, LLC	IPP	Koppelman Sun	MN	61381	KOPP1	1.0	Solar Photovoltaic	SUN	PV
2017	11	61016	SunE Koppelman 1, LLC	IPP	Koppelman Sun	MN	61381	KOPP2	1.0	Solar Photovoltaic	SUN	PV
2017	11	61016	SunE Koppelman 1, LLC	IPP	Koppelman Sun	MN	61381	KOPP3	1.0	Solar Photovoltaic	SUN	PV
2017	11	61016	SunE Koppelman 1, LLC	IPP	Koppelman Sun	MN	61381	KOPP4	1.0	Solar Photovoltaic	SUN	PV
2017	11	61016	SunE Koppelman 1, LLC	IPP	Koppelman Sun	MN	61381	KOPP5	1.0	Solar Photovoltaic	SUN	PV
2017	11	61018	SunE Rengstorf 1, LLC	IPP	Rengstorf Solar	MN	61383	RENG1	1.0	Solar Photovoltaic	SUN	PV
2017	11	61018	SunE Rengstorf 1, LLC	IPP	Rengstorf Solar	MN	61383	RENG2	1.0	Solar Photovoltaic	SUN	PV
2017	11	61018	SunE Rengstorf 1, LLC	IPP	Rengstorf Solar	MN	61383	RENG3	1.0	Solar Photovoltaic	SUN	PV
2017	11	61018	SunE Rengstorf 1, LLC	IPP	Rengstorf Solar	MN	61383	RENG4	1.0	Solar Photovoltaic	SUN	PV
2017	11	61018	SunE Rengstorf 1, LLC	IPP	Rengstorf Solar	MN	61383	RENG5	1.0	Solar Photovoltaic	SUN	PV
2017	11	60947	Tesla Inc.	IPP	Montgomery County Correctional Facility	MD	60820	PV1	1.4	Solar Photovoltaic	SUN	PV
2017	11	60947	Tesla Inc.	IPP	Onondaga County - Oak Orchard WWTP	NY	60098	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	11	57341	Veolia Energy	Electric CHP	Univ Minnesota CHP Plant	MN	59197	CTG-1	17.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	11	61072	Waterford Holdco LLC	IPP	Waterford Holdco	MN	61452	WATER	2.7	Solar Photovoltaic	SUN	PV
2017	11	60542	Willow Springs Windfarm, LLC	IPP	Willow Springs Wind Farm	TX	60901	WSPWF	250.0	Onshore Wind Turbine	WND	WT

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2017

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

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

Table 6.4. Retired Utility Scale Generating Units by Operating Company, Plant, and Month, 2017

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
2017	1	9303	Bucksport Generation LLC	Electric CHP	Bucksport Generation LLC	ME	50243	GEN2	21.0	Wood/Wood Waste Biomass	WDS	ST
2017	1	19204	City of Trinidad - (CO)	Electric Utility	Trinidad (CO)	CO	511	1	3.8	Conventional Steam Coal	BIT	ST
2017	1	57249	EPP Renewable Energy	IPP	Moretown	VT	56891	GEN 1	1.6	Landfill Gas	LFG	IC
2017	1	11241	Entergy Louisiana LLC	Electric Utility	R S Nelson	LA	1393	3	146.0	Natural Gas Steam Turbine	NG	ST
2017	1	12631	NRG Delta LLC	IPP	Pittsburg Power	CA	271	5	312.0	Natural Gas Steam Turbine	NG	ST
2017	1	12631	NRG Delta LLC	IPP	Pittsburg Power	CA	271	6	317.0	Natural Gas Steam Turbine	NG	ST
2017	1	12631	NRG Delta LLC	IPP	Pittsburg Power	CA	271	7	682.0	Natural Gas Steam Turbine	NG	ST
2017	1	57440	SABIC IP Mt. Vernon, LLC	Industrial	SABIC Innovative Plastics Mt. Vernon	IN	58063	1	3.0	Conventional Steam Coal	BIT	ST
2017	1	56773	Toyon Landfill Gas Conversion, LLC	IPP	Toyon Power Station	CA	54327	TOY3	1.7	Landfill Gas	LFG	IC
2017	1	19900	Viking Energy Corp	Electric CHP	Viking Energy of Northumberland	PA	50771	GEN1	16.2	Wood/Wood Waste Biomass	WDS	ST
2017	2	3775	Clear Lake Cogeneration LP	Electric CHP	Clear Lake Cogeneration Ltd	TX	10741	G102	100.0	Natural Gas Fired Combined Cycle	NG	CT
2017	2	3775	Clear Lake Cogeneration LP	Electric CHP	Clear Lake Cogeneration Ltd	TX	10741	G103	100.0	Natural Gas Fired Combined Cycle	NG	CT
2017	2	3775	Clear Lake Cogeneration LP	Electric CHP	Clear Lake Cogeneration Ltd	TX	10741	G104	100.0	Natural Gas Fired Combined Cycle	NG	CT
2017	2	3775	Clear Lake Cogeneration LP	Electric CHP	Clear Lake Cogeneration Ltd	TX	10741	S101	50.3	Natural Gas Fired Combined Cycle	NG	CA
2017	2	3775	Clear Lake Cogeneration LP	Electric CHP	Clear Lake Cogeneration Ltd	TX	10741	S102	12.1	Natural Gas Fired Combined Cycle	NG	CA
2017	2	57249	EPP Renewable Energy	Electric CHP	Frey Farm Landfill	PA	56510	GEN1	1.6	Landfill Gas	LFG	IC
2017	2	13193	Naniwa Energy LLC	IPP	Tri Center Naniwa Energy	NV	55494	CT3	50.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	2	13193	Naniwa Energy LLC	IPP	Tri Center Naniwa Energy	NV	55494	CT4	50.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	2	13193	Naniwa Energy LLC	IPP	Tri Center Naniwa Energy	NV	55494	CT5	50.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	2	13193	Naniwa Energy LLC	IPP	Tri Center Naniwa Energy	NV	55494	CT6	50.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	2	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	E2	0.8	Other Waste Biomass	OBG	IC
2017	2	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	E5	1.8	Other Waste Biomass	OBG	IC
2017	2	18843	Thiele Kaolin Co	Industrial	Thiele Kaolin Reedy Creek	GA	54849	G1	1.1	Petroleum Liquids	DFO	IC
2017	2	18843	Thiele Kaolin Co	Industrial	Thiele Kaolin Reedy Creek	GA	54849	G2	1.1	Petroleum Liquids	DFO	IC
2017	2	18843	Thiele Kaolin Co	Industrial	Thiele Kaolin Sandersville	GA	54841	G1	1.1	Petroleum Liquids	DFO	IC
2017	2	18843	Thiele Kaolin Co	Industrial	Thiele Kaolin Sandersville	GA	54841	G2	1.1	Petroleum Liquids	DFO	IC
2017	2	55808	Westmoreland Partners	Electric CHP	Roanoke Valley Energy Facility I	NC	54035	GEN1	165.0	Conventional Steam Coal	BIT	ST
2017	2	55808	Westmoreland Partners	Electric CHP	Roanoke Valley Energy Facility II	NC	54755	GEN2	44.0	Conventional Steam Coal	BIT	ST
2017	3	3046	Duke Energy Progress - (NC)	Electric Utility	L V Sutton Steam	NC	2713	GT1	11.0	Petroleum Liquids	DFO	GT
2017	3	55932	Georgia-Pacific Brewton LLC	Industrial	Georgia-Pacific Brewton Mill	AL	54789	1TG	10.5	Wood/Wood Waste Biomass	BLQ	ST
2017	3	7160	Geysers Power Co LLC	IPP	Geysers Unit 5-20	CA	286	U10	30.0	Geothermal	GEO	ST
2017	3	7160	Geysers Power Co LLC	IPP	Geysers Unit 5-20	CA	286	U9	30.0	Geothermal	GEO	ST
2017	3	7570	Great River Energy	Electric Utility	Stanton	ND	2824	1	188.1	Conventional Steam Coal	SUB	ST
2017	3	7570	Great River Energy	Electric Utility	Stanton	ND	2824	2	1.0	Petroleum Liquids	DFO	IC
2017	3	13407	Nevada Power Co	Electric Utility	Reid Gardner	NV	2324	4	257.0	Conventional Steam Coal	BIT	ST
2017	3	14063	Oklahoma Gas & Electric Co	Electric Utility	Horseshoe Lake	OK	2951	GT7	7.3	Natural Gas Fired Combustion Turbine	NG	GT
2017	3	10023	TC Ravenswood LLC	IPP	Ravenswood	NY	2500	GT7	12.7	Natural Gas Fired Combustion Turbine	NG	GT
2017	3	20863	Wisconsin River Power Company	Electric Utility	Juneau	WI	8050	31	12.6	Petroleum Liquids	DFO	GT
2017	4	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	ST1	106.0	Natural Gas Steam Turbine	NG	ST
2017	4	18642	Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	1	628.0	Conventional Steam Coal	BIT	ST
2017	4	18642	Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	2	602.0	Conventional Steam Coal	BIT	ST
2017	5	1871	City of Blooming Prairie - (MN)	Electric Utility	Blooming Prairie	MN	1966	1	0.3	Petroleum Liquids	DFO	IC
2017	5	1871	City of Blooming Prairie - (MN)	Electric Utility	Blooming Prairie	MN	1966	2	0.7	Petroleum Liquids	DFO	IC
2017	5	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	GT1	12.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	5	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	GT2	24.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	5	9417	Interstate Power and Light Co	Electric Utility	Dubuque	IA	1046	3	31.1	Natural Gas Steam Turbine	NG	ST
2017	5	9417	Interstate Power and Light Co	Electric Utility	Dubuque	IA	1046	4	37.5	Natural Gas Steam Turbine	NG	ST
2017	5	9417	Interstate Power and Light Co	Electric Utility	Dubuque	IA	1046	IC1	2.0	Petroleum Liquids	DFO	IC
2017	5	9417	Interstate Power and Light Co	Electric Utility	Dubuque	IA	1046	IC2	1.4	Petroleum Liquids	DFO	IC
2017	5	9417	Interstate Power and Light Co	Electric Utility	Sutherland	IA	1077	1	27.9	Natural Gas Steam Turbine	NG	ST
2017	5	54899	NAES Corporation - (DE)	IPP	McKee Run	DE	599	1	17.1	Natural Gas Steam Turbine	NG	ST
2017	5	54899	NAES Corporation - (DE)	IPP	McKee Run	DE	599	2	17.4	Natural Gas Steam Turbine	NG	ST
2017	5	29849	Wasatch Integrated Waste Management	Electric CHP	Wasatch Energy Systems Energy Recovery	UT	55302	1	1.6	Municipal Solid Waste	MSW	ST
2017	6	58534	Brayton Point Energy LLC	IPP	Brayton Point	MA	1619	1	225.2	Conventional Steam Coal	BIT	ST
2017	6	58534	Brayton Point Energy LLC	IPP	Brayton Point	MA	1619	2	237.8	Conventional Steam Coal	BIT	ST
2017	6	58534	Brayton Point Energy LLC	IPP	Brayton Point	MA	1619	3	575.0	Conventional Steam Coal	BIT	ST
2017	6	58534	Brayton Point Energy LLC	IPP	Brayton Point	MA	1619	4	435.0	Petroleum Liquids	RFO	ST
2017	6	3046	Duke Energy Progress - (NC)	Electric Utility	Darlington County	SC	3250	9	50.0	Petroleum Liquids	DFO	GT
2017	6	55838	Exelon Wind 1, LLC	IPP	EXC Wind 1	TX	56557	1	10.0	Onshore Wind Turbine	WND	WT
2017	6	55837	Exelon Wind 2, LLC	IPP	EXC Wind 2	TX	56558	JDW2	10.0	Onshore Wind Turbine	WND	WT
2017	6	55836	Exelon Wind 3, LLC	IPP	EXC Wind 3	TX	56559	JDW3	10.0	Onshore Wind Turbine	WND	WT
2017	6	9417	Interstate Power and Light Co	Electric Utility	Sutherland	IA	1077	3	80.8	Natural Gas Steam Turbine	NG	ST
2017	6	15147	PSEG Fossil LLC	IPP	PSEG Hudson Generating Station	NJ	2403	2	620.0	Natural Gas Steam Turbine	NG	ST
2017	6	15147	PSEG Fossil LLC	IPP	PSEG Mercer Generating Station	NJ	2408	1	316.0	Conventional Steam Coal	BIT	ST
2017	6	15147	PSEG Fossil LLC	IPP	PSEG Mercer Generating Station	NJ	2408	2	316.0	Conventional Steam Coal	BIT	ST
2017	6	56981	Town of Falmouth	Commercial	Town of Falmouth WWTP	MA	57654	WIND1	0.8	Onshore Wind Turbine	WND	WT
2017	6	56981	Town of Falmouth	Commercial	Town of Falmouth WWTP	MA	57654	WIND2	0.8	Onshore Wind Turbine	WND	WT

Table 6.4. Retired Utility Scale Generating Units by Operating Company, Plant, and Month, 2017

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
2017	7	221	Alaska Village Elec Coop, Inc	Electric Utility	Noorvik	AK	6330	2A	0.4	Petroleum Liquids	DFO	IC
2017	7	3046	Duke Energy Progress - (NC)	Electric Utility	L V Sutton Steam	NC	2713	GTA	23.0	Petroleum Liquids	DFO	GT
2017	7	3046	Duke Energy Progress - (NC)	Electric Utility	L V Sutton Steam	NC	2713	GTB	25.0	Petroleum Liquids	DFO	GT
2017	7	21352	Municipal Energy Agency of NE	Electric Utility	MEAN Wind Project	NE	56106	1	10.5	Onshore Wind Turbine	WND	WT
2017	8	6636	Foss Manufacturing Company LLC	Industrial	Hampton Facility	NH	10108	GEN1	0.5	Petroleum Liquids	DFO	IC
2017	8	6636	Foss Manufacturing Company LLC	Industrial	Hampton Facility	NH	10108	GEN2	0.5	Petroleum Liquids	DFO	IC
2017	8	6636	Foss Manufacturing Company LLC	Industrial	Hampton Facility	NH	10108	GEN3	0.7	Petroleum Liquids	DFO	IC
2017	8	6636	Foss Manufacturing Company LLC	Industrial	Hampton Facility	NH	10108	GEN4	0.7	Petroleum Liquids	DFO	IC
2017	8	6636	Foss Manufacturing Company LLC	Industrial	Hampton Facility	NH	10108	GEN5	0.7	Petroleum Liquids	DFO	IC
2017	8	9417	Interstate Power and Light Co	Electric Utility	Grinnell	IA	7137	1	23.7	Natural Gas Fired Combustion Turbine	NG	GT
2017	8	9417	Interstate Power and Light Co	Electric Utility	Grinnell	IA	7137	2	20.6	Natural Gas Fired Combustion Turbine	NG	GT
2017	8	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	8	103.8	Conventional Hydroelectric	WAT	HY
2017	9	19558	Homer Electric Assn Inc	Electric Utility	Seldovia	AK	6283	6	1.2	Petroleum Liquids	DFO	IC
2017	9	15466	Public Service Co of Colorado	Electric Utility	Valmont	CO	477	5	184.0	Conventional Steam Coal	BIT	ST
2017	11	5109	DTE Electric Company	Electric Utility	St Clair	MI	1743	4	151.0	Conventional Steam Coal	RC	ST
2017	11	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	1	2.1	Petroleum Liquids	DFO	IC
2017	11	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	2	1.8	Petroleum Liquids	DFO	IC
2017	11	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	3	1.9	Petroleum Liquids	DFO	IC
2017	11	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	GT1	21.6	Petroleum Liquids	DFO	GT
2017	11	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	GT2	25.7	Petroleum Liquids	DFO	GT
2017	11	9417	Interstate Power and Light Co	Electric Utility	Fox Lake	MN	1888	1	13.2	Natural Gas Steam Turbine	NG	ST
2017	11	9417	Interstate Power and Light Co	Electric Utility	Fox Lake	MN	1888	3	85.2	Natural Gas Steam Turbine	NG	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)
2017	12	60277	54 KR 8me LLC	IPP	Redwood 4 Solar Farm	CA	60490	RW4SF	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2017	12	60118	83WI 8ME, LLC	IPP	Midway Solar Farm 1	CA	60336	MSF1	50.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	50.0
2017	12	61106	ABEC #3 LLC	IPP	ABEC #3 dba Lakeview Dairy	CA	61502	GEN1	1.0	Other Waste Biomass	OBG	IC	(V) Under construction, more than 50 percent complete	1.0
2017	12	60571	AEP Onsite Partners	IPP	Porter Way Community Solar Garden	MN	61500	PV1	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0
2017	12	61012	AES Distributed Energy	IPP	Call Farms 1	NY	61470	CFM11	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2017	12	61012	AES Distributed Energy	IPP	Call Farms 3	NY	61471	CFM31	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2017	12	61012	AES Distributed Energy	IPP	Lichtenthal	NY	61469	LIC01	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2017	12	61012	AES Distributed Energy	IPP	Monroe County Sites A & B	NY	61509	MONA	1.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.7
2017	12	61012	AES Distributed Energy	IPP	Monroe County Sites A & B	NY	61509	MONB	1.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.7
2017	12	61012	AES Distributed Energy	IPP	Monroe County Sites C, D, & E	NY	61510	MONC	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2017	12	61012	AES Distributed Energy	IPP	Monroe County Sites C, D, & E	NY	61510	MOND	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2017	12	61012	AES Distributed Energy	IPP	Monroe County Sites C, D, & E	NY	61510	MONE	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2017	12	60347	AL Solar A, LLC	IPP	LaFayette Solar Farm	AL	60583	PV1	79.2	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	79.2
2017	12	221	Alaska Village Elec Coop, Inc	Electric Utility	Kasigluk	AK	57066	1	0.8	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	0.8
2017	12	60824	Antares Community Solar	IPP	Antares Community Solar	MN	61176	FACS1	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2017	12	60824	Antares Community Solar	IPP	Antares Community Solar	MN	61176	FACS2	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2017	12	60824	Antares Community Solar	IPP	Antares Community Solar	MN	61176	FACS3	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2017	12	57003	Arlington Valley Solar Energy LLC	IPP	Arlington Valley Solar Energy I	AZ	57679	AVSE1	125.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	127.0
2017	12	15399	Avangrid Renewables LLC	IPP	Deerfield Wind LLC	VT	61039	WT1	30.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	30.0
2017	12	15399	Avangrid Renewables LLC	IPP	El Cabo Wind	NM	58098	1	298.0	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	298.0
2017	12	15399	Avangrid Renewables LLC	IPP	Tule Wind LLC	CA	57913	1	143.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	143.0
2017	12	15399	Avangrid Renewables LLC	IPP	Twin Buttes II Wind	CO	61040	WT1	75.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	75.0
2017	12	60730	Bakersfield Industrial PV 1, LLC	IPP	Bakersfield Industrial PV 1	CA	61118	BIND1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	60729	Bakersfield PV 1, LLC	IPP	Bakersfield PV 1	CA	61117	BAKE1	5.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.3
2017	12	60746	Bedford Solar, LLC	IPP	Bedford Solar	VA	61126	12346	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0
2017	12	60944	Bluff Point Wind, LLC	IPP	Bluff Point Wind Facility	IN	61303	BLUFF	119.7	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	119.7
2017	12	60617	Buckthorn Wind Project, LLC	IPP	Buckthorn Wind Project	TX	60983	BWIND	100.5	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	100.5
2017	12	60655	Bullock Road Solar 1, LLC	IPP	Bullock Road Solar 1	MA	61010	BULLO	3.9	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	3.9
2017	12	60865	CD Global Solar Holdings, LLC	IPP	Beacon Solar Plant Site 2	CA	59309	BEAC2	45.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	45.0
2017	12	60865	CD Global Solar Holdings, LLC	IPP	Beacon Solar Plant Site 5	CA	59308	BEAC5	36.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	36.0
2017	12	61096	Cameron Solar, LLC	IPP	Cameron Solar	SC	61489	CAM	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2017	12	59541	Carroll County Energy LLC	Electric CHP	Carroll County Energy	OH	59773	CGT1	197.3	Natural Gas Fired Combined Cycle	NG	CT	(TS) Construction complete, but not yet in commercial operation	235.5
2017	12	59541	Carroll County Energy LLC	Electric CHP	Carroll County Energy	OH	59773	CGT2	197.3	Natural Gas Fired Combined Cycle	NG	CT	(TS) Construction complete, but not yet in commercial operation	235.5
2017	12	59541	Carroll County Energy LLC	Electric CHP	Carroll County Energy	OH	59773	SGT1	288.0	Natural Gas Fired Combined Cycle	NG	CA	(TS) Construction complete, but not yet in commercial operation	361.3
2017	12	61127	Champion Solar, LLC	IPP	Champion Solar	SC	61522	PGRD3	10.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.8
2017	12	58519	Clean Energy Collective LLC	IPP	Xcel Adams 2 Community Solar Array	CO	60725	ADCO2	1.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.5
2017	12	60795	Columbus Solar Project	IPP	Columbus Solar Project	NM	61165	88029	1.9	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.9
2017	12	56769	Consolidated Edison Development Inc.	IPP	CED Foster	RI	61499	FORI	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2017	12	56769	Consolidated Edison Development Inc.	IPP	Upton County Solar	TX	60581	UCTX	150.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	150.0
2017	12	61032	Constellation Solar Georgia 2, LLC	IPP	Georgia Power at Jakin GA PV	GA	61397	PV1	1.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.5
2017	12	60380	Cork Oak Solar LLC	IPP	Cork Oak Solar	NC	60637	NC160	26.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2017	12	58695	Coronal Development Services	IPP	Essex Solar Center	VA	61406	ESSEX	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2017	12	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS1	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2017	12	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS2	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2017	12	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS3	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2017	12	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS4	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2017	12	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS5	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2017	12	60967	Crater Community Solar	IPP	Crater Community Solar	MN	61328	TCCS1	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	60967	Crater Community Solar	IPP	Crater Community Solar	MN	61328	TCCS2	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	60967	Crater Community Solar	IPP	Crater Community Solar	MN	61328	TCCS3	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	61060	Cypress Creek Renewables	IPP	ABD Farms	NC	61525	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	61060	Cypress Creek Renewables	IPP	Auten Road Farm, LLC	NC	60634	PV1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	61060	Cypress Creek Renewables	IPP	Bakatsias Solar	NC	61527	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	61060	Cypress Creek Renewables	IPP	Bayboro Solar Farm	NC	61528	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	61060	Cypress Creek Renewables	IPP	Bladen Solar	NC	61561	GEN1	50.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	50.0
2017	12	61060	Cypress Creek Renewables	IPP	Bladen Solar Farm	NC	60296	PV1	4.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	61060	Cypress Creek Renewables	IPP	Bondi Solar	NC	61352	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	61060	Cypress Creek Renewables	IPP	Bullock Solar, LLC	NC	61512	GEN1	50.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	50.0
2017	12	61060	Cypress Creek Renewables	IPP	CF Novel Solar Gardens Eleven, LLC	MN	61549	GEN1	3.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.0
2017	12	61060	Cypress Creek Renewables	IPP	CF Novel Solar Gardens Five, LLC	MN	61543	GEN1	3.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.4
2017	12	61060	Cypress Creek Renewables	IPP	CF Novel Solar Gardens Seven, LLC	MN	61548	GEN1	3.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.3
2017	12	61060	Cypress Creek Renewables	IPP	CF Novel Solar Gardens Two, LLC	MN	61546	GEN1	1.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.8
2017	12	61060	Cypress Creek Renewables	IPP	CGSun, LLC	MN	61545	GEN1	4.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.0
2017	12	61060	Cypress Creek Renewables	IPP	Estill Solar II	SC	61529	GEN1	10.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.2
2017	12	61060	Cypress Creek Renewables	IPP	Gaston Solar I - SC	SC	61530	GEN1	10.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.2
2017	12	61060	Cypress Creek Renewables	IPP	Highway 56 Solar	TX	61409	GEN1	5.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.3
2017	12	61060	Cypress Creek Renewables	IPP	LeSun, LLC	MN	61544	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	61060	Cypress Creek Renewables	IPP	Leon Solar	TX	61532	GEN1	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2017	12	61060	Cypress Creek Renewables	IPP	Marlin Solar	TX	61513	GEN1	5.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.3
2017	12	61060	Cypress Creek Renewables	IPP	Next Generation Solar Farm	VT	61340	NGSF1	2.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.2
2017	12	61060	Cypress Creek Renewables	IPP	North Gainesville Solar	TX	61514	GEN1	5.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.2
2017	12	61060	Cypress Creek Renewables	IPP	PopeSun, LLC	MN	61542	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	61060	Cypress Creek Renewables	IPP	Shoe Creek Solar, LLC	NC	60380	SCSPV	5.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.2
2017	12	61060	Cypress Creek Renewables	IPP	Statesville Solar	NC	61535	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	61060	Cypress Creek Renewables	IPP	Wakefield Solar	NC	61536	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	61060	Cypress Creek Renewables	IPP	Whitesboro Solar	TX	61410	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	61060	Cypress Creek Renewables	IPP	Whitesboro Solar II	TX	61411	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	61060	Cypress Creek Renewables	IPP	Whitewright Solar	TX	61524	GEN1	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2017	12	61060	Cypress Creek Renewables	IPP	WrightSun, LLC	MN	61547	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	61113	DG Camden, LLC	IPP	DG Camden LLC Holtec	NJ	61515	HOLTC	2.2	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.2
2017	12	61111	DG New Jersey Solar, LLC	IPP	DG New Jersey Solar RLS Logistics	NJ	61507	RLSNJ	4.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.0
2017	12	60728	Delano Land 1, LLC	IPP	Delano Land 1	CA	61116	DELA1	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2017	12	60968	Delphinus Community Solar	IPP	Delphinus Community Solar	MN	61329	QDCS1	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2017	12	60968	Delphinus Community Solar	IPP	Delphinus Community Solar	MN	61329	QDCS2	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2017	12	61163	Denver Metro Solar LLC	IPP	Denver Metro Solar	CO	61563	53962	1.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.6
2017	12	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
2017	12	61014	DodgeSun, LLC	IPP	DodgeSun	MN	61379	DODG1	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2017	12	61014	DodgeSun, LLC	IPP	DodgeSun	MN	61379	DODG2	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2017	12	61014	DodgeSun, LLC	IPP	DodgeSun	MN	61379	DODG3	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2017	12	61014	DodgeSun, LLC	IPP	DodgeSun	MN	61379	DODG4	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2017	12	61014	DodgeSun, LLC	IPP	DodgeSun	MN	61379	DODG5	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2017	12	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5501	3.0	All Other	OTH	OT	(V) Under construction, more than 50 percent complete	3.0
2017	12	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5502	1.3	All Other	OTH	OT	(V) Under construction, more than 50 percent complete	1.3
2017	12	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5511	1.7	All Other	OTH	OT	(V) Under construction, more than 50 percent complete	1.7
2017	12	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5EG	1.0	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	1.0
2017	12	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5STA	40.0	Natural Gas Fired Combined Cycle	NG	CA	(TS) Construction complete, but not yet in commercial operation	65.0
2017	12	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5STB	40.0	Natural Gas Fired Combined Cycle	NG	CA	(TS) Construction complete, but not yet in commercial operation	65.0
2017	12	58468	Dominion Renewable Energy	IPP	Correctional Solar LLC	VA	60915	PV1	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2017	12	58468	Dominion Renewable Energy	IPP	Scott-II Solar LLC	VA	60968	PV1	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2017	12	5416	Duke Energy Carolinas, LLC	Electric Utility	W S Lee	SC	3264	CT11	230.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	243.0
2017	12	5416	Duke Energy Carolinas, LLC	Electric Utility	W S Lee	SC	3264	CT12	230.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	243.0
2017	12	5416	Duke Energy Carolinas, LLC	Electric Utility	W S Lee	SC	3264	ST10	293.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	362.0
2017	12	55729	Duke Energy Kentucky Inc	Electric Utility	Crittenden Solar Facility	KY	61310	PV1	2.7	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.7
2017	12	55729	Duke Energy Kentucky Inc	Electric Utility	Walton 1 Solar Facility	KY	61311	PV1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2017	12	55729	Duke Energy Kentucky Inc	Electric Utility	Walton 2 Solar Facility	KY	61312	PV1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2017	12	56215	E ON Climate Renewables N America LLC	IPP	Bruennings Breeze Wind Farm	TX	59066	MVII	228.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	228.0
2017	12	56215	E ON Climate Renewables N America LLC	IPP	Inadale Wind Farm LLC	TX	56984	INABT	9.9	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	9.9
2017	12	56215	E ON Climate Renewables N America LLC	IPP	Pyron Wind Farm LLC	TX	56981	PYRBT	9.9	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	9.9
2017	12	56215	E ON Climate Renewables N America LLC	IPP	Radfords Run Wind Farm	IL	59061	WT1	278.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	278.0
2017	12	60869	EDF Renewable Energy	IPP	Rock Falls Wind Farm LLC	OK	61261	RF1	154.5	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	154.5
2017	12	57249	EPP Renewable Energy	IPP	Haworth Water Treatment Plant	NJ	56701	GEN5	3.9	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	4.0
2017	12	57249	EPP Renewable Energy	IPP	Haworth Water Treatment Plant	NJ	56701	GEN6	3.9	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	4.0
2017	12	57249	EPP Renewable Energy	IPP	Pennsauken Solar	NJ	56883	GEN10	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2017	12	60853	ET CAP OR HOLDINGS LLC	IPP	OR Solar 3, LLC	OR	61201	ORSR3	10.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	10.0
2017	12	60853	ET CAP OR HOLDINGS LLC	IPP	OR Solar 5, LLC	OR	61423	PV1	8.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	8.0
2017	12	60853	ET CAP OR HOLDINGS LLC	IPP	OR Solar 6, LLC	OR	61430	PV6	10.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	10.0
2017	12	60853	ET CAP OR HOLDINGS LLC	IPP	OR Solar 8, LLC	OR	61424	PV1	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2017	12	60904	ETCAP NES CS MN 06 LLC	IPP	WasecaSun	MN	61142	0000H	3.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.4
2017	12	60904	ETCAP NES CS MN 06 LLC	IPP	WasecaSun	MN	61142	WASE2	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	60904	ETCAP NES CS MN 06 LLC	IPP	WasecaSun	MN	61142	WASE3	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	60904	ETCAP NES CS MN 06 LLC	IPP	WasecaSun	MN	61142	WASE4	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	60904	ETCAP NES CS MN 06 LLC	IPP	WasecaSun	MN	61142	WASE5	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar	MN	61380	JOHN1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar	MN	61380	JOHN2	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar	MN	61380	JOHN3	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar	MN	61380	JOHN4	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar	MN	61380	JOHN5	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	60901	ETCAP NES CS MN 12 LLC	IPP	Kramer Solar	MN	61058	0000B	3.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.3
2017	12	60901	ETCAP NES CS MN 12 LLC	IPP	Kramer Solar	MN	61058	KRAM2	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	60901	ETCAP NES CS MN 12 LLC	IPP	Kramer Solar	MN	61058	KRAM3	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	58970	Ecoplexus, Inc	IPP	American Legion PV 1	NC	59516	AMLEG	16.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	16.0
2017	12	58970	Ecoplexus, Inc	IPP	Vaughn Creek PV1	NC	60001	VNCRK	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2017	12	61097	Estill Solar I, LLC	IPP	Estill Solar	SC	61490	EST1	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2017	12	60348	FL Solar 1, LLC	IPP	CoTAL Solar Farm	FL	60582	PV1	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2017	12	6452	Florida Power & Light Co	Electric Utility	Coral Farms Solar Energy Center	FL	61022	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2017	12	6452	Florida Power & Light Co	Electric Utility	Hammock Solar	FL	61024	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2017	12	6452	Florida Power & Light Co	Electric Utility	Horizon Solar Energy Center	FL	61021	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2017	12	6452	Florida Power & Light Co	Electric Utility	Indian River Solar Center	FL	61020	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2017	12	6452	Florida Power & Light Co	Electric Utility	Wildflower Solar Energy Center	FL	61050	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2017	12	60690	Foundation CA Fund VIII Manager, LLC	IPP	Foundation CDCR LAC	CA	61066	WTG1	1.9	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	1.9
2017	12	7140	Georgia Power Co	Electric Utility	Marine Corps Logistics Base Solar	GA	59876	1	31.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	31.0
2017	12	7490	Grand River Dam Authority	Electric Utility	GREC	OK	165	3CT	324.6	Natural Gas Fired Combined Cycle	NG	CT	(TS) Construction complete, but not yet in commercial operation	369.0
2017	12	7490	Grand River Dam Authority	Electric Utility	GREC	OK	165	3ST	191.8	Natural Gas Fired Combined Cycle	NG	CA	(TS) Construction complete, but not yet in commercial operation	231.3
2017	12	59978	HXNAir Solar One LLC	IPP	HXNAir Solar One	NC	60209	HXNAI	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	61128	Haley Solar, LLC	IPP	Haley Solar	SC	61523	PGRD1	8.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	8.2
2017	12	61095	Hampton Solar II, LLC	IPP	Hampton Solar 2	SC	61498	HAM2	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2017	12	60969	Hog Creek Wind Project LLC	IPP	Hog Creek Wind Project	OH	61330	WT1	66.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	66.0
2017	12	57389	IKEA Property Inc	IPP	IKEA Grand Prairie Rooftop PV System	TX	61309	PV1	1.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.2
2017	12	57389	IKEA Property Inc	Commercial	IKEA Joliet Rooftop PV System	IL	61192	PV	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2017	12	9234	Indiana Municipal Power Agency	Electric Utility	Greenfield Solar Park	IN	61053	SGREE	2.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.8
2017	12	49893	Invenergy Services LLC	IPP	Shoreham Solar Commons	NY	60045	GEN1	24.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	24.9
2017	12	61154	Klamath Falls Solar 2, LLC	IPP	Klamath Falls Solar 2	OR	61553	1	2.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.9
2017	12	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
2017	12	60461	LSDP 11, LLC	IPP	Deerfield Solar	MA	60775	PV1	4.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.4
2017	12	61028	LSE Cassiopeia LLC	IPP	Ashby Duffy Solar Farm	MA	61399	DU183	1.8	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.8
2017	12	58822	MC Power Companies Inc	IPP	Farmington Solar Farm	MO	61450	FSF1	2.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.5
2017	12	60099	MS Solar 3, LLC	IPP	Sumrall II Solar Farm	MS	60303	SUM2	52.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	52.0
2017	12	60727	Manteca Land PV, LLC	IPP	Manteca Land PV	CA	61115	MANT1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	61158	Martin Solar Center, LLC	IPP	Martin Solar Center	VA	61458	MARTN	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	12341	MidAmerican Energy Co	Electric Utility	Beaver Creek Wind	IA	61079	1	170.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	170.0
2017	12	12341	MidAmerican Energy Co	IPP	Prairie Wind Farm	IA	60873	PWE	168.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	168.0
2017	12	60392	Moffett Solar 1, LLC	IPP	Moffett Solar Project	SC	60658	PV1	69.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	71.4
2017	12	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT1	60.0	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	71.2
2017	12	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT2	60.0	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	71.2
2017	12	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT3	60.0	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	71.2
2017	12	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT4	60.0	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	71.2
2017	12	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT5	60.0	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	71.2
2017	12	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT6	60.0	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	71.2
2017	12	60635	Northern Cardinal Solar LLC	IPP	Northern Cardinal Solar	NC	60992	NCARD	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2017	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	1	0.1	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	0.1
2017	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	2	0.1	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	0.1
2017	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	3	0.1	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	0.1
2017	12	61071	Northfield Holdco LLC	IPP	Northfield Holdco	MN	61451	NORTH	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2017	12	61161	Norwest Energy 7, LLC	IPP	Eagle Point Solar	OR	61560	PGRD4	9.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	9.9
2017	12	60685	Novel Energy Solutions	IPP	Novel - OYA of Mapleton	MN	61060	0000I	3.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.5
2017	12	60685	Novel Energy Solutions	IPP	Novel CSG of Armstrong	MN	61138	0000A	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2017	12	60685	Novel Energy Solutions	IPP	Novel CSG of MN Lake	MN	61140	0000D	1.8	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.8
2017	12	60685	Novel Energy Solutions	IPP	Novel CSG of Vetter Farms	MN	61141	0000F	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0
2017	12	60685	Novel Energy Solutions	IPP	Novel OYA of Osakis	MN	61059	0000G	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2017	12	60644	OEE XXIV LLC	Industrial	Whirlpool Corporation - Ottawa Wind Farm	OH	61004	W1	1.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	1.5
2017	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT5	57.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	66.0
2017	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT6	57.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	66.0
2017	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT7	57.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	66.0
2017	12	61159	Palmer Solar Center, LLC	IPP	Palmer Solar Center	VA	61457	PALM	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	58109	President & Trustees of Williams College	Commercial	Williams College - Campus CHP	MA	58160	GEN4	2.0	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	2.0
2017	12	58109	President & Trustees of Williams College	Commercial	Williams College - Campus CHP	MA	58160	GEN5	2.0	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	2.0
2017	12	60882	Red Dirt Wind Project, LLC	IPP	Red Dirt Wind Project	OK	61270	RDDRT	299.3	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	299.3
2017	12	60997	Red Pine Wind Project, LLC	IPP	Red Pine Wind Project	MN	61357	RP1	200.0	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	200.0
2017	12	61093	SL Babylon, LLC	IPP	SL Babylon	NY	61487	SLBAB	9.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	9.0
2017	12	60978	SP Solar 5, LLC	IPP	Mill Creek Solar (OR)	OR	61338	PGRC1	2.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.2
2017	12	61114	School Sisters CSG LLC	IPP	School Sisters CSG	MN	61516	SCHOO	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2017	12	60520	SoCore Energy LLC	IPP	Michael Solar	MN	60971	PV1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	60520	SoCore Energy LLC	IPP	Michael Solar	MN	60971	PV2	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	60520	SoCore Energy LLC	IPP	Michael Solar	MN	60971	PV3	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2017	12	60520	SoCore Energy LLC	IPP	New Auburn DPC Solar	WI	60936	PV1	2.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.5
2017	12	60520	SoCore Energy LLC	IPP	Richmond CSG	MN	61427	PV1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2017	12	60163	Soltage LLC	IPP	Barker Solar, LLC	NC	61194	BARK	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2017	12	60163	Soltage LLC	IPP	Broadridge Solar, LLC	NC	61218	BROAD	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2017	12	60712	South Maui Renewable Resources LLC	IPP	Kihei Solar Farm	HI	61099	KIHEI	2.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.9
2017	12	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT1	9.7	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.7
2017	12	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT2	9.7	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.7
2017	12	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT3	9.7	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.7
2017	12	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT4	9.7	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.7
2017	12	60595	Spartan PV 1, LLC	IPP	Spartan PV 1	MI	60945	PV1	10.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	10.5
2017	12	60652	Stafford St Solar 1, LLC	IPP	Stafford St Solar 1	MA	61016	STAF1	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2017	12	60653	Stafford St Solar 2, LLC	IPP	Stafford St Solar 2	MA	61017	STAF2	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2017	12	60654	Stafford St Solar 3, LLC	IPP	Stafford St Solar 3	MA	61018	STAF3	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2017	12	60871	Stuttgart Solar, LLC	IPP	Stuttgart Solar	AR	61262	STGRT	81.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	81.0
2017	12	60381	Sunflower Solar LLC	IPP	Sunflower Solar	NC	60638	NC160	20.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	16.0
2017	12	58661	Sustainable Power Group, LLC	IPP	Bayshore Solar A, LLC	CA	60481	BSHRA	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2017	12	58661	Sustainable Power Group, LLC	IPP	Bayshore Solar B, LLC	CA	60474	BSHRB	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2017	12	58661	Sustainable Power Group, LLC	IPP	Bayshore Solar C, LLC	CA	60475	BSHRC	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2017	12	58661	Sustainable Power Group, LLC	IPP	Marin Clean Energy Solar One	CA	61013	MCES1	10.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.5
2017	12	61126	Swamp Fox Solar, LLC	IPP	Swamp Fox Solar	SC	61521	PGRD2	10.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.8
2017	12	60822	Taurus Community Solar	IPP	Taurus Community Solar	MN	61174	ETCS1	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2017	12	60822	Taurus Community Solar	IPP	Taurus Community Solar	MN	61174	ETCS2	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2017	12	60822	Taurus Community Solar	IPP	Taurus Community Solar	MN	61174	ETCS3	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2017	12	60822	Taurus Community Solar	IPP	Taurus Community Solar	MN	61174	ETCS4	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2017	12	60947	Tesla Inc.	IPP	Greene County Meter #1	NY	60463	PV1	1.6	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.6
2017	12	60947	Tesla Inc.	IPP	Hampshire College	MA	60815	BA2	0.5	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	0.5
2017	12	60947	Tesla Inc.	IPP	Hampshire College	MA	60815	PV2	1.7	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.7
2017	12	60947	Tesla Inc.	IPP	Intel - Ocotillo Campus Solar	AZ	60822	PV1	2.8	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.8
2017	12	60947	Tesla Inc.	IPP	Sacramento Regional County Sanitation PV	CA	61209	PV1	3.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	3.5
2017	12	60881	Thunder Ranch Wind Project, LLC	IPP	Thunder Ranch Wind Project	OK	61269	WT1	297.8	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	297.8
2017	12	60472	Tungsten Mountain	IPP	Tungsten Mountain	NV	60785	UNIT1	37.0	Geothermal	GEO	BT	(TS) Construction complete, but not yet in commercial operation	37.0
2017	12	61082	Vandenberg Solar I, LLC	IPP	Vandenberg Solar Project	CA	61463	VBERG	20.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	22.5
2017	12	19876	Virginia Electric & Power Co	Electric Utility	Oceana Solar	VA	60584	01	17.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	17.6
2017	12	60749	Wadesboro Solar, LLC	IPP	Wadesboro Solar	NC	61129	12347	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2017	12	56927	Wallingford Energy LLC	IPP	Wallingford Energy	CT	55517	CTG6	45.0	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	50.0
2017	12	56927	Wallingford Energy LLC	IPP	Wallingford Energy	CT	55517	CTG7	45.0	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	50.0
2017	12	61160	Woodline Solar, LLC	IPP	Woodline Solar	OR	61559	PGRD5	8.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	8.0
2017	12	60059	ZGlobal Inc	IPP	Madera 1 PV	CA	61421	MDRA1	1.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.5
2017	12	60059	ZGlobal Inc	IPP	Valencia 1 Solar CA	CA	61418	VAL1	3.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	3.0
2018	1	61105	ABEC #2 LLC	IPP	ABEC #2 dba West-Star Dairy	CA	61501	GEN1	1.0	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	61107	ABEC #4 LLC	IPP	ABEC #4 dba CE&S Dairy	CA	61503	GEN1	1.0	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	221	Alaska Village Elec Coop, Inc	Electric Utility	Brevig Mission	AK	60260	3A	0.4	Petroleum Liquids	DFO	IC	(U) Under construction, less than or equal to 50 percent complete	0.4
2018	1	60922	Belchertown Renewables, LLC	IPP	Belchertown Renewables	MA	61295	02675	4.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.0
2018	1	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	1	4254	Consumers Energy Co	Electric Utility	Cross Winds Energy Park	MI	58830	CWEP2	44.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	44.0
2018	1	56204	Diamond Generating Corp- Ops LLC	IPP	CPV Valley Energy Center	NY	56940	CTG1	198.2	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	235.0
2018	1	56204	Diamond Generating Corp- Ops LLC	IPP	CPV Valley Energy Center	NY	56940	CTG2	198.2	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	235.0
2018	1	56204	Diamond Generating Corp- Ops LLC	IPP	CPV Valley Energy Center	NY	56940	STG	308.7	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	300.0
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	(V) Under construction, more than 50 percent complete	7.8
2018	1	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR1	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR2	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR3	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR4	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR5	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX1	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX2	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX3	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX4	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX5	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	SunE Feely 1, LLC	MN	61478	FELY1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	SunE Feely 1, LLC	MN	61478	FELY2	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	SunE Feely 1, LLC	MN	61478	FELY3	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	SunE Feely 1, LLC	MN	61478	FELY4	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	SunE Feely 1, LLC	MN	61478	FELY5	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	SunE Stolee, LLC	MN	61485	STOL1	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	SunE Stolee, LLC	MN	61485	STOL2	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	SunE Stolee, LLC	MN	61485	STOL3	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY01	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY02	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY03	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2018	1	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY04	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY05	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	1	60252	Friendswood Energy Genco, LLC	IPP	Friendswood Energy	TX	60468	GT-1	117.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	121.5
2018	1	60556	Fusion Solar Centre, L.L.C	IPP	Fusion Solar Center LLC	CT	58876	PV	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2018	1	7140	Georgia Power Co	Electric Utility	Comer Solar	GA	61554	1	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	1	9234	Indiana Municipal Power Agency	Electric Utility	IMPA Anderson Solar Park 2	IN	61054	SAND2	8.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	8.1
2018	1	60996	OEE XXV LLC	Industrial	Valfilm Wind Project	OH	61356	W1	1.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	1.5
2018	1	60996	OEE XXV LLC	Industrial	Valfilm Wind Project	OH	61356	W2	1.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	1.5
2018	1	40229	Old Dominion Electric Coop	Electric Utility	Wildcat Point Generation Facility	MD	59220	CT1	310.3	Natural Gas Fired Combined Cycle	NG	CT	(TS) Construction complete, but not yet in commercial operation	310.3
2018	1	40229	Old Dominion Electric Coop	Electric Utility	Wildcat Point Generation Facility	MD	59220	CT2	310.3	Natural Gas Fired Combined Cycle	NG	CT	(TS) Construction complete, but not yet in commercial operation	310.3
2018	1	40229	Old Dominion Electric Coop	Electric Utility	Wildcat Point Generation Facility	MD	59220	ST1	493.0	Natural Gas Fired Combined Cycle	NG	CA	(TS) Construction complete, but not yet in commercial operation	493.0
2018	1	17470	PUD 1 of Snohomish County	Electric Utility	Calligan Creek Hydroelectric Project	WA	60418	CC6MW	6.0	Conventional Hydroelectric	WAT	HY	(TS) Construction complete, but not yet in commercial operation	6.0
2018	1	17470	PUD 1 of Snohomish County	Electric Utility	Hancock Creek Hydroelectric Project	WA	60517	HY1	6.0	Conventional Hydroelectric	WAT	HY	(TS) Construction complete, but not yet in commercial operation	6.0
2018	1	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	CTG1	226.3	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	244.8
2018	1	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	CTG2	226.3	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	244.8
2018	1	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	CTG3	226.3	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	244.8
2018	1	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	STG	417.6	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	460.0
2018	1	60433	Sadiebrook Solar, LLC	IPP	Sadiebrook Solar, LLC	SC	60719	SADIE	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2018	1	60919	Sampson Road Solar, LLC	IPP	Sampson Road Solar	MA	61308	02696	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018	1	60520	SoCore Energy LLC	IPP	Lahr 1, LLC	MN	61203	PV1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV2	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV3	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV4	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV5	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	1	60520	SoCore Energy LLC	IPP	Taylors Falls CSG	MN	61428	PV1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2018	1	60163	Soltage LLC	IPP	Kelly Solar, LLC	NC	61219	KELLY	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	1	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	1	60947	Tesla Inc.	IPP	Intel - Ocotillo Campus Solar	AZ	60822	PV2	1.4	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.4
2018	1	60923	Theodore Drive Solar, LLC	IPP	Theodore Drive Solar	MA	61296	02529	1.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.5
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	1	2.0	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	2.0
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	2	2.0	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	2.0
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	3	2.0	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	2.0
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	4	2.0	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	2.0
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	5	2.0	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	2.0
2018	2	59474	BQ Energy LLC	IPP	Annapolis Solar Park, LLC	MD	60681	ASP12	12.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	12.0
2018	2	60772	Big Timber Wind, LLC	IPP	Big Timber Wind Farm	MT	61155	BT-MT	25.0	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	25.0
2018	2	60827	Carina Community Solar	IPP	Carina Community Solar	MN	61179	JCCS1	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.9
2018	2	60827	Carina Community Solar	IPP	Carina Community Solar	MN	61179	JCCS2	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.9
2018	2	60827	Carina Community Solar	IPP	Carina Community Solar	MN	61179	JCCS3	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.9
2018	2	60827	Carina Community Solar	IPP	Carina Community Solar	MN	61179	JCCS4	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.9
2018	2	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant North Sub	KS	60751	CAT1	2.0	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	2.0
2018	2	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant North Sub	KS	60751	CAT2	2.0	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	2.0
2018	2	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant North Sub	KS	60751	CAT3	2.0	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	2.0
2018	2	58519	Clean Energy Collective LLC	IPP	BHE Pueblo 2 Community Solar Array	CO	60801	PUEB2	1.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.5
2018	2	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	2	61060	Cypress Creek Renewables	IPP	Island Grove Solar	NC	61531	GEN1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	2	61060	Cypress Creek Renewables	IPP	Old Caroleen Solar Farm	NC	61534	GEN1	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	2	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Coldwater	MI	61435	AMPCW	1.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.3
2018	2	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Jackson Center	OH	61438	AMPJC	1.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.6
2018	2	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Versailles	OH	61437	AMPVS	1.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.8
2018	2	60844	Flat Top Wind I, LLC	IPP	Flat Top Wind I	TX	61212	FTWI	200.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	200.0
2018	2	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
2018	2	61109	Huneke I CSG LLC	IPP	Huneke I CSG	MN	61505	HUNE1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	2	49893	Invenergy Services LLC	IPP	Lackawanna Energy Center	PA	60357	GEN1	465.0	Natural Gas Fired Combined Cycle	NG	CS	(V) Under construction, more than 50 percent complete	555.0
2018	2	61110	Krause CSG LLC	IPP	Krause CSG	MN	61506	KRAUS	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	2	60830	Lyra Community Solar	IPP	Lyra Community Solar	MN	61182	RLCS1	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.9
2018	2	60830	Lyra Community Solar	IPP	Lyra Community Solar	MN	61182	RLCS2	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.9
2018	2	60830	Lyra Community Solar	IPP	Lyra Community Solar	MN	61182	RLCS3	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.9
2018	2	60755	Phelps 158 Solar Farm, LLC	IPP	Phelps 158 Solar Farm	NC	61134	15800	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2018	2	61108	RJC I CSG LLC	IPP	RJC I CSG	MN	61504	RCJ1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	2	60520	SoCore Energy LLC	IPP	Gopher CSG	MN	61426	PV1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2018	2	59696	Soluga Farms IV	IPP	Soluga Farms IV	NC	59934	SFIV	4.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.9
2018	2	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	2	60947	Tesla Inc.	IPP	Town of Rocky Hill	CT	61541	PV1	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	2	60947	Tesla Inc.	IPP	Town of Rocky Hill	CT	61541	PV2	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	2	60947	Tesla Inc.	IPP	Town of Rocky Hill	CT	61541	PV3	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	2	60947	Tesla Inc.	IPP	US GSA - Sacramento	CA	60846	PV1	1.1	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.1
2018	3	60112	97WI BME, LLC	IPP	Midway Solar Farm III	CA	60315	MSF3	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2018	3	60281	Altus Power America Management, LLC	IPP	Big George PV	MA	61429	12344	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	3	60831	Argo Navis Community Solar	IPP	Argo Navis Community Solar	MN	61183	UACS1	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2018	3	60831	Argo Navis Community Solar	IPP	Argo Navis Community Solar	MN	61183	UACS2	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2018	3	60831	Argo Navis Community Solar	IPP	Argo Navis Community Solar	MN	61183	UACS3	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2018	3	60750	Bear Poplar Solar, LLC	IPP	Bear Poplar Solar	NC	61130	12344	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	3	59247	Bearford Solar II, LLC	IPP	Bearford Solar II	NC	59488	BEARF	4.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.9
2018	3	59777	Buckthorn Westex, LLC	IPP	Buckthorn Solar 1	TX	60044	BKTH1	202.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	202.0
2018	3	60533	Carl Friedrich Gauss Solar LLC	IPP	Carl Friedrich Gauss Solar	NC	60882	GAUSS	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2018	3	6175	City of Falls City - (NE)	Electric Utility	Falls City	NE	2237	9	9.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.3
2018	3	58519	Clean Energy Collective LLC	Electric Utility	SCE&G Nimitz CSG	SC	61433	SCNM1	8.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	8.0
2018	3	58519	Clean Energy Collective LLC	Electric Utility	SCE&G Springfield CSG	SC	61434	SCSP1	6.1	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	6.1
2018	3	61060	Cypress Creek Renewables	IPP	Antanavica Solar	MA	61526	GEN1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	3	61060	Cypress Creek Renewables	IPP	Innovative Solar 55	NC	59676	IS044	6.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	6.5
2018	3	61060	Cypress Creek Renewables	IPP	Mustang Solar	NC	61533	GEN1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2018	3	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Orrville 3	OH	61436	AMPO3	2.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.3
2018	3	5310	Doswell Ltd Partnership	IPP	Doswell Energy Center	VA	52019	GEN8	150.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	187.0
2018	3	5310	Doswell Ltd Partnership	IPP	Doswell Energy Center	VA	52019	GEN9	150.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	187.0
2018	3	6452	Florida Power & Light Co	Electric Utility	Barefoot Bay Solar Energy Center	FL	61051	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2018	3	6452	Florida Power & Light Co	Electric Utility	Blue Cypress Solar Energy Center	FL	61029	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2018	3	6452	Florida Power & Light Co	Electric Utility	Loggerhead Solar Energy Center	FL	61052	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2018	3	59633	Great Bay Solar I LLC	IPP	Great Bay Solar 1	MD	59851	GBS01	57.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	150.0
2018	3	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S1	8.4	Other Waste Biomass	OBL	IC	(U) Under construction, less than or equal to 50 percent complete	8.4
2018	3	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S2	8.4	Other Waste Biomass	OBL	IC	(U) Under construction, less than or equal to 50 percent complete	8.4
2018	3	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S3	8.4	Other Waste Biomass	OBL	IC	(U) Under construction, less than or equal to 50 percent complete	8.4
2018	3	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S4	8.4	Other Waste Biomass	OBL	IC	(U) Under construction, less than or equal to 50 percent complete	8.4
2018	3	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S5	8.4	Other Waste Biomass	OBL	IC	(U) Under construction, less than or equal to 50 percent complete	8.4
2018	3	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S6	8.4	Other Waste Biomass	OBL	IC	(U) Under construction, less than or equal to 50 percent complete	8.4
2018	3	61102	Minnesota Solar CSG 8, LLC	IPP	Carver Gladden	MN	61495	42254	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	3	61102	Minnesota Solar CSG 8, LLC	IPP	Carver Gladden	MN	61495	42255	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	3	61102	Minnesota Solar CSG 8, LLC	IPP	Carver Gladden	MN	61495	42256	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	3	61080	North Smithfield Solar Power 1, LLC	IPP	North Smithfield Solar Power 1	RI	61461	NSS01	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	3	13781	Northern States Power Co - Minnesota	Electric Utility	Black Dog	MN	1904	6	360.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	360.0
2018	3	13781	Northern States Power Co - Minnesota	Electric Utility	Black Dog	MN	1904	6-1	215.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	238.0
2018	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
2018	3	61069	RE Gaskell West LLC	IPP	RE Gaskell West 1 LLC	CA	61445	PV1	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2018	3	60748	Salisbury Solar, LLC	IPP	Salisbury Solar	NC	61128	12349	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	3	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	CT1	229.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	238.0
2018	3	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	CT2	229.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	238.0
2018	3	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	ST1	245.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	260.0
2018	3	60495	Sunpin Holdings, LLC	IPP	Colgreen North Shore Solar Farm	CA	60825	CNS1	74.8	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.8
2018	3	60947	Tesla Inc.	IPP	Hamilton College	NY	61103	PV1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	3	60947	Tesla Inc.	IPP	Jefferson-Lewis BOCES Solar	NY	60819	PV1	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2018	3	60947	Tesla Inc.	IPP	Onondaga County- Jamesville	NY	60232	PV1	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018	3	60947	Tesla Inc.	IPP	Time Warner Cable - Knowles	NY	60904	PV1	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018	4	60571	AEP Onsite Partners	IPP	Ohio Northern University Solar Site	OH	60913	PV2	1.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.0
2018	4	61103	Adams Solar Center LLC	IPP	Adams Solar Center	OR	61496	ADAMS	10.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2018	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Hooper Bay	AK	6319	3B	0.4	Petroleum Liquids	DFO	IC	(T) Regulatory approvals received. Not under construction	0.4
2018	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Pilot Station	AK	57058	1	0.5	Petroleum Liquids	DFO	IC	(T) Regulatory approvals received. Not under construction	0.5
2018	4	59474	BQ Energy LLC	IPP	Kings Park Solar I	NY	59880	KIPS1	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2018	4	59474	BQ Energy LLC	IPP	Kings Park Solar II	NY	59881	KIPS2	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar	MN	61139	0000C	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar	MN	61139	MARM2	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar	MN	61139	MARM3	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar	MN	61139	MARM4	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar	MN	61139	MARM5	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	4	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor Station NGCC	MA	60903	1	147.5	Natural Gas Fired Combined Cycle	NG	CA	(TS) Construction complete, but not yet in commercial operation	158.4
2018	4	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor Station NGCC	MA	60903	2	147.5	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	158.4
2018	4	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor Station NGCC	MA	60903	3	217.5	Natural Gas Fired Combined Cycle	NG	CT	(TS) Construction complete, but not yet in commercial operation	240.7
2018	4	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor Station NGCC	MA	60903	4	217.5	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	240.7
2018	4	49893	Invenergy Services LLC	IPP	Santa Rita Wind Energy	TX	60987	GEN1	300.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	300.0
2018	4	61017	Lindstrom CSG 1, LLC	IPP	Lindstrom Solar	MN	61382	LIND1	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	4	61017	Lindstrom CSG 1, LLC	IPP	Lindstrom Solar	MN	61382	LIND2	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	4	61017	Lindstrom CSG 1, LLC	IPP	Lindstrom Solar	MN	61382	LIND3	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	4	59124	NTE Ohio LLC	IPP	Middletown Energy Center	OH	59326	MEC1	257.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310.2
2018	4	59124	NTE Ohio LLC	IPP	Middletown Energy Center	OH	59326	MEC2	227.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	233.7
2018	4	60443	Rattlesnake Power, LLC	IPP	Rattlesnake Power, LLC	TX	60743	WT1	160.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	160.0
2018	4	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES1	9.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.3
2018	4	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES2	9.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.3
2018	4	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES3	9.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.3
2018	4	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES4	9.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.3
2018	4	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES5	9.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.3
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar	MN	61384	STCL1	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar	MN	61384	STCL2	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar	MN	61384	STCL3	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar	MN	61384	STCL4	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar	MN	61384	STCL5	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	4	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	4	58658	Sunlight Partners	IPP	Anna Solar	NC	60176	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	4	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	4	58658	Sunlight Partners	IPP	Bonnie Solar	NC	60175	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	4	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	4	58658	Sunlight Partners	IPP	Cardinal Solar	NC	60174	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	4	58658	Sunlight Partners	IPP	Carter Solar	NC	60167	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2018	4	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	4	58658	Sunlight Partners	IPP	Christina Solar	NC	60172	PV1	3.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.0
2018	4	58658	Sunlight Partners	IPP	Clayton Solar	NC	60171	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	4	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	4	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	4	58658	Sunlight Partners	IPP	Hawk Solar	NC	60163	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2018	4	58658	Sunlight Partners	IPP	Heedeh Solar	NC	60157	PV1	4.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.5
2018	4	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	4	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	4	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	4	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	4	58658	Sunlight Partners	IPP	Jordan Solar	NC	60164	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	4	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	4	58658	Sunlight Partners	IPP	Kathleen Solar	NC	60180	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	4	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	4	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	4	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	4	58658	Sunlight Partners	IPP	Sadie Solar	NC	60168	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2018	4	58658	Sunlight Partners	IPP	Shelter Solar	NC	60156	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	4	58658	Sunlight Partners	IPP	Signature Solar	NC	60155	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2018	4	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	4	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	4	60059	ZGlobal Inc	IPP	Merced 1 PV	CA	61420	MRCD1	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0
2018	5	60899	Bear Creek Solar Center, LLC	IPP	Bear Creek Solar Center	OR	61281	BCRSC	10.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2018	5	19002	CPV Towantic, LLC	IPP	CPV Towantic Energy Center	CT	56047	CTG1	233.6	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	280.5
2018	5	19002	CPV Towantic, LLC	IPP	CPV Towantic Energy Center	CT	56047	CTG2	233.6	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	280.5
2018	5	19002	CPV Towantic, LLC	IPP	CPV Towantic Energy Center	CT	56047	STG	277.8	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	280.5
2018	5	6455	Duke Energy Florida, LLC	Electric Utility	Citrus County Combined Cycle Plant	FL	60138	1GTA	251.7	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310.3
2018	5	6455	Duke Energy Florida, LLC	Electric Utility	Citrus County Combined Cycle Plant	FL	60138	1GTB	251.7	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310.3
2018	5	6455	Duke Energy Florida, LLC	Electric Utility	Citrus County Combined Cycle Plant	FL	60138	CC1ST	316.7	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	364.7
2018	5	61104	Elbe Solar Center LLC	IPP	Elbe Solar Center	OR	61497	ELBE	10.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2018	5	61070	Foundation CA Fund IX Manager, LLC	IPP	Foundation California Training Facility	CA	61442	WTG1	1.8	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	1.8
2018	5	58901	Hydro Green Energy	IPP	Braddock Lock and Dam	PA	59091	GEN1	5.3	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	5.3
2018	5	59675	Moxie Freedom LLC	IPP	Moxie Freedom Generation Plant	PA	59906	GEN1	490.0	Natural Gas Fired Combined Cycle	NG	CC	(U) Under construction, less than or equal to 50 percent complete	529.0
2018	5	59675	Moxie Freedom LLC	IPP	Moxie Freedom Generation Plant	PA	59906	GEN2	490.0	Natural Gas Fired Combined Cycle	NG	CC	(U) Under construction, less than or equal to 50 percent complete	529.0
2018	5	60100	PSEG Keys Energy Center, LLC	IPP	Keys Energy Center	MD	60302	10	327.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	359.0
2018	5	60100	PSEG Keys Energy Center, LLC	IPP	Keys Energy Center	MD	60302	11	214.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	235.0
2018	5	60100	PSEG Keys Energy Center, LLC	IPP	Keys Energy Center	MD	60302	12	214.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	235.0
2018	5	59701	RE Tranquillity 8 LLC	IPP	RE Tranquility 8	CA	59940	TQ8	200.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	205.3
2018	5	60947	Tesla Inc.	IPP	Broome County	NY	60507	NORTH	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018	5	60947	Tesla Inc.	IPP	Broome County	NY	60507	SOUTH	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018	6	60366	BRE NC Solar 2, LLC	IPP	BRE NC Solar 2	NC	60626	BEAM2	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	6	60367	BRE NC Solar 3, LLC	IPP	BRE NC Solar 3	NC	60627	BEAM3	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	6	60368	BRE NC Solar 4, LLC	IPP	BRE NC Solar 4	NC	60628	BEAM4	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	6	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	6	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	6	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	6	56769	Consolidated Edison Development Inc.	IPP	Castle Gap Solar	TX	60123	CGAP	180.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	180.0
2018	6	59997	Customized Energy Solutions	IPP	ESS Fairgrounds	MD	60215	ESSFG	4.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	4.0
2018	6	59997	Customized Energy Solutions	IPP	ESS Wesel	MD	60214	ESSWL	6.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	6.0
2018	6	58970	Ecoplexus, Inc	IPP	Manning PV 1	NC	59520	MANN	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	6	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
2018	6	60147	Enerparc Solar Development, LLC	IPP	Gastonia Solar Center	NC	60359	60916	4.3	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	4.3
2018	6	61070	Foundation CA Fund IX Manager, LLC	IPP	Foundation Salinas Valley State Prison	CA	61444	WTG1	1.8	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	1.8
2018	6	60251	GRP Franklin Renewable Energy Facility, LLC	IPP	GRP Franklin Renewable Energy Facility	GA	60550	GEN	93.5	Wood/Wood Waste Biomass	WDS	ST	(P) Planned for installation, but regulatory approvals not initiated	93.5
2018	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
2018	6	60747	Gamble Solar, LLC	IPP	Gamble Solar	NC	61127	12348	3.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.0
2018	6	60886	Gray Hawk Solar, LLC	IPP	Gray Hawk Solar	AZ	61272	GHS	55.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	55.0
2018	6	60849	Green Beanworks C, LLC	IPP	Green Beanworks C PV	CA	61215	GBWXC	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2018	6	60850	Green Beanworks D, LLC	IPP	Green Beanworks D PV	CA	61216	GBWXD	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2018	6	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
2018	6	60356	Hexagon Energy	IPP	Bay Branch Solar	NC	60601	BBSOL	4.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.5
2018	6	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	GT1	207.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	207.0
2018	6	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	GT2	207.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	207.0
2018	6	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	STG1	230.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	230.0
2018	6	58822	MC Power Companies Inc	IPP	El Dorado Springs Solar Farm	MO	61566	EDSF1	2.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.5
2018	6	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
2018	6	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
2018	6	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
2018	6	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
2018	6	60471	Mt. Tom Solar, LLC	IPP	Mt. Tom Solar Project	MA	60906	BA1	3.1	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	3.1
2018	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
2018	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
2018	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
2018	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
2018	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
2018	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
2018	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
2018	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
2018	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
2018	6	58477	O2energies, Inc.	IPP	Five Forks Solar	NC	59951	5FRK	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2018	6	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	6	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	701	321.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	430.0
2018	6	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	702	219.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	287.0
2018	6	60735	Pristine Sun Fund 8, LLC	IPP	SCWA R5 Pond Solar	CA	61123	SKYR5	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2018	6	18642	Tennessee Valley Authority	Electric Utility	Allen Combined Cycle Plant	TN	60671	CTG1	311.9	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	347.0
2018	6	18642	Tennessee Valley Authority	Electric Utility	Allen Combined Cycle Plant	TN	60671	CTG2	311.9	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	347.0
2018	6	18642	Tennessee Valley Authority	Electric Utility	Allen Combined Cycle Plant	TN	60671	STG1	428.3	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	476.9
2018	6	60947	Tesla Inc.	IPP	Lancaster SCE ReMAT	CA	61081	PV1	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2018	6	60817	Winton Solar 2 LLC	IPP	Winton Solar 2	NC	61188	PV1	1.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	1.0
2018	7	61006	Bearkat TE Partnership LLC	IPP	Bearkat	TX	59972	BRKAT	360.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	360.0
2018	7	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
2018	7	3265	Cleco Power LLC	Electric Utility	St. Mary Clean Energy Center	LA	60610	1	47.9	All Other	WH	OT	(P) Planned for installation, but regulatory approvals not initiated	58.2
2018	7	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
2018	7	5701	El Paso Electric Co	Electric Utility	Holloman Solar Facility	NM	60301	HPV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2018	7	60953	Farmingdale Fuel Cell, LLC	Electric CHP	Farmingdale Fuel Cell	NY	61317	MB-21	1.4	Other Natural Gas	NG	FC	(P) Planned for installation, but regulatory approvals not initiated	1.4
2018	7	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
2018	7	60470	Jersey Holdings LLC	IPP	Jersey Holdings	NC	60784	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	7	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	7	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
2018	7	60647	RES Cactus Flats Wind Energy, LLC	IPP	Cactus Flats Wind Energy Project	TX	61001	WT1	150.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	150.0
2018	7	59010	Rhubarb One LLC	IPP	Rhubarb One	NC	59216	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	7	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
2018	7	60334	SR Millington, LLC	IPP	Millington Solar Farm	TN	60560	MILL	53.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	53.0
2018	7	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
2018	7	59318	Soy Solar LLC	IPP	Soy Solar	NC	59571	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	7	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
2018	7	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
2018	7	59098	Trishe Wind Ohio LLC	IPP	Trishe Wind Ohio LLC	OH	59296	NWOH1	100.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	100.0
2018	7	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
2018	7	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	8	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

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	8	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	8	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	8	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
2018	8	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
2018	8	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	8	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	8	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	8	18445	City of Tallahassee - (FL)	Electric Utility	Sub 12	FL	61080	IC1	9.3	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	9.3
2018	8	18445	City of Tallahassee - (FL)	Electric Utility	Sub 12	FL	61080	IC2	9.3	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	9.3
2018	8	57484	Foundation CA Fund V Manager, LLC	IPP	Foundation NWNA	CA	58114	WTG3	1.9	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	1.9
2018	8	60399	GASNA 6P, LLC	IPP	San Joaquin Solar	CA	60678	SJ1A	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2018	8	60399	GASNA 6P, LLC	IPP	San Joaquin Solar	CA	60678	SJ1B	1.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.5
2018	8	60878	Green Beanworks B, LLC	IPP	Green Beanworks B PV	CA	61339	GBWXB	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2018	8	11208	Los Angeles Department of Water & Power	Electric Utility	Beacon BESS 1	CA	61431	BCNB1	20.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	20.0
2018	8	59123	NTE Carolinas, LLC	IPP	Kings Mountain Energy Center	NC	59325	KMEC1	259.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310.2
2018	8	59123	NTE Carolinas, LLC	IPP	Kings Mountain Energy Center	NC	59325	KMEC2	227.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	233.7
2018	8	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	8A	122.0	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	122.0
2018	8	60947	Tesla Inc.	IPP	Oswego County - Fulton Solar	NY	60818	PV1	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018	8	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	9	60876	Antelope Expansion 2, LLC	IPP	Antelope Expansion 2	CA	61264	ANTX2	105.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	105.0
2018	9	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
2018	9	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
2018	9	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	9	60910	Sun Farm V, LLC	IPP	Sun Farm V, LLC	NC	61287	SF5PV	4.8	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2018	9	59840	Wallace Solar 2 LLC	IPP	Wallace Solar 2	NC	60090	2MWPV	1.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.9
2018	10	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 6	105.3	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	105.3
2018	10	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 7	105.3	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	105.3
2018	10	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 8	105.3	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	105.3
2018	10	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
2018	10	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
2018	10	61054	Fluvanna Wind Energy 2 LLC	IPP	Gopher Creek Wind Farm	TX	61417	GCWF	158.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	158.0
2018	10	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
2018	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
2018	10	61101	Minnesota Solar CSG 1, LLC	IPP	Wright Cuddyer	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	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	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	MN	61494	41330	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	10	15466	Public Service Co of Colorado	Electric Utility	Rush Creek Wind	CO	60619	GEN1	576.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	600.0
2018	10	17633	Southern Indiana Gas & Elec Co	Electric Utility	Oak Hill Solar Array	IN	61333	OHSA1	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2018	10	17633	Southern Indiana Gas & Elec Co	Electric Utility	Volkman Road Solar Array	IN	61334	VRSA1	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2018	10	17633	Southern Indiana Gas & Elec Co	Electric Utility	Volkman Road Solar Array	IN	61334	VRSA2	1.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	1.0
2018	10	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
2018	10	59056	Tri Global Energy, LLC	IPP	Tex-Mex Renewable Energy Project, LLC	TX	60269	WT1	80.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	80.0
2018	11	60691	AES LAWAI SOLAR, LLC	IPP	AES LAWAI SOLAR	HI	61068	LAWA1	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2018	11	60691	AES LAWAI SOLAR, LLC	IPP	AES LAWAI SOLAR	HI	61068	LAWA2	20.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	20.0
2018	11	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT6	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	161.9
2018	11	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT7	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	161.9
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 9	105.3	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	105.3
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC10	105.3	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	105.3
2018	11	60656	Chestnut Solar LLC	IPP	Chestnut Solar	NC	61011	PV1	74.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.9
2018	11	58840	Copenhagen Wind Farm, LLC	IPP	Copenhagen Wind Farm	NY	58979	CPHGN	79.9	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	79.9
2018	11	6455	Duke Energy Florida, LLC	Electric Utility	Citrus County Combined Cycle Plant	FL	60138	2GTA	251.7	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310.3
2018	11	6455	Duke Energy Florida, LLC	Electric Utility	Citrus County Combined Cycle Plant	FL	60138	2GTB	251.7	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310.3
2018	11	6455	Duke Energy Florida, LLC	Electric Utility	Citrus County Combined Cycle Plant	FL	60138	CC2ST	316.7	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	364.7
2018	11	49893	Invenergy Services LLC	IPP	Lackawanna Energy Center	PA	60357	GEN2	465.0	Natural Gas Fired Combined Cycle	NG	CS	(U) Under construction, less than or equal to 50 percent complete	555.0
2018	11	15248	Portland General Electric Co	Electric Utility	Timothy Lake Powerhouse	OR	60868	1	1.2	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	1.2
2018	11	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
2018	12	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
2018	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
2018	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
2018	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
2018	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
2018	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
2018	12	59714	Antrim Wind Energy LLC	IPP	Antrim Wind	NH	59953	AWND1	28.4	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	28.8
2018	12	59725	Ariel Solar, LLC	IPP	Bloomsbury Solar, LLC	NC	59970	BLOOM	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2018	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
2018	12	15399	Avangrid Renewables LLC	IPP	La Joya NM	NM	61044	WT1	400.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	400.0
2018	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
2018	12	15399	Avangrid Renewables LLC	IPP	WyEast Solar	OR	61345	PV1	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2018	12	59359	BHE Renewables, LLC	IPP	Walnut Ridge Wind Farm	IL	58694	1	212.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	212.0
2018	12	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
2018	12	60328	Big Level Wind LLC	IPP	Big Level Wind	PA	60551	BLW01	90.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	90.0
2018	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	(P) Planned for installation, but regulatory approvals not initiated	40.0
2018	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	(P) Planned for installation, but regulatory approvals not initiated	40.0
2018	12	60476	Bluebell Solar, LLC	IPP	Bluebell Solar	TX	60789	UNIT1	30.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	30.0
2018	12	58190	Bluestem LLC	IPP	Seward Wind Farm	NE	61056	T1	1.7	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	1.7
2018	12	58190	Bluestem 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
2018	12	58190	Bluestem 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
2018	12	59365	Capital Power Corporation	IPP	New Frontier Wind	ND	59903	GEN	99.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	99.0
2018	12	58508	Carolina Solar Energy II LLC	IPP	Brantley Solar	NC	60623	PV1	50.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	50.2
2018	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
2018	12	58508	Carolina Solar Energy II LLC	IPP	Fox Creek Solar	NC	60624	PV1	50.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	50.2
2018	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
2018	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
2018	12	58508	Carolina Solar Energy II LLC	IPP	Tides Lane Farm	NC	60429	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2018	12	58391	Chilocco Wind Farm LLC	IPP	Chilocco Wind Farm	OK	58406	1	76.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	76.5
2018	12	58391	Chilocco Wind Farm LLC	IPP	Chilocco Wind Farm	OK	58406	2	76.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	76.5
2018	12	60609	Clean Focus Renewables, Inc.	IPP	Rugged Solar LLC	CA	57960	1	80.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	80.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2018	12	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
2018	12	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
2018	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
2018	12	56769	Consolidated Edison Development Inc.	IPP	Panoche Valley Solar Farm	CA	57340	1	240.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	240.0
2018	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
2018	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
2018	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
2018	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
2018	12	58695	Coronal Development Services	IPP	Latitude Solar Center	TN	61412	LATSC	15.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	15.0
2018	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
2018	12	5109	DTE Electric Company	Electric Utility	Pine River Wind Park	MI	61106	1	161.3	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	161.3
2018	12	56215	E ON Climate Renewables N America LLC	IPP	Stella Wind Farm	TX	59063	WT1	201.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	201.0
2018	12	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT1	8.7	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	8.9
2018	12	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT2	8.7	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	8.9
2018	12	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT3	8.7	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	8.9
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	E Nash PV1	NC	60002	NASH1	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2018	12	58970	Ecoplexus, Inc	IPP	Everett PV1	NC	60997	EVRT1	10.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2018	12	58970	Ecoplexus, Inc	IPP	Grandy PV 1	NC	59518	GRAND	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2018	12	58970	Ecoplexus, Inc	IPP	High Shoals PV1	NC	59997	HISHO	16.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	16.0
2018	12	58970	Ecoplexus, Inc	IPP	Round Hill PV1	NC	59998	RNDHL	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	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
2018	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
2018	12	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
2018	12	58135	Ecos Energy LLC	IPP	Lake Perris Solar	CA	60973	LKPR	1.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.5
2018	12	58135	Ecos Energy LLC	IPP	San Jacinto Solar	CA	60972	SJAC	1.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.5
2018	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
2018	12	60603	Eisenhower Solar, LLC	IPP	Eisenhower Solar	NC	60963	PV1	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2018	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
2018	12	58672	Everpower Wind Holdings Inc	IPP	Mason Dixon Wind Farm	PA	60212	1	76.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	76.0
2018	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
2018	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
2018	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
2018	12	6035	Exelon Power	IPP	Exelon West Medway II LLC	MA	59882	4	97.4	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	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	(L) Regulatory approvals pending. Not under construction	100.0
2018	12	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
2018	12	59745	First Solar Asset Management	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	56615	First Solar Project Development	IPP	Aiya Solar Project	NV	59869	GEN01	100.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	100.0
2018	12	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
2018	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
2018	12	56615	First Solar Project Development	IPP	Willow Spring Solar, LLC	CA	60324	GEN01	100.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	100.0
2018	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
2018	12	58146	Gaelectric LLC	IPP	Jawbone Wind Project	MT	58175	JWPI	131.1	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	131.1
2018	12	60259	Green River Wind Farm, LLC	IPP	Green River Wind Farm	IL	60471	GRNRV	212.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	212.0
2018	12	60222	Haida Energy, Inc.	Electric Utility	Hilangaay Hydro	AK	59037	GEN 1	5.0	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	5.0
2018	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
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	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
2018	12	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
2018	12	59439	Innovative Solar 54, LLC	IPP	Innovative Solar 54	NC	59669	IS054	50.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	50.0
2018	12	59448	Innovative Solar 67, LLC	IPP	Innovative Solar 67	NC	59678	IS067	33.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	33.3
2018	12	49893	Invenergy Services LLC	IPP	Lackawanna Energy Center	PA	60357	GEN3	465.0	Natural Gas Fired Combined Cycle	NG	CS	(U) Under construction, less than or equal to 50 percent complete	555.0
2018	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
2018	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
2018	12	59678	KDC Solar PR1, LLC	IPP	KDC Solar PR1, LLC	NJ	59910	SF	22.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	22.0
2018	12	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
2018	12	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
2018	12	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
2018	12	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
2018	12	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
2018	12	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
2018	12	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
2018	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
2018	12	11664	Mark Technologies Corp	IPP	Alta Mesa Project Phase IV	CA	55352	GEN1	40.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	40.0
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	4202	Phillips 66-Ponca City Refinery	Industrial	Ponca City Refinery	OK	52188	G1A	3.0	Other Gases	OG	ST	(P) Planned for installation, but regulatory approvals not initiated	5.0
2018	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
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	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
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	58860	Southbridge Recycling and Disposal Park	IPP	Southbridge Landfill Gas-to-Energy	MA	59011	CAT2	1.5	Landfill Gas	LFG	IC	(P) Planned for installation, but regulatory approvals not initiated	1.6
2018	12	60523	Springfield Project Development LLC	IPP	Homestead Wind LLC	IL	60871	HOMES	35.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	35.0
2018	12	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
2018	12	59138	SunPower Corporation, Systems	IPP	Aragonne Solar LLC	NM	59252	PV1	38.4	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	40.0
2018	12	61005	Sweetwater Solar LLC	IPP	Sweetwater Solar	WY	61369	PV1	80.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	80.0
2018	12	60249	Tenaska Pennsylvania Partners, LLC	IPP	Tenaska Westmoreland Generating Station	PA	60464	CTG1	276.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 50 percent complete	394.0
2018	12	59056	Tri Global Energy, LLC	IPP	Canyon Wind Project, LLC	TX	60271	WT1	300.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	300.0
2018	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
2018	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
2018	12	59056	Tri Global Energy, LLC	IPP	Lorenzo Wind	TX	59244	FIBE1	80.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	80.0
2018	12	60602	Tyler Solar, LLC	IPP	Tyler Solar	NC	60970	PV1	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2018	12	19511	University of Alaska	Commercial	University of Alaska Fairbanks	AK	50711	GEN5	17.0	Conventional Steam Coal	SUB	ST	(U) Under construction, less than or equal to 50 percent complete	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	(L) Regulatory approvals pending. Not under construction	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	(L) Regulatory approvals pending. Not under construction	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	(L) Regulatory approvals pending. Not under construction	369.8

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
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	(L) Regulatory approvals pending. Not under construction	663.9
2018	12	19876	Virginia Electric & Power Co	Electric Utility	Hollyfield	VA	61023	1	6.8	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	17.0
2018	12	60694	Washburn Wind Energy LLC	IPP	Washburn Wind Farm	IA	61071	WASH	70.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	70.0
2018	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
2018	12	20421	Western Minnesota Mun Pwr Agny	Electric Utility	Red Rock Hydro Plant	IA	58434	1	27.5	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	18.2
2018	12	20421	Western Minnesota Mun Pwr Agny	Electric Utility	Red Rock Hydro Plant	IA	58434	2	27.5	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	18.2
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	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
2018	12	59731	Windham Solar LLC	IPP	Lebanon Solar 2	CT	59992	LEB2	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	12	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018	12	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018	12	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018	12	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018	12	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	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
2019	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
2019	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
2019	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
2019	1	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT5	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	161.9
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC1	18.5	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	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	(P) Planned for installation, but regulatory approvals not initiated	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	(P) Planned for installation, but regulatory approvals not initiated	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	(P) Planned for installation, but regulatory approvals not initiated	18.8
2019	1	58519	Clean Energy Collective LLC	Electric Utility	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	1	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
2019	1	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
2019	1	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
2019	1	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
2019	1	59458	Landfill Energy Systems Florida	IPP	Sarasota County LFGTE Facility	FL	59686	LESF4	1.6	Landfill Gas	LFG	IC	(P) Planned for installation, but regulatory approvals not initiated	1.6
2019	1	58718	Na Pua Makani Power Partners LLC	IPP	Na Pua Makani Wind Project	HI	58837	WT1	25.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	25.0
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	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	2	60840	93LF 8me LLC	IPP	Mount Signal Solar Farm 3	CA	61202	MTSG3	252.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	252.3
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	(P) Planned for installation, but regulatory approvals not initiated	65.0
2019	3	9417	Interstate Power and Light Co	Electric Utility	Upland Prairie	IA	61564	1	299.3	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	299.3
2019	3	56545	Pattern Operators LP	IPP	Grady Wind Energy Center, LLC	NM	60317	1	200.8	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.8
2019	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
2019	3	59056	Tri Global Energy, LLC	IPP	Crosby County Wind Farm, LLC	TX	60273	WT1	160.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	160.0
2019	4	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT3	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	161.9
2019	4	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT4	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	161.9
2019	4	58409	Future Power PA	IPP	Good Spring NGCC Facility	PA	58409	GT1	232.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	250.0
2019	4	58409	Future Power PA	IPP	Good Spring NGCC Facility	PA	58409	ST1	108.0	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	108.0
2019	4	15473	Public Service Co of NM	Electric Utility	La Luz Energy Center	NM	58284	0002	40.2	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	42.3
2019	4	59056	Tri Global Energy, LLC	IPP	Changing Winds	TX	59243	CHAN1	288.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	288.0
2019	5	60672	Birdsboro Power LLC	IPP	Birdsboro Power	PA	61035	GEN1	476.0	Natural Gas Fired Combined Cycle	NG	CC	(L) Regulatory approvals pending. Not under construction	488.0
2019	5	2172	Brazos Electric Power Coop Inc	Electric Utility	Hill County Generation Facility	TX	60194	CT1	205.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	232.0
2019	5	2172	Brazos Electric Power Coop Inc	Electric Utility	Hill County Generation Facility	TX	60194	CT2	205.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	232.0
2019	5	2172	Brazos Electric Power Coop Inc	Electric Utility	Hill County Generation Facility	TX	60194	CT3	205.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	232.0
2019	5	2172	Brazos Electric Power Coop Inc	Electric Utility	Hill County Generation Facility	TX	60194	CT4	205.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	232.0
2019	5	56987	RRE Austin Solar LLC	IPP	Pflugerville Solar Farm	TX	57659	PSF	120.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	120.0
2019	5	17718	Southwestern Public Service Co	Electric Utility	Gaines County	TX	60697	GC-1	186.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	225.0
2019	5	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	(L) Regulatory approvals pending. Not under construction	18.3
2019	5	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	(L) Regulatory approvals pending. Not under construction	18.3
2019	5	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	(L) Regulatory approvals pending. Not under construction	18.3
2019	5	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	(L) Regulatory approvals pending. Not under construction	18.3
2019	5	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	(L) Regulatory approvals pending. Not under construction	18.3
2019	5	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	(L) Regulatory approvals pending. Not under construction	18.3
2019	5	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	(L) Regulatory approvals pending. Not under construction	18.3
2019	5	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	(L) Regulatory approvals pending. Not under construction	18.3
2019	5	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	(L) Regulatory approvals pending. Not under construction	18.3
2019	5	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	(L) Regulatory approvals pending. Not under construction	18.3
2019	6	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	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
2019	6	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
2019	6	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
2019	6	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	6	11241	Entergy Louisiana LLC	Electric Utility	St. Charles Power Station (LA)	LA	60926	1A	250.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 50 percent complete	500.0
2019	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
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	(L) Regulatory approvals pending. Not under construction	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	(L) Regulatory approvals pending. Not under construction	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	(L) Regulatory approvals pending. Not under construction	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	(L) Regulatory approvals pending. Not under construction	593.3
2019	6	61037	Foard City Wind, LLC	IPP	Foard City Wind	TX	61402	FOARD	350.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	350.0
2019	6	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
2019	6	60002	Halyard Energy Wharton, LLC	IPP	Halyard Wharton Energy Center	TX	60221	TBN1	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	232.0
2019	6	60002	Halyard Energy Wharton, LLC	IPP	Halyard Wharton Energy Center	TX	60221	TBN2	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	232.0
2019	6	59487	Moundsville Power, LLC	IPP	Moundsville Power	WV	59720	MPCA1	224.9	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	321.6
2019	6	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
2019	6	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
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	59101	NTE Texas, LLC	IPP	Pecan Creek Energy Center	TX	59298	PCEC1	133.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	171.8
2019	6	59101	NTE Texas, LLC	IPP	Pecan Creek Energy Center	TX	59298	PCEC2	133.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	171.8
2019	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
2019	6	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

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	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	6	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	6	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	6	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	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
2019	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
2019	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
2019	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
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	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
2019	6	20159	Washington Parish Engy Ctr LLC	IPP	Washington Parish Energy Center	LA	55486	CTG1	172.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	200.0
2019	6	20159	Washington Parish Engy Ctr LLC	IPP	Washington Parish Energy Center	LA	55486	CTG2	172.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	200.0
2019	6	20159	Washington Parish Engy Ctr LLC	IPP	Washington Parish Energy Center	LA	55486	ST1	215.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	255.0
2019	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
2019	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
2019	7	59235	Cogentrix Development Holdings, LLC	IPP	Buckeye Generation Center, LLC	AZ	59471	CTG01	104.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	108.7
2019	7	59235	Cogentrix Development Holdings, LLC	IPP	Buckeye Generation Center, LLC	AZ	59471	CTG02	104.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	108.7
2019	7	59235	Cogentrix Development Holdings, LLC	IPP	Buckeye Generation Center, LLC	AZ	59471	CTG03	104.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	108.7
2019	7	59235	Cogentrix Development Holdings, LLC	IPP	Buckeye Generation Center, LLC	AZ	59471	CTG04	104.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	108.7
2019	7	59235	Cogentrix Development Holdings, LLC	IPP	Buckeye Generation Center, LLC	AZ	59471	CTG05	104.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	108.7
2019	7	59235	Cogentrix Development Holdings, LLC	IPP	Buckeye Generation Center, LLC	AZ	59471	CTG06	104.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	108.7
2019	7	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
2019	7	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
2019	7	59137	Palmer Renewable Energy	IPP	Palmer Renewable Energy	MA	59336	PRE	42.0	Wood/Wood Waste Biomass	WDS	ST	(L) Regulatory approvals pending. Not under construction	42.0
2019	7	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
2019	8	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
2019	8	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
2019	9	60719	Broadlands Wind Farm LLC	IPP	Broadlands Wind Farm	IL	61161	GEN01	300.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	300.0
2019	9	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	59683	Rockwood Energy Center LLC	IPP	Rockwood Energy Center LLC	TX	59918	ROCKW	1,068.0	Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	1,068.0
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	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
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	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	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	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	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	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
2019	11	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
2019	11	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
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	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	Karankawa Wind LLC	TX	61343	WT1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	15399	Avangrid Renewables LLC	IPP	Montague Wind Power Facility LLC	OR	58099	1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	15399	Avangrid Renewables LLC	IPP	Otter Creek Wind Farm LLC	IL	61344	WT1	129.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	129.0
2019	12	15399	Avangrid Renewables LLC	IPP	Tatanka Ridge	SD	61046	WT1	98.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	98.0
2019	12	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	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
2019	12	60289	Blazing Star Wind Farm, LLC	IPP	Blazing Star Wind Farm 1	MN	60504	BLZG1	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0
2019	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
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	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
2019	12	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
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	60288	Cattle Ridge Wind Farm, 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	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	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	58672	Everpower Wind Holdings Inc	IPP	Baron Winds Farm	NY	60596	1	250.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	250.0
2019	12	58672	Everpower Wind Holdings Inc	IPP	Buckeye Wind Farm	OH	58776	1	100.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	100.0
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	Coyote Crest Wind Farm	WA	58778	1	127.5	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	127.5
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	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	60405	FDS Coke Plant, LLC	Electric CHP	FDS Co-Generation Facility	OH	60693	1	110.0	Other Gases	OG	ST	(T) Regulatory approvals received. Not under construction	135.0
2019	12	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
2019	12	56615	First Solar Project Development	IPP	North Rosamond Solar LLC	CA	59879	GEN01	150.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	150.0
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

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	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	(L) Regulatory approvals pending. Not under construction	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	(L) Regulatory approvals pending. Not under construction	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	(L) Regulatory approvals pending. Not under construction	102.0
2019	12	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
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	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	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	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	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	61004	Midway Solar LLC	IPP	Midway Solar - TX	TX	61368	PV1	182.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	182.0
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
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	60604	Mountain Lion Solar, LLC	IPP	Mountain Lion Solar	NC	60950	PV1	1.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.7
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	25.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	25.0
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	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	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	I-A	687.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	687.0
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	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	60601	River Otter Solar, LLC	IPP	River Otter Solar	NC	60969	PV1	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	12	60897	Salinas Valley Solid Waste Authority	IPP	Crazy Horse Solar Project	CA	61285	PV1	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	12	16609	San Diego Gas & Electric Co	Electric Utility	Top Gun Energy Storage	CA	61366	TGES	10.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	10.0
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	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	58661	Sustainable Power Group, LLC	IPP	ESI Project	CA	50819	SHWA	13.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	13.0
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	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	20323	Wellhead Services Inc	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
2019	12	20323	Wellhead Services Inc	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
2019	12	20323	Wellhead Services Inc	IPP	Stanton Energy Reliability Center	CA	60698	GT3	45.9	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	60.5
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	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	13478	Entergy New Orleans Inc	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	Sun Streams, LLC	AZ	60827	GEN01	150.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	150.0
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	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
2020	1	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
2020	1	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
2020	1	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	CTG3	225.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	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	(T) Regulatory approvals received. Not under construction	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	(T) Regulatory approvals received. Not under construction	260.1
2020	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
2020	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
2020	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
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	2	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2020	2	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
2020	2	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
2020	3	60350	CPV Fairview, LLC	IPP	CPV Fairview Energy Center	PA	60589	GEN1	1,100.0	Natural Gas Fired Combined Cycle	NG	CC	(L) Regulatory approvals pending. Not under construction	1,100.0
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	9417	Interstate Power and Light Co	Electric Utility	English Farms	IA	61565	1	169.9	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	169.9
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	17539	South Carolina Electric&Gas Company	Electric Utility	V C Summer	SC	6127	2	1,100.0	Nuclear	NUC	ST	(U) Under construction, less than or equal to 50 percent complete	1,100.0
2020	5	60385	Energy Nuevo Storage Farm	Industrial	Energy Nuevo Storage Farm	CA	60646	NUEVO	20.0	Flywheels	MWH	FW	(P) Planned for installation, but regulatory approvals not initiated	20.0
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	GTG1	41.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	41.0
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	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	(L) Regulatory approvals pending. Not under construction	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	(L) Regulatory approvals pending. Not under construction	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	(L) Regulatory approvals pending. Not under construction	500.0
2020	6	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
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	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	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
2020	6	59490	Neches Station, LLC	IPP	Neches Station, LLC	TX	59716	CTG1	223.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	232.0
2020	6	59490	Neches Station, LLC	IPP	Neches Station, LLC	TX	59716	CTG2	223.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	232.0
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	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	6	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	6	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	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	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	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
2020	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
2020	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
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	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	7	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	7	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	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	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
2020	8	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
2020	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
2020	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
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	60388	Mission Rock Energy Center, LLC	IPP	Mission Rock Energy Center	CA	60650	BA1	25.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	25.0
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	10	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK3	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	10	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK3	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	10	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	57028	West Butte Wind Power LLC	IPP	West Butte Wind Power Project	OR	57704	WB-1	104.5	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	104.5
2020	11	49880	EDP Renewables North America 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	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	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK4	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	12	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK4	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	12	59365	Capital Power Corporation	IPP	Hopeful Solar LLC	GA	59892	GEN	20.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.7
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	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
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	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	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
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	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	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
2020	12	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
2020	12	17539	South Carolina Electric&Gas Company	Electric Utility	V C Summer	SC	6127	3	1,100.0	Nuclear	NUC	ST	(U) Under construction, less than or equal to 50 percent complete	1,100.0
2020	12	58763	Summit Ridge Wind Holdings, LLC	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2020	12	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
2021	1	58702	AES Energy Storage	IPP	AES ES ALAMITOS, LLC	CA	61204	ALMTS	100.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	100.0
2021	1	61033	Boswell Wind Project I, LLC	IPP	Boswell Wind I	WY	61393	BOSW1	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	1	61034	Boswell Wind Project II, LLC	IPP	Boswell Wind II	WY	61394	BOSW2	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	1	61035	Boswell Wind Project III, LLC	IPP	Boswell Wind III	WY	61395	BOSW3	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	1	61036	Boswell Wind Project IV, LLC	IPP	Boswell Wind IV	WY	61396	BOSW4	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	1	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	1	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	1	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	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	19876	Virginia Electric & Power Co	Electric Utility	VA Offshore Wind Project (VOWTAP)	VA	59693	OSW1	12.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	12.0
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	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	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
2021	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
2021	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
2021	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
2021	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
2021	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
2021	6	59965	ESC Tioga County Power	IPP	ESC Tioga County Power	PA	60205	TCCA1	302.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	331.5
2021	6	59965	ESC Tioga County Power	IPP	ESC Tioga County Power	PA	60205	TCCT1	253.1	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2021	6	59965	ESC Tioga County Power	IPP	ESC Tioga County Power	PA	60205	TCCT2	253.1	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2021	6	58597	Enivromission, Inc	IPP	La Paz Solar Tower	AZ	58652	1	200.0	Solar Thermal without Energy Storage	SUN	OT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2021	6	55937	Entergy Texas Inc.	Electric Utility	Montgomery County	TX	60925	1A	250.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	250.0
2021	6	55937	Entergy Texas Inc.	Electric Utility	Montgomery County	TX	60925	1B	250.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	250.0
2021	6	55937	Entergy Texas Inc.	Electric Utility	Montgomery County	TX	60925	1C	500.0	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	500.0
2021	6	60836	NTE Connecticut, LLC	IPP	Killingly Energy Center	CT	61239	KEC	498.2	Natural Gas Fired Combined Cycle	NG	CC	(L) Regulatory approvals pending. Not under construction	552.0
2021	7	60835	NTE Carolinas II, LLC	IPP	Reidsville Energy Center	NC	61240	REC	474.3	Natural Gas Fired Combined Cycle	NG	CC	(L) Regulatory approvals pending. Not under construction	534.5
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	49745	Cash Creek Generating LLC	IPP	Cash Creek	KY	56107	CT1	350.3	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	357.0
2021	12	49745	Cash Creek Generating LLC	IPP	Cash Creek	KY	56107	CT2	350.3	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	357.0
2021	12	49745	Cash Creek Generating LLC	IPP	Cash Creek	KY	56107	ST	123.6	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	136.0
2021	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
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	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	59646	Summit Texas Clean Energy	IPP	Texas Clean Energy Project	TX	59859	TCE1A	274.0	Other Gases	OG	CT	(T) Regulatory approvals received. Not under construction	274.0
2021	12	59646	Summit Texas Clean Energy	IPP	Texas Clean Energy Project	TX	59859	TCE1B	126.0	Other Gases	OG	CA	(T) Regulatory approvals received. Not under construction	126.0
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	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
2022	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
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 Landfill	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 Landfill	NC	57492	GEN8	1.6	Landfill Gas	LFG	IC	(T) Regulatory approvals received. Not under construction	1.6
2022	12	56943	Blackstone Wind Farm III LLC	IPP	Blackstone Wind Farm III	IL	57618	GEN1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2022	12	56944	Blackstone Wind Farm IV LLC	IPP	Blackstone Wind Farm IV	IL	57619	GEN1	100.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	100.0
2022	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
2022	12	56425	Simpson Ridge Wind Farm LLC	IPP	Simpson Ridge Wind Farm LLC	WY	57117	GEN 1	50.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2023	12	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
2023	12	57470	Noble Energy Systems, Inc.	IPP	Pea Patch Wind Farm	MD	58087	PEAP	50.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	50.0
2023	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	II-B	750.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	750.0
2026	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

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
2017	12	221	Alaska Village Elec Coop, Inc	Electric Utility	Kasigluk	AK	57066	UNIT1	0.4	Petroleum Liquids	DFO	IC
2017	12	733	Appalachian Power Co	Electric Utility	Kanawha River	WV	3936	1	200.0	Conventional Steam Coal	BIT	ST
2017	12	733	Appalachian Power Co	Electric Utility	Kanawha River	WV	3936	2	200.0	Conventional Steam Coal	BIT	ST
2017	12	17833	City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	MO	2161	1	21.0	Conventional Steam Coal	SUB	ST
2017	12	17833	City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	MO	2161	2	21.0	Conventional Steam Coal	SUB	ST
2017	12	17833	City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	MO	2161	3	41.0	Conventional Steam Coal	SUB	ST
2017	12	1148	City of Baldwin City- (KS)	Electric Utility	Baldwin City Plant No 1	KS	1262	3	0.7	Petroleum Liquids	DFO	IC
2017	12	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC2	0.9	Natural Gas Internal Combustion Engine	NG	IC
2017	12	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC4	0.7	Petroleum Liquids	DFO	IC
2017	12	56375	Graphic Packaging International Inc	Electric CHP	Graphic Packaging International	CA	54561	GT-G	23.0	Natural Gas Fired Combined Cycle	NG	CT
2017	12	56375	Graphic Packaging International Inc	Electric CHP	Graphic Packaging International	CA	54561	ST-G	3.0	Natural Gas Fired Combined Cycle	NG	CA
2017	12	49735	HGST a Western Digital Company	Industrial	HGST San Jose Standby Generator	CA	50024	50MW	42.0	Petroleum Liquids	DFO	GT
2017	12	9205	Illinois Electricial Gen Partn	IPP	Streator Energy Partners LLC	IL	55760	ST1	0.9	Landfill Gas	LFG	IC
2017	12	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT1	15.2	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT2	13.4	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT3	14.2	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT4	16.1	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	2	104.0	Natural Gas Steam Turbine	NG	ST
2017	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	3	110.0	Natural Gas Steam Turbine	NG	ST
2017	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	4	300.0	Natural Gas Steam Turbine	NG	ST
2017	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	5	330.0	Natural Gas Steam Turbine	NG	ST
2017	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	GT1	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	13960	NRG Cabrillo Power Ops Inc	IPP	Kearny	CA	303	KEA3	61.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	3	121.0	Natural Gas Steam Turbine	NG	ST
2017	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	4	259.0	Natural Gas Steam Turbine	NG	ST
2017	12	14030	Oklahoma State University	Commercial	Oklahoma State University	OK	54779	GEN1	1.6	Natural Gas Steam Turbine	NG	ST
2017	12	14030	Oklahoma State University	Commercial	Oklahoma State University	OK	54779	GEN2	1.6	Natural Gas Steam Turbine	NG	ST
2017	12	14030	Oklahoma State University	Commercial	Oklahoma State University	OK	54779	GEN4	5.2	Natural Gas Steam Turbine	NG	ST
2017	12	15473	Public Service Co of NM	Electric Utility	San Juan	NM	2451	2	340.0	Conventional Steam Coal	BIT	ST
2017	12	15473	Public Service Co of NM	Electric Utility	San Juan	NM	2451	3	497.0	Conventional Steam Coal	BIT	ST
2017	12	18642	Tennessee Valley Authority	Electric Utility	Johnsonville	TN	3406	1	107.0	Conventional Steam Coal	SUB	ST
2017	12	18642	Tennessee Valley Authority	Electric Utility	Johnsonville	TN	3406	2	107.0	Conventional Steam Coal	SUB	ST
2017	12	18642	Tennessee Valley Authority	Electric Utility	Johnsonville	TN	3406	3	107.0	Conventional Steam Coal	SUB	ST
2017	12	18642	Tennessee Valley Authority	Electric Utility	Johnsonville	TN	3406	4	107.0	Conventional Steam Coal	SUB	ST
2017	12	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT1	0.5	Landfill Gas	LFG	IC
2017	12	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT2	0.3	Landfill Gas	LFG	IC
2017	12	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT3	0.3	Landfill Gas	LFG	IC
2017	12	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT4	0.3	Landfill Gas	LFG	IC
2018	1	221	Alaska Village Elec Coop, Inc	Electric Utility	Brevig Mission	AK	60260	3	0.5	Petroleum Liquids	DFO	IC
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	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	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS1	0.9	Conventional Hydroelectric	WAT	HY
2018	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS2	0.9	Conventional Hydroelectric	WAT	HY
2018	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS3	0.9	Conventional Hydroelectric	WAT	HY
2018	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS4	0.9	Conventional Hydroelectric	WAT	HY
2018	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS5	0.9	Conventional Hydroelectric	WAT	HY
2018	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS6	0.9	Conventional Hydroelectric	WAT	HY
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	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	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	1	324.0	Conventional Steam Coal	BIT	ST
2018	4	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	2	442.0	Conventional Steam Coal	BIT	ST
2018	4	17633	Southern Indiana Gas & Elec Co	Electric Utility	Broadway (IN)	IN	1011	1	0.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	4	19876	Virginia Electric & Power Co	Electric Utility	Yorktown	VA	3809	1	159.0	Conventional Steam Coal	BIT	ST
2018	4	19876	Virginia Electric & Power Co	Electric Utility	Yorktown	VA	3809	2	164.0	Conventional Steam Coal	BIT	ST
2018	5	5701	El Paso Electric Co	Electric Utility	Rio Grande	NM	2444	6	45.0	Natural Gas Steam Turbine	NG	ST
2018	5	13756	Northern Indiana Pub Serv Co	Electric Utility	Bailly	IN	995	7	160.0	Conventional Steam Coal	BIT	ST
2018	5	13756	Northern Indiana Pub Serv Co	Electric Utility	Bailly	IN	995	8	320.0	Conventional Steam Coal	BIT	ST
2018	5	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	1	102.8	Natural Gas Steam Turbine	NG	ST

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
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	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	9397	International Turbine Res Inc	IPP	Dinosaur Point	CA	10005	WTGS	17.0	Onshore Wind Turbine	WND	WT
2018	7	7308	Hawkeye Energy Greenport LLC	IPP	Hawkeye Energy Greenport LLC	NY	55969	U-01	53.5	Petroleum Liquids	KER	GT
2018	7	11479	Madison Gas & Electric Co	Electric Utility	Fitchburg	WI	3991	1	16.6	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	11479	Madison Gas & Electric Co	Electric Utility	Fitchburg	WI	3991	2	15.8	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	15466	Public Service Co of Colorado	Electric Utility	Salida	CO	474	1	0.8	Conventional Hydroelectric	WAT	HY
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	Arvah B Hopkins	FL	688	1	76.0	Natural Gas Steam Turbine	NG	ST
2018	10	18445	City of Tallahassee - (FL)	Electric Utility	S O Purdom	FL	689	GT1	10.0	Natural Gas Fired Combustion Turbine	NG	GT
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	18715	Texas Municipal Power Agency	Electric Utility	Gibbons Creek	TX	6136	1	470.0	Conventional Steam Coal	SUB	ST
2018	11	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	11	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	GTG2		Natural Gas Fired Combined Cycle	NG	CT
2018	11	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	GTG3		Natural Gas Fired Combined Cycle	NG	CT
2018	11	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	STG1		Natural Gas Fired Combined Cycle	NG	CA
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	17833	City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	MO	2161	4	56.0	Natural Gas Steam Turbine	NG	ST
2018	12	17833	City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	MO	2161	5	97.0	Natural Gas Steam Turbine	NG	ST
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	9417	Interstate Power and Light Co	Electric Utility	Red Cedar	IA	7595	1	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	12	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Sibley	MO	2094	1	42.2	Conventional Steam Coal	SUB	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	11479	Madison Gas & Electric Co	Electric Utility	Nine Springs	WI	9674	GT1	14.2	Natural Gas Fired Combustion Turbine	NG	GT
2018	12	11479	Madison Gas & Electric Co	Electric Utility	Sycamore (WI)	WI	3993	1	11.2	Natural Gas Fired Combustion Turbine	NG	GT
2018	12	11479	Madison Gas & Electric Co	Electric Utility	Sycamore (WI)	WI	3993	2	16.6	Natural Gas Fired Combustion Turbine	NG	GT
2018	12	12384	Midwest Generations EME LLC	IPP	Will County	IL	884	4	510.0	Conventional Steam Coal	SUB	ST
2018	12	13781	Northern States Power Co - Minnesota	Electric Utility	Northern States Flambeau	WI	3984	1	12.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	4	0.8	Petroleum Liquids	DFO	IC
2018	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	5	0.8	Petroleum Liquids	DFO	IC
2018	12	20856	Wisconsin Power & Light Co	Electric Utility	Edgewater	WI	4050	4	294.4	Conventional Steam Coal	SUB	ST
2019	1	14328	Pacific Gas & Electric Co.	Electric Utility	Cow Creek	CA	229	1	0.9	Conventional Hydroelectric	WAT	HY
2019	1	14328	Pacific Gas & Electric Co.	Electric Utility	Cow Creek	CA	229	2	0.9	Conventional Hydroelectric	WAT	HY
2019	1	14328	Pacific Gas & Electric Co.	Electric Utility	Kilarc	CA	253	1	1.6	Conventional Hydroelectric	WAT	HY
2019	1	14328	Pacific Gas & Electric Co.	Electric Utility	Kilarc	CA	253	2	1.6	Conventional Hydroelectric	WAT	HY
2019	2	56997	Marina Energy LLC	Commercial	Stockton Athletic Center	NJ	57864	SAC	0.3	Solar Photovoltaic	SUN	PV
2019	3	8776	City of Holyoke Gas and Electric Dept.	Electric Utility	Harris Energy Realty	MA	54981	ALBA	0.3	Conventional Hydroelectric	WAT	HY
2019	3	8776	City of Holyoke Gas and Electric Dept.	Electric Utility	Harris Energy Realty	MA	54981	ALBD	0.4	Conventional Hydroelectric	WAT	HY
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	55768	RC Cape May Holdings LLC	IPP	B L England	NJ	2378	3	148.0	Petroleum Liquids	RFO	ST
2019	6	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	5	55.0	Conventional Steam Coal	SUB	ST
2019	6	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	6	55.0	Conventional Steam Coal	SUB	ST
2019	6	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	7	83.0	Conventional Steam Coal	SUB	ST
2019	6	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	8	83.0	Conventional Steam Coal	SUB	ST

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2019	6	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	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	1	2.0	Petroleum Liquids	DFO	IC
2019	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	2	2.0	Petroleum Liquids	DFO	IC
2019	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	3	2.0	Petroleum Liquids	DFO	IC
2019	10	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	1	175.0	Natural Gas Steam Turbine	NG	ST
2019	10	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	2	175.0	Natural Gas Steam Turbine	NG	ST
2019	10	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	5	485.0	Natural Gas Steam Turbine	NG	ST
2019	10	23693	AES Huntington Beach LLC	IPP	AES Huntington Beach LLC	CA	335	1	225.8	Natural Gas Steam Turbine	NG	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	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	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	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	1	74.0	Natural Gas Steam Turbine	NG	ST
2019	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	3	102.0	Natural Gas Steam Turbine	NG	ST
2019	12	55951	Exelon Nuclear	IPP	Oyster Creek	NJ	2388	1	607.7	Nuclear	NUC	ST
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	Conventional Steam Coal	SUB	ST
2019	12	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Lake Road (MO)	MO	2098	6	20.9	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	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	15908	NRG California South LP	IPP	Mandalay	CA	345	1	215.0	Natural Gas Steam Turbine	NG	ST
2020	1	15908	NRG California South LP	IPP	Mandalay	CA	345	2	215.0	Natural Gas Steam Turbine	NG	ST
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	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	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	60422	H.A. Wagner LLC	IPP	Herbert A Wagner	MD	1554	2	118.0	Conventional Steam Coal	RC	ST
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN1	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN2	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN3	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN4	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN5	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN6	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN7	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL00	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL01	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL02	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL03	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL04	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL05	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL06	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL07	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL08	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL09	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL10	0.1	Other Waste Biomass	OBG	FC

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	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	6	495.0	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	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	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	1	107.0	Natural Gas Steam Turbine	NG	ST
2020	12	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	2	177.0	Natural Gas Steam Turbine	NG	ST
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	24.3	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	4	14.6	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	5	50.7	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	6	51.2	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Sheepskin	WI	4059	1	33.6	Natural Gas Fired Combustion Turbine	NG	GT
2021	1	15248	Portland General Electric Co	Electric Utility	Boardman	OR	6106	1	585.0	Conventional Steam Coal	SUB	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	12653	GenOn Mid-Atlantic LLC	IPP	Dickerson	MD	1572	2	173.0	Conventional Steam Coal	BIT	ST
2021	5	12653	GenOn Mid-Atlantic LLC	IPP	Dickerson	MD	1572	3	173.0	Conventional Steam Coal	BIT	ST
2021	5	12653	GenOn Mid-Atlantic LLC	IPP	Dickerson	MD	1572	GT1	18.0	Petroleum Liquids	DFO	GT
2021	5	12653	GenOn Mid-Atlantic LLC	IPP	Dickerson	MD	1572	GT2	147.0	Natural Gas Fired Combustion Turbine	NG	GT
2021	5	12653	GenOn Mid-Atlantic LLC	IPP	Dickerson	MD	1572	GT3	147.0	Natural Gas Fired Combustion Turbine	NG	GT
2021	5	12653	GenOn Mid-Atlantic LLC	IPP	Dickerson	MD	1572	ST1	173.0	Conventional Steam Coal	BIT	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	9	17166	Sierra Pacific Power Co	Electric Utility	Fort Churchill	NV	2330	2	113.0	Natural Gas Steam Turbine	NG	ST
2021	10	14127	Omaha Public Power District	Electric Utility	North Omaha	NE	2291	1	64.8	Natural Gas Steam Turbine	NG	ST
2021	10	14127	Omaha Public Power District	Electric Utility	North Omaha	NE	2291	2	90.8	Natural Gas Steam Turbine	NG	ST
2021	10	14127	Omaha Public Power District	Electric Utility	North Omaha	NE	2291	3	86.0	Natural Gas Steam Turbine	NG	ST
2021	12	12686	Mississippi Power Co	Electric Utility	Jack Watson	MS	2049	3	107.0	Natural Gas Steam Turbine	NG	ST
2021	12	17166	Sierra Pacific Power Co	Electric Utility	North Valmy	NV	8224	1	254.0	Conventional Steam Coal	SUB	ST
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	787.4	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	BIT	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	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2023	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	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	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	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	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	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
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	Sherburne County	MN	6090	1	680.0	Conventional Steam Coal	SUB	ST
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	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	Carlsbad	NM	2453	5	10.0	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
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	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
2042	7	796	Arizona Electric Pwr Coop Inc	Electric Utility	SunAnza	CA	60791	ANZA1	2.0	Solar Photovoltaic	SUN	PV
2047	2	56031	CPV Maryland LLC	IPP	CPV St Charles Energy Center	MD	56846	GTG1	205.0	Natural Gas Fired Combined Cycle	NG	CT
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

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-November 2017

	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%
Year 2015								
January	61.4%	52.6%	4.4%	7.6%	5.2%	12.4%	0.6%	2.5%
February	65.0%	52.2%	6.2%	9.9%	5.7%	22.8%	1.9%	3.1%
March	50.3%	50.7%	5.2%	8.3%	8.5%	7.9%	0.6%	1.9%
April	43.3%	47.9%	5.7%	9.4%	6.6%	12.0%	0.9%	2.2%
May	49.9%	50.2%	6.7%	9.3%	8.7%	12.6%	1.1%	2.0%
June	62.6%	61.5%	8.3%	13.7%	11.2%	12.0%	1.0%	2.0%
July	66.8%	67.2%	10.7%	19.4%	12.3%	15.5%	1.3%	2.4%
August	64.9%	66.9%	8.9%	19.0%	12.3%	14.8%	1.2%	2.4%
Sept	58.7%	61.4%	8.2%	14.2%	9.8%	15.9%	1.2%	2.1%
October	47.0%	53.6%	6.7%	10.5%	8.1%	14.5%	1.0%	2.1%
November	44.0%	50.9%	7.0%	8.4%	8.6%	10.5%	1.9%	1.8%
December	43.6%	54.6%	5.0%	8.5%	8.5%	9.7%	1.1%	2.0%
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	59.5%	50.5%	6.6%	4.3%	NA	10.7%	1.6%	NA
February	49.4%	48.3%	6.9%	3.9%	NA	9.5%	2.0%	NA
March	46.2%	48.2%	9.8%	7.8%	NA	12.9%	2.1%	NA
April	43.8%	45.9%	8.3%	8.6%	NA	9.5%	1.2%	NA
May	48.1%	49.5%	9.0%	9.9%	NA	15.4%	1.9%	NA
June	58.4%	60.2%	9.9%	15.4%	NA	15.3%	1.8%	NA
July	67.2%	70.1%	12.8%	21.5%	NA	18.1%	2.1%	NA
August	62.9%	69.3%	11.0%	18.6%	NA	14.3%	2.2%	NA
Sept	53.4%	58.8%	11.7%	15.4%	NA	13.5%	3.0%	NA
October	47.4%	51.2%	10.0%	14.3%	NA	11.1%	2.6%	NA
November	49.3%	48.8%	8.2%	6.8%	NA	11.8%	1.5%	NA

Values for 2016 and prior years are final. Values for 2017 are preliminary. NA = Not Available

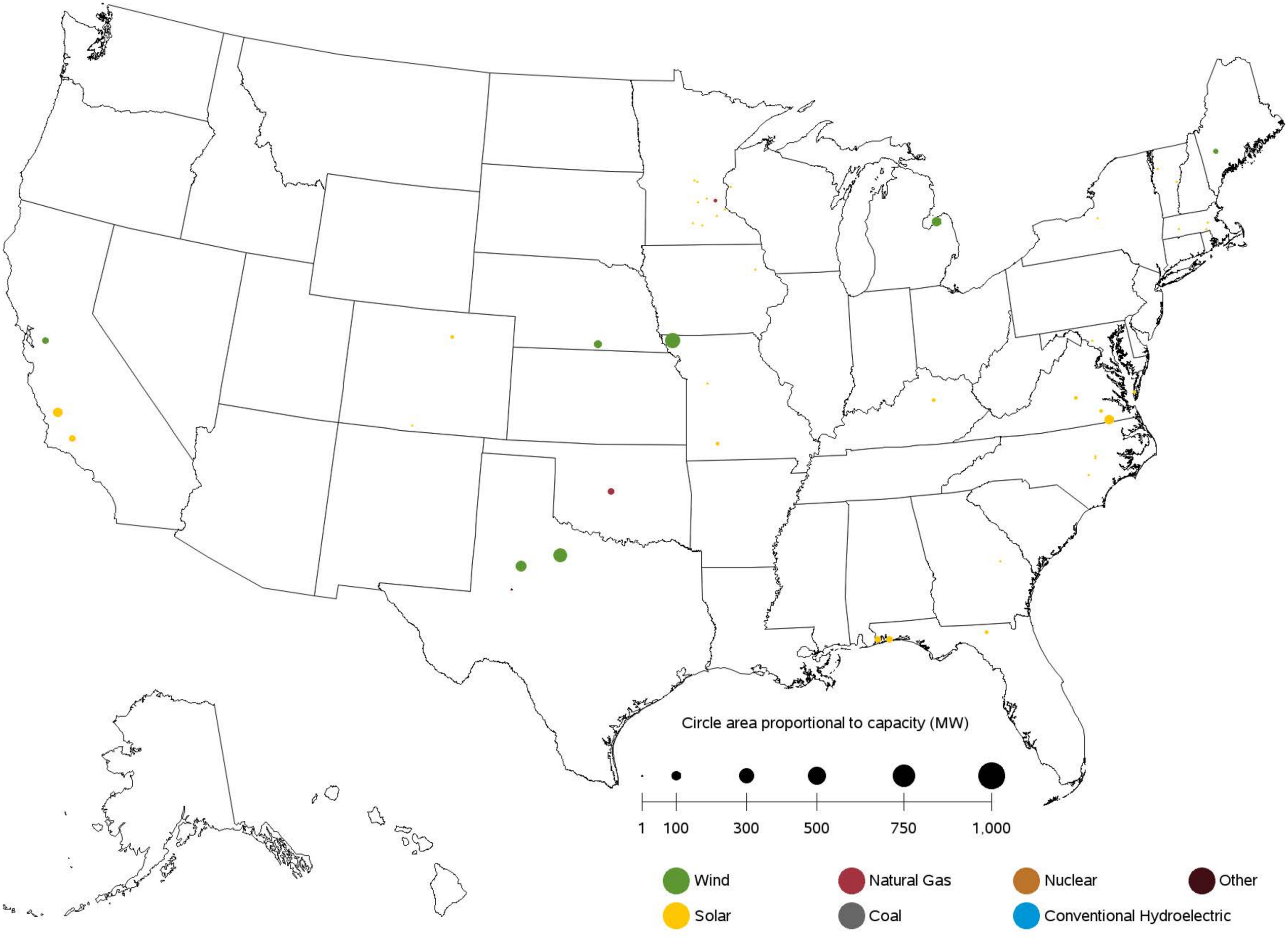
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Table 6.7.B. Capacity Factors for Utility Scale Generators Not Primarily Using Fossil Fuels, January 2013-November 2017

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%
Year 2015								
January	101.3%	40.7%	31.2%	16.8%	5.0%	65.1%	57.2%	75.9%
February	95.8%	41.4%	34.1%	22.1%	14.5%	64.3%	60.0%	76.4%
March	88.0%	40.8%	31.4%	26.7%	22.6%	63.0%	53.4%	76.8%
April	84.3%	39.4%	37.5%	30.9%	30.5%	66.8%	47.3%	72.4%
May	89.8%	33.9%	34.8%	31.2%	27.0%	68.5%	48.4%	76.6%
June	96.4%	35.8%	27.9%	31.7%	32.2%	69.2%	56.7%	74.1%
July	97.3%	35.8%	27.4%	31.4%	31.1%	73.1%	59.9%	74.7%
August	98.6%	32.5%	25.8%	31.3%	32.3%	71.5%	61.6%	73.9%
Sept	93.6%	28.3%	28.1%	26.6%	27.1%	68.8%	56.1%	67.9%
October	82.5%	28.3%	31.6%	22.8%	16.5%	68.3%	48.8%	72.4%
November	84.8%	33.8%	39.0%	20.7%	16.9%	72.4%	55.8%	75.4%
December	94.9%	39.4%	37.4%	17.5%	9.5%	73.0%	58.3%	75.3%
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%	48.4%	36.5%	16.8%	7.3%	75.4%	49.4%	79.7%
February	95.7%	47.8%	42.4%	19.8%	11.7%	71.6%	55.5%	77.9%
March	87.9%	54.1%	44.6%	27.8%	22.9%	67.7%	51.8%	74.9%
April	79.2%	53.9%	45.0%	31.0%	24.9%	67.9%	51.2%	78.6%
May	82.8%	56.8%	38.8%	34.1%	31.0%	70.6%	47.0%	74.0%
June	93.5%	57.1%	34.4%	35.7%	37.9%	72.6%	49.1%	75.2%
July	96.3%	46.1%	27.6%	33.7%	25.4%	71.3%	51.0%	78.0%
August	97.7%	37.9%	22.4%	31.2%	27.6%	72.7%	49.0%	77.4%
Sept	94.9%	34.7%	31.5%	29.6%	29.2%	69.3%	48.2%	77.8%
October	89.1%	30.2%	41.6%	26.6%	24.1%	67.0%	52.4%	69.3%
November	92.9%	35.3%	39.4%	20.1%	10.3%	71.1%	51.5%	76.6%

Values for 2016 and prior years are final. Values for 2017 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 November 2017

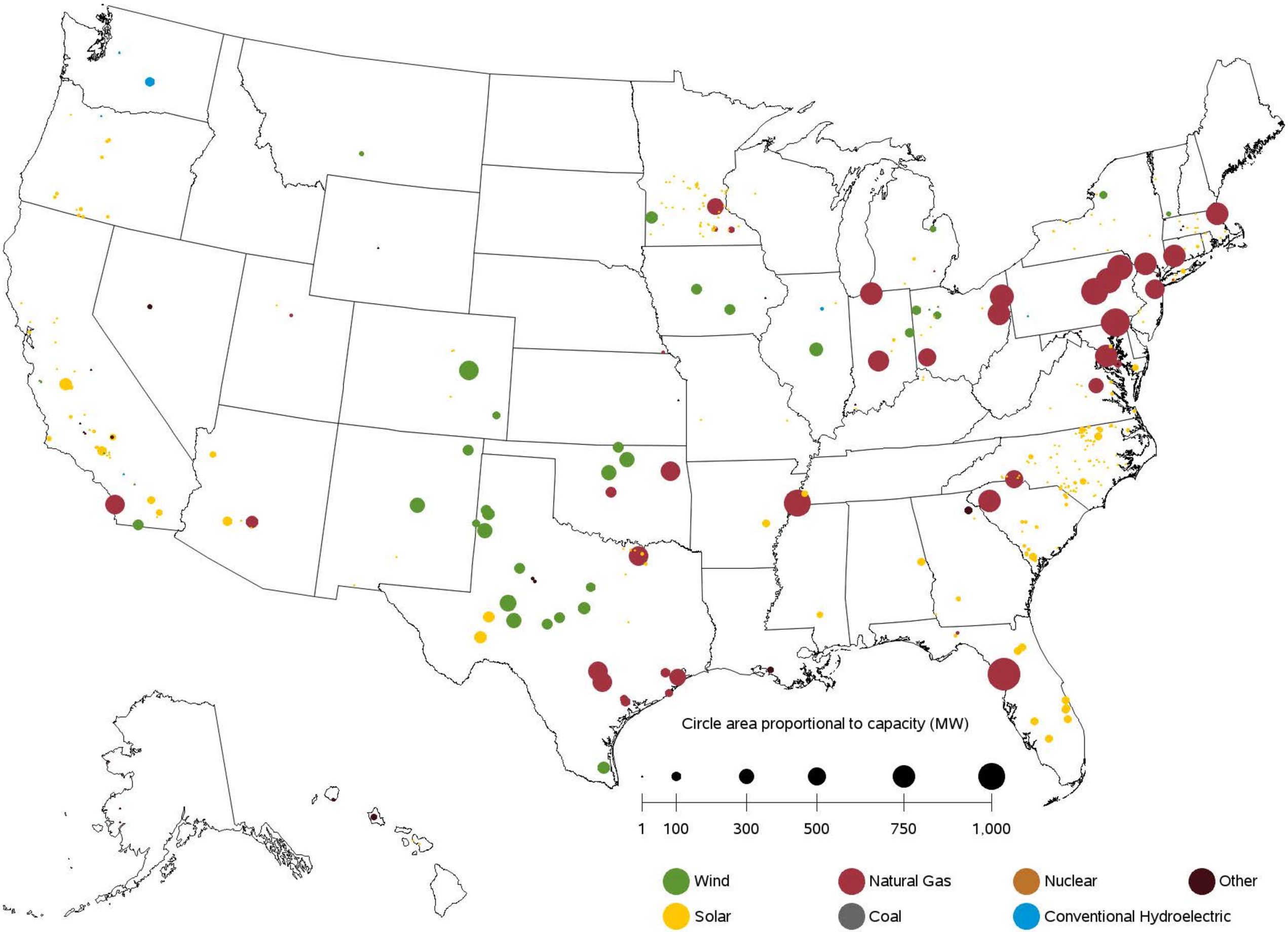


Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.B. Utility-Scale Generating Units Retired in November 2017

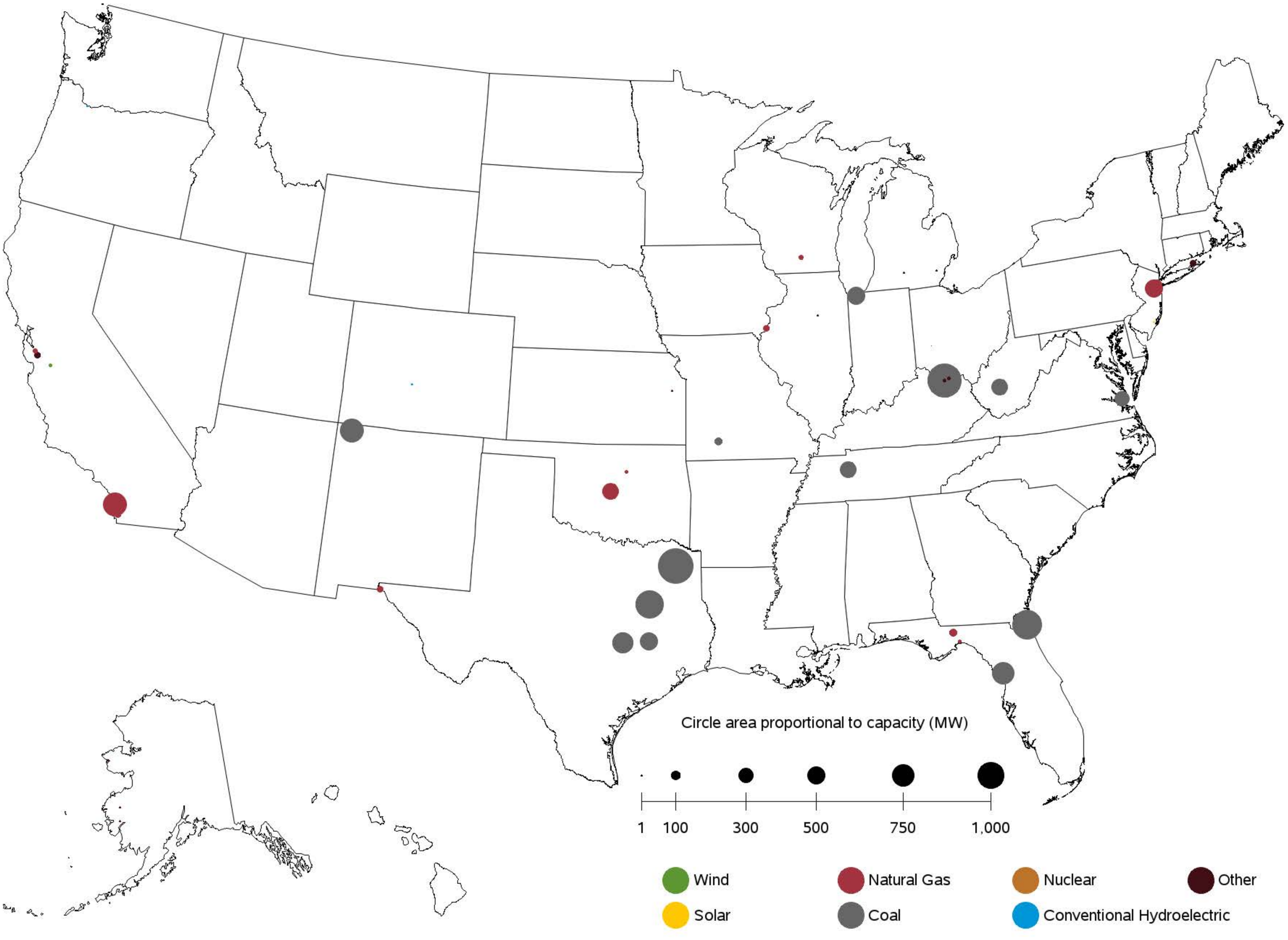
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.C. Utility-Scale Generating Units Planned to Come Online from December 2017 to November 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.D. Utility-Scale Generating Units Planned to Retire from December 2017 to November 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.'

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	4,426,999	6,647,082	69,600,817	9,329,463	60,271,354
Year 2016							
January	5,886,417	227,589	405,984	391,636	6,292,401	619,225	5,673,176
February	4,927,541	384,301	354,896	318,144	5,282,437	702,445	4,579,992
March	5,210,412	410,645	417,364	441,056	5,627,776	851,701	4,776,075
April	4,092,342	358,746	389,947	311,760	4,482,289	670,506	3,811,783
May	4,977,621	142,398	378,826	431,533	5,356,447	573,931	4,782,516
June	6,162,812	94,538	363,393	738,211	6,526,205	832,749	5,693,456
July	6,969,110	78,459	362,863	838,475	7,331,973	916,934	6,415,039
August	6,577,610	149,565	383,363	825,076	6,960,973	974,641	5,986,332
Sept	4,631,320	161,183	286,640	805,125	4,917,960	966,308	3,951,652
October	4,989,801	320,694	436,941	436,044	5,426,742	756,738	4,670,004
November	5,809,773	109,219	359,166	559,837	6,168,939	669,056	5,499,883
December	4,939,059	245,044	287,616	550,185	5,226,675	795,229	4,431,446
Year 2017							
January	5,277,771	172,909	325,772	658,237	5,603,543	831,146	4,772,397
February	4,131,760	359,401	282,486	600,378	4,414,246	959,779	3,454,467
March	4,598,818	663,648	223,689	521,388	4,822,507	1,185,036	3,637,471
April	5,262,194	619,414	207,404	579,407	5,469,598	1,198,821	4,270,777
May	4,912,110	341,657	129,523	532,294	5,041,633	873,951	4,167,682
June	5,637,814	242,997	104,319	819,173	5,742,133	1,062,170	4,679,963
July	5,328,084	65,828	253,399	974,208	5,581,483	1,040,036	4,541,447
August	5,874,172	63,435	276,687	1,067,167	6,150,859	1,130,602	5,020,257
Sept	4,715,752	139,000	159,646	905,932	4,875,398	1,044,932	3,830,466

Source: U.S. Energy Information Administration, Form EIA-111, "Quarterly Electricity Imports and Exports Report."

Appendix C

Technical notes

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

Data quality

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

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

Reliability of data

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

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

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

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

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

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

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

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

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

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

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

Data revision procedure

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

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

Data sources for Electric Power Monthly

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

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

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

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

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

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

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

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

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

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

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

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

P Indicates a preliminary value.

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

Form EIA-826

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form EIA-860

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

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

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

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

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

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

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

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

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

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

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

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

Form EIA-860M

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

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

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

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

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

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

Form EIA-861

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

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

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

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

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

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

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

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

Form EIA-923

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

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

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

Instrument and design history:

Receipts and cost and quality of fossil fuels

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

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

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

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

Generation, consumption, and stocks

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Issues within historical data series:

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

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

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

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

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

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

Average Capacity Factors

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

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

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

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

NERC classification

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

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

The new NERC Regional Council names are as follows:

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

Business classification

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

Agriculture, Forestry, and Fishing

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

Mining

211 Oil and gas extraction
2121 Coal mining
2122 Metal mining

2123 Mining and quarrying of nonmetallic minerals except fuels

Construction

23

Manufacturing

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

Transportation and Public Utilities

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

Wholesale Trade

421 to 422

Retail Trade

441 to 454

Finance, Insurance, and Real Estate

521 to 533

Services

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

Public Administration

92

Multiple Survey Programs- Small Scale PV Solar Estimation of Generation

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

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

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

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

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

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

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

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

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

e_i is the error term

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

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

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

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

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

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

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

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

Appendix 1- MSAs

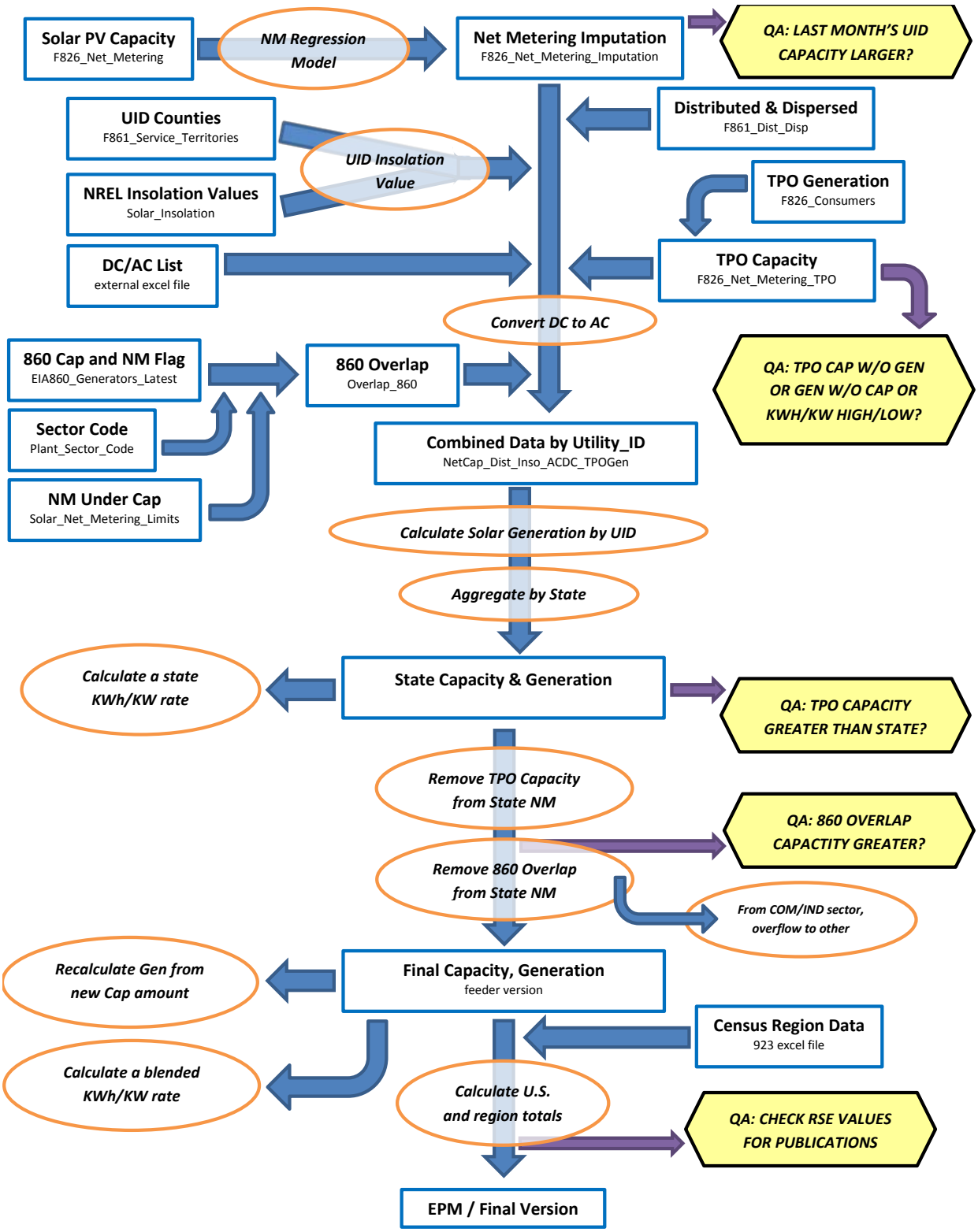
TMY3 (1991-2005) Weather Stations by MSA

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

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

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

Appendix 2 – Flow diagram of data sources and analysis



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

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

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

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

Total (All Sectors) by Census Division and State, November 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**13**	**8**	**0**	**5**	**0**	**0**	**7**
Connecticut	0	30	0	2	0	0	35
Maine	36	6	0	49	0	0	9
Massachusetts	0	9	0	8	0	0	20
New Hampshire	0	11	0	0	0	0	16
Rhode Island	0	65	0	26	0	0	0
Vermont	0	54	0	0	0	0	15
Middle Atlantic	**2**	**10**	**66**	**3**	**19**	**0**	**2**
New Jersey	0	67	0	11	0	0	193
New York	0	17	0	4	0	0	1
Pennsylvania	2	10	146	2	25	0	11
East North Central	**1**	**2**	**0**	**2**	**10**	**0**	**10**
Illinois	0	17	0	13	0	0	27
Indiana	1	2	0	4	15	0	22
Michigan	3	7	0	3	0	0	20
Ohio	1	3	0	1	20	0	21
Wisconsin	0	25	0	6	0	0	15
West North Central	**1**	**8**	**0**	**10**	**0**	**0**	**7**
Iowa	1	13	0	13	0	0	27
Kansas	3	5	0	12	0	0	0
Minnesota	3	29	0	13	0	0	21
Missouri	0	5	0	36	0	0	15
Nebraska	5	112	0	33	0	0	20
North Dakota	0	6	0	30	0	0	18
South Dakota	0	134	0	41	0	0	12
South Atlantic	**1**	**6**	**20**	**1**	**32**	**0**	**7**
Delaware	0	68	0	24	34	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	16	0	2	0	0	36
Georgia	0	28	69	4	0	0	10
Maryland	0	7	0	6	0	0	2
North Carolina	0	5	0	2	0	0	9
South Carolina	0	29	0	6	0	0	15
Virginia	5	15	0	3	0	0	17
West Virginia	2	0	0	19	0	0	16
East South Central	**0**	**6**	**0**	**3**	**0**	**0**	**4**
Alabama	0	91	0	3	0	0	6
Kentucky	0	1	0	12	0	0	10
Mississippi	0	57	0	5	0	0	0
Tennessee	0	0	0	6	0	0	7
West South Central	**0**	**9**	**1**	**2**	**5**	**0**	**6**
Arkansas	0	19	0	16	0	0	9
Louisiana	0	36	0	3	8	0	13
Oklahoma	0	2	0	5	0	0	10
Texas	0	15	57	2	5	0	16
Mountain	**1**	**4**	**0**	**1**	**5**	**0**	**4**
Arizona	0	2	0	1	0	0	4
Colorado	0	27	0	1	0	0	19
Idaho	119	0	0	20	0	0	9
Montana	5	24	0	22	0	0	8
Nevada	0	0	0	0	0	0	1
New Mexico	0	12	0	3	0	0	68
Utah	0	3	0	4	0	0	27
Wyoming	4	3	0	5	5	0	25
Pacific Contiguous	**0**	**16**	**0**	**1**	**2**	**0**	**2**
California	0	11	0	1	2	0	7
Oregon	0	0	0	4	0	0	3
Washington	0	41	0	7	0	0	1
Pacific Noncontiguous	**16**	**1**	**0**	**19**	**0**	**0**	**18**
Alaska	56	4	0	19	0	0	19
Hawaii	0	1	0	0	0	0	29
U.S. Total	**0**	**1**	**3**	**1**	**6**	**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, November 2017 (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**	**12**	**7**	**0**	**1**	**2**
Connecticut	0	0	0	46	14	0	0	1
Maine	0	0	0	114	8	0	0	9
Massachusetts	0	0	0	13	8	0	2	5
New Hampshire	0	0	0	0	19	0	0	3
Rhode Island	0	0	0	99	9	0	0	24
Vermont	0	0	0	35	22	0	0	12
Middle Atlantic	**0**	**0**	**0**	**11**	**4**	**0**	**1**	**1**
New Jersey	0	0	0	13	6	0	0	5
New York	0	0	0	24	6	0	2	1
Pennsylvania	0	0	0	47	6	0	0	1
East North Central	**0**	**0**	**0**	**15**	**3**	**0**	**3**	**0**
Illinois	0	0	0	34	4	0	0	1
Indiana	0	0	0	22	6	0	0	1
Michigan	0	0	0	32	6	0	11	1
Ohio	0	0	0	37	5	0	0	1
Wisconsin	0	0	0	69	9	0	38	1
West North Central	**0**	**0**	**0**	**11**	**3**	**0**	**6**	**1**
Iowa	0	0	0	98	5	0	0	2
Kansas	0	0	0	137	2	0	0	1
Minnesota	0	0	0	12	6	0	4	2
Missouri	0	0	0	38	6	0	0	2
Nebraska	0	0	0	75	7	0	0	3
North Dakota	0	0	0	0	5	0	50	2
South Dakota	0	0	0	271	10	0	0	6
South Atlantic	**0**	**0**	**0**	**4**	**2**	**0**	**1**	**1**
Delaware	0	0	0	55	29	0	0	19
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	5	3	0	1	1
Georgia	0	0	0	7	4	0	13	1
Maryland	0	0	0	20	10	0	0	1
North Carolina	0	0	0	5	3	0	0	1
South Carolina	0	0	0	34	6	0	0	1
Virginia	0	0	0	18	9	0	0	1
West Virginia	0	0	0	0	12	0	0	2
East South Central	**0**	**0**	**0**	**12**	**3**	**0**	**10**	**1**
Alabama	0	0	0	28	4	0	0	1
Kentucky	0	0	0	48	16	0	0	2
Mississippi	0	0	0	6	5	0	0	4
Tennessee	0	0	0	31	8	0	61	1
West South Central	**0**	**0**	**0**	**5**	**1**	**0**	**2**	**1**
Arkansas	0	0	0	21	5	0	91	3
Louisiana	0	0	0	0	5	0	2	2
Oklahoma	0	0	0	0	2	0	0	2
Texas	0	0	0	5	1	0	5	1
Mountain	**0**	**10**	**0**	**3**	**2**	**0**	**0**	**1**
Arizona	0	0	0	4	5	0	0	0
Colorado	0	0	0	13	3	0	0	1
Idaho	0	40	0	16	9	0	0	6
Montana	0	0	0	66	12	0	0	4
Nevada	0	10	0	4	6	0	0	1
New Mexico	0	0	0	12	3	0	0	1
Utah	0	17	0	9	6	0	0	1
Wyoming	0	0	0	0	9	0	0	4
Pacific Contiguous	**0**	**3**	**0**	**3**	**2**	**0**	**2**	**1**
California	0	3	0	3	2	0	2	1
Oregon	0	24	0	21	7	0	0	2
Washington	0	0	0	0	5	0	0	1
Pacific Noncontiguous	**0**	**23**	**0**	**17**	**9**	**0**	**0**	**4**
Alaska	0	0	0	0	33	0	0	12
Hawaii	0	23	0	17	9	0	0	1
U.S. Total	**0**	**5**	**0**	**3**	**2**	**0**	**1**	**0**

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

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

Total (All Sectors) by Census Division and State, Year-to-Date through November 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**13**	**8**	**0**	**5**	**0**	**0**	**7**
Connecticut	0	30	0	2	0	0	35
Maine	36	6	0	49	0	0	9
Massachusetts	0	9	0	8	0	0	20
New Hampshire	0	11	0	0	0	0	16
Rhode Island	0	65	0	26	0	0	0
Vermont	0	54	0	0	0	0	15
Middle Atlantic	**2**	**10**	**66**	**3**	**19**	**0**	**2**
New Jersey	0	67	0	11	0	0	193
New York	0	17	0	4	0	0	1
Pennsylvania	2	10	146	2	25	0	11
East North Central	**1**	**2**	**0**	**2**	**10**	**0**	**10**
Illinois	0	17	0	13	0	0	27
Indiana	1	2	0	4	15	0	22
Michigan	3	7	0	3	0	0	20
Ohio	1	3	0	1	20	0	21
Wisconsin	0	25	0	6	0	0	15
West North Central	**1**	**8**	**0**	**10**	**0**	**0**	**7**
Iowa	1	13	0	13	0	0	27
Kansas	3	5	0	12	0	0	0
Minnesota	3	29	0	13	0	0	21
Missouri	0	5	0	36	0	0	15
Nebraska	5	112	0	33	0	0	20
North Dakota	0	6	0	30	0	0	18
South Dakota	0	134	0	41	0	0	12
South Atlantic	**1**	**6**	**20**	**1**	**32**	**0**	**7**
Delaware	0	68	0	24	34	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	16	0	2	0	0	36
Georgia	0	28	69	4	0	0	10
Maryland	0	7	0	6	0	0	2
North Carolina	0	5	0	2	0	0	9
South Carolina	0	29	0	6	0	0	15
Virginia	5	15	0	3	0	0	17
West Virginia	2	0	0	19	0	0	16
East South Central	**0**	**6**	**0**	**3**	**0**	**0**	**4**
Alabama	0	91	0	3	0	0	6
Kentucky	0	1	0	12	0	0	10
Mississippi	0	57	0	5	0	0	0
Tennessee	0	0	0	6	0	0	7
West South Central	**0**	**9**	**1**	**2**	**5**	**0**	**6**
Arkansas	0	19	0	16	0	0	9
Louisiana	0	36	0	3	8	0	13
Oklahoma	0	2	0	5	0	0	10
Texas	0	15	57	2	5	0	16
Mountain	**1**	**4**	**0**	**1**	**5**	**0**	**4**
Arizona	0	2	0	1	0	0	4
Colorado	0	27	0	1	0	0	19
Idaho	119	0	0	20	0	0	9
Montana	5	24	0	22	0	0	8
Nevada	0	0	0	0	0	0	1
New Mexico	0	12	0	3	0	0	68
Utah	0	3	0	4	0	0	27
Wyoming	4	3	0	5	5	0	25
Pacific Contiguous	**0**	**16**	**0**	**1**	**2**	**0**	**2**
California	0	11	0	1	2	0	7
Oregon	0	0	0	4	0	0	3
Washington	0	41	0	7	0	0	1
Pacific Noncontiguous	**16**	**1**	**0**	**19**	**0**	**0**	**18**
Alaska	56	4	0	19	0	0	19
Hawaii	0	1	0	0	0	0	29
U.S. Total	**0**	**1**	**3**	**1**	**6**	**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 November 2017 (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**	**12**	**7**	**0**	**1**	**2**
Connecticut	0	0	0	46	14	0	0	1
Maine	0	0	0	114	8	0	0	9
Massachusetts	0	0	0	13	8	0	2	5
New Hampshire	0	0	0	0	19	0	0	3
Rhode Island	0	0	0	99	9	0	0	24
Vermont	0	0	0	35	22	0	0	12
Middle Atlantic	**0**	**0**	**0**	**11**	**4**	**0**	**1**	**1**
New Jersey	0	0	0	13	6	0	0	5
New York	0	0	0	24	6	0	2	1
Pennsylvania	0	0	0	47	6	0	0	1
East North Central	**0**	**0**	**0**	**15**	**3**	**0**	**3**	**0**
Illinois	0	0	0	34	4	0	0	1
Indiana	0	0	0	22	6	0	0	1
Michigan	0	0	0	32	6	0	11	1
Ohio	0	0	0	37	5	0	0	1
Wisconsin	0	0	0	69	9	0	38	1
West North Central	**0**	**0**	**0**	**11**	**3**	**0**	**6**	**1**
Iowa	0	0	0	98	5	0	0	2
Kansas	0	0	0	137	2	0	0	1
Minnesota	0	0	0	12	6	0	4	2
Missouri	0	0	0	38	6	0	0	2
Nebraska	0	0	0	75	7	0	0	3
North Dakota	0	0	0	0	5	0	50	2
South Dakota	0	0	0	271	10	0	0	6
South Atlantic	**0**	**0**	**0**	**4**	**2**	**0**	**1**	**1**
Delaware	0	0	0	55	29	0	0	19
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	5	3	0	1	1
Georgia	0	0	0	7	4	0	13	1
Maryland	0	0	0	20	10	0	0	1
North Carolina	0	0	0	5	3	0	0	1
South Carolina	0	0	0	34	6	0	0	1
Virginia	0	0	0	18	9	0	0	1
West Virginia	0	0	0	0	12	0	0	2
East South Central	**0**	**0**	**0**	**12**	**3**	**0**	**10**	**1**
Alabama	0	0	0	28	4	0	0	1
Kentucky	0	0	0	48	16	0	0	2
Mississippi	0	0	0	6	5	0	0	4
Tennessee	0	0	0	31	8	0	61	1
West South Central	**0**	**0**	**0**	**5**	**1**	**0**	**2**	**1**
Arkansas	0	0	0	21	5	0	91	3
Louisiana	0	0	0	0	5	0	2	2
Oklahoma	0	0	0	0	2	0	0	2
Texas	0	0	0	5	1	0	5	1
Mountain	**0**	**10**	**0**	**3**	**2**	**0**	**0**	**1**
Arizona	0	0	0	4	5	0	0	0
Colorado	0	0	0	13	3	0	0	1
Idaho	0	40	0	16	9	0	0	6
Montana	0	0	0	66	12	0	0	4
Nevada	0	10	0	4	6	0	0	1
New Mexico	0	0	0	12	3	0	0	1
Utah	0	17	0	9	6	0	0	1
Wyoming	0	0	0	0	9	0	0	4
Pacific Contiguous	**0**	**3**	**0**	**3**	**2**	**0**	**2**	**1**
California	0	3	0	3	2	0	2	1
Oregon	0	24	0	21	7	0	0	2
Washington	0	0	0	0	5	0	0	1
Pacific Noncontiguous	**0**	**23**	**0**	**17**	**9**	**0**	**0**	**4**
Alaska	0	0	0	0	33	0	0	12
Hawaii	0	23	0	17	9	0	0	1
U.S. Total	**0**	**5**	**0**	**3**	**2**	**0**	**1**	**0**

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

Table A.1.C. Relative Standard Error (Percent) for Small Scale Solar Generation and Capacity by Sector, Census Division and State, November 2017

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**0**	**2**	**.**	**0**
Connecticut	0	1	0	.	0
Maine	3	3	0	.	2
Massachusetts	1	0	2	.	0
New Hampshire	1	0	0	.	1
Rhode Island	1	0	0	.	1
Vermont	4	5	119	.	4
Middle Atlantic	**0**	**0**	**2**	**.**	**0**
New Jersey	0	0	3	.	0
New York	0	0	1	.	0
Pennsylvania	2	2	0	.	1
East North Central	**2**	**1**	**5**	**.**	**1**
Illinois	4	6	0	.	4
Indiana	5	4	0	.	3
Michigan	2	8	81	.	4
Ohio	3	1	11	.	1
Wisconsin	5	6	2	.	3
West North Central	**1**	**1**	**6**	**.**	**1**
Iowa	4	2	29	.	2
Kansas	7	9	0	.	6
Minnesota	4	5	5	.	3
Missouri	1	1	0	.	1
Nebraska	12	31	34	.	12
North Dakota	0	0	0	.	0
South Dakota	0	0	0	.	0
South Atlantic	**1**	**2**	**3**	**.**	**1**
Delaware	3	3	22	.	2
District of Columbia	0	0	0	.	0
Florida	4	7	5	.	3
Georgia	76	137	0	.	68
Maryland	1	2	4	.	1
North Carolina	8	1	0	.	4
South Carolina	2	6	0	.	2
Virginia	9	8	20	.	6
West Virginia	0	0	0	.	0
East South Central	**6**	**11**	**0**	**.**	**6**
Alabama	0	0	0	.	0
Kentucky	7	12	0	.	7
Mississippi	9	31	0	.	18
Tennessee	0	0	0	.	0
West South Central	**3**	**4**	**0**	**.**	**3**
Arkansas	19	5	0	.	13
Louisiana	2	3	0	.	2
Oklahoma	18	3	0	.	15
Texas	6	5	0	.	5
Mountain	**0**	**0**	**0**	**.**	**0**
Arizona	0	0	0	.	0
Colorado	2	1	13	.	1
Idaho	3	2	0	.	2
Montana	10	4	0	.	7
Nevada	0	0	0	.	0
New Mexico	3	1	0	.	2
Utah	1	1	0	.	1
Wyoming	30	12	0	.	19
Pacific Contiguous	**0**	**0**	**0**	**.**	**0**
California	0	0	0	.	0
Oregon	1	2	8	.	1
Washington	2	6	61	.	2
Pacific Noncontiguous	**0**	**0**	**0**	**.**	**0**
Alaska	2	4	0	.	2
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, November 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**29**	**0**	**77**	**0**	**0**	**17**
Connecticut	0	37	0	0	0	0	42
Maine	0	0	0	0	0	0	0
Massachusetts	0	137	0	138	0	0	50
New Hampshire	0	19	0	0	0	0	28
Rhode Island	0	0	0	0	0	0	0
Vermont	0	55	0	0	0	0	24
Middle Atlantic	**0**	**21**	**0**	**10**	**0**	**0**	**1**
New Jersey	0	379	0	117	0	0	0
New York	0	21	0	10	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**1**	**4**	**0**	**4**	**13**	**0**	**11**
Illinois	0	50	0	66	0	0	42
Indiana	1	2	0	5	164	0	22
Michigan	3	7	0	9	0	0	21
Ohio	4	9	0	3	0	0	26
Wisconsin	0	25	0	6	0	0	16
West North Central	**1**	**8**	**0**	**11**	**0**	**0**	**8**
Iowa	1	13	0	15	0	0	27
Kansas	3	5	0	12	0	0	0
Minnesota	3	32	0	14	0	0	28
Missouri	0	5	0	45	0	0	15
Nebraska	5	112	0	33	0	0	20
North Dakota	0	6	0	31	0	0	18
South Dakota	0	140	0	41	0	0	12
South Atlantic	**0**	**6**	**0**	**1**	**0**	**0**	**8**
Delaware	0	0	0	0	0	0	0
Florida	0	12	0	1	0	0	36
Georgia	0	22	0	4	0	0	10
Maryland	0	9	0	0	0	0	0
North Carolina	0	4	0	2	0	0	9
South Carolina	0	31	0	7	0	0	15
Virginia	6	31	0	4	0	0	17
West Virginia	0	0	0	0	0	0	27
East South Central	**0**	**2**	**0**	**4**	**0**	**0**	**4**
Alabama	0	33	0	6	0	0	6
Kentucky	0	1	0	13	0	0	10
Mississippi	0	74	0	5	0	0	0
Tennessee	0	0	0	6	0	0	7
West South Central	**0**	**11**	**0**	**6**	**0**	**0**	**7**
Arkansas	0	19	0	32	0	0	9
Louisiana	0	36	0	7	0	0	0
Oklahoma	0	2	0	8	0	0	10
Texas	0	23	0	10	0	0	16
Mountain	**1**	**4**	**0**	**1**	**0**	**0**	**4**
Arizona	0	2	0	1	0	0	4
Colorado	0	27	0	1	0	0	20
Idaho	0	0	0	25	0	0	9
Montana	0	461	0	26	0	0	8
Nevada	0	0	0	0	0	0	0
New Mexico	0	12	0	5	0	0	68
Utah	0	3	0	6	0	0	28
Wyoming	4	3	0	14	0	0	25
Pacific Contiguous	**0**	**12**	**0**	**2**	**0**	**0**	**2**
California	0	12	0	1	0	0	6
Oregon	0	0	0	9	0	0	3
Washington	0	44	0	6	0	0	1
Pacific Noncontiguous	**104**	**1**	**0**	**19**	**0**	**0**	**20**
Alaska	104	4	0	19	0	0	20
Hawaii	0	1	0	0	0	0	0
U.S. Total	**0**	**1**	**0**	**1**	**13**	**0**	**2**

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

Electric Utilities by Census Division and State, November 2017 (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**	**47**	**12**	**0**	**0**	**10**
Connecticut	0	0	0	0	0	0	0	11
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	108	63	0	0	44
New Hampshire	0	0	0	0	0	0	0	10
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	56	22	0	0	16
Middle Atlantic	**0**	**0**	**0**	**44**	**44**	**0**	**0**	**2**
New Jersey	0	0	0	44	44	0	0	36
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**	**24**	**10**	**0**	**3**	**1**
Illinois	0	0	0	0	38	0	0	14
Indiana	0	0	0	36	17	0	0	1
Michigan	0	0	0	32	12	0	0	2
Ohio	0	0	0	138	120	0	0	3
Wisconsin	0	0	0	0	18	0	34	2
West North Central	**0**	**0**	**0**	**81**	**4**	**0**	**9**	**1**
Iowa	0	0	0	107	5	0	0	2
Kansas	0	0	0	0	6	0	0	2
Minnesota	0	0	0	179	10	0	0	2
Missouri	0	0	0	0	52	0	0	2
Nebraska	0	0	0	0	30	0	0	3
North Dakota	0	0	0	0	8	0	50	2
South Dakota	0	0	0	0	17	0	0	7
South Atlantic	**0**	**0**	**0**	**7**	**12**	**0**	**0**	**1**
Delaware	0	0	0	152	152	0	0	30
Florida	0	0	0	6	5	0	0	1
Georgia	0	0	0	17	17	0	0	1
Maryland	0	0	0	137	137	0	0	41
North Carolina	0	0	0	18	18	0	0	1
South Carolina	0	0	0	0	10	0	0	1
Virginia	0	0	0	26	22	0	0	2
West Virginia	0	0	0	0	0	0	0	1
East South Central	**0**	**0**	**0**	**40**	**26**	**0**	**0**	**1**
Alabama	0	0	0	64	64	0	0	1
Kentucky	0	0	0	48	28	0	0	2
Mississippi	0	0	0	0	0	0	0	4
Tennessee	0	0	0	0	0	0	0	1
West South Central	**0**	**0**	**0**	**90**	**7**	**0**	**0**	**2**
Arkansas	0	0	0	271	271	0	0	4
Louisiana	0	0	0	0	0	0	0	3
Oklahoma	0	0	0	0	7	0	0	4
Texas	0	0	0	156	25	0	0	4
Mountain	**0**	**23**	**0**	**12**	**9**	**0**	**0**	**1**
Arizona	0	0	0	14	14	0	0	0
Colorado	0	0	0	162	33	0	0	1
Idaho	0	0	0	0	96	0	0	9
Montana	0	0	0	0	34	0	0	8
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	25	25	0	0	1
Utah	0	23	0	0	23	0	0	1
Wyoming	0	0	0	0	12	0	0	4
Pacific Contiguous	**0**	**0**	**0**	**18**	**5**	**0**	**0**	**1**
California	0	0	0	18	5	0	0	2
Oregon	0	0	0	167	10	0	0	3
Washington	0	0	0	0	7	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**33**	**0**	**0**	**7**
Alaska	0	0	0	0	52	0	0	13
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**6**	**0**	**6**	**4**	**0**	**3**	**0**

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

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

Electric Utilities by Census Division and State, Year-to-Date through November 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**29**	**0**	**77**	**0**	**0**	**17**
Connecticut	0	37	0	0	0	0	42
Maine	0	0	0	0	0	0	0
Massachusetts	0	137	0	138	0	0	50
New Hampshire	0	19	0	0	0	0	28
Rhode Island	0	0	0	0	0	0	0
Vermont	0	55	0	0	0	0	24
Middle Atlantic	**0**	**21**	**0**	**10**	**0**	**0**	**1**
New Jersey	0	379	0	117	0	0	0
New York	0	21	0	10	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**1**	**4**	**0**	**4**	**13**	**0**	**11**
Illinois	0	50	0	66	0	0	42
Indiana	1	2	0	5	164	0	22
Michigan	3	7	0	9	0	0	21
Ohio	4	9	0	3	0	0	26
Wisconsin	0	25	0	6	0	0	16
West North Central	**1**	**8**	**0**	**11**	**0**	**0**	**8**
Iowa	1	13	0	15	0	0	27
Kansas	3	5	0	12	0	0	0
Minnesota	3	32	0	14	0	0	28
Missouri	0	5	0	45	0	0	15
Nebraska	5	112	0	33	0	0	20
North Dakota	0	6	0	31	0	0	18
South Dakota	0	140	0	41	0	0	12
South Atlantic	**0**	**6**	**0**	**1**	**0**	**0**	**8**
Delaware	0	0	0	0	0	0	0
Florida	0	12	0	1	0	0	36
Georgia	0	22	0	4	0	0	10
Maryland	0	9	0	0	0	0	0
North Carolina	0	4	0	2	0	0	9
South Carolina	0	31	0	7	0	0	15
Virginia	6	31	0	4	0	0	17
West Virginia	0	0	0	0	0	0	27
East South Central	**0**	**2**	**0**	**4**	**0**	**0**	**4**
Alabama	0	33	0	6	0	0	6
Kentucky	0	1	0	13	0	0	10
Mississippi	0	74	0	5	0	0	0
Tennessee	0	0	0	6	0	0	7
West South Central	**0**	**11**	**0**	**6**	**0**	**0**	**7**
Arkansas	0	19	0	32	0	0	9
Louisiana	0	36	0	7	0	0	0
Oklahoma	0	2	0	8	0	0	10
Texas	0	23	0	10	0	0	16
Mountain	**1**	**4**	**0**	**1**	**0**	**0**	**4**
Arizona	0	2	0	1	0	0	4
Colorado	0	27	0	1	0	0	20
Idaho	0	0	0	25	0	0	9
Montana	0	461	0	26	0	0	8
Nevada	0	0	0	0	0	0	0
New Mexico	0	12	0	5	0	0	68
Utah	0	3	0	6	0	0	28
Wyoming	4	3	0	14	0	0	25
Pacific Contiguous	**0**	**12**	**0**	**2**	**0**	**0**	**2**
California	0	12	0	1	0	0	6
Oregon	0	0	0	9	0	0	3
Washington	0	44	0	6	0	0	1
Pacific Noncontiguous	**104**	**1**	**0**	**19**	**0**	**0**	**20**
Alaska	104	4	0	19	0	0	20
Hawaii	0	1	0	0	0	0	0
U.S. Total	**0**	**1**	**0**	**1**	**13**	**0**	**2**

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

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

Electric Utilities by Census Division and State, Year-to-Date through November 2017 (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**	**47**	**12**	**0**	**0**	**10**
Connecticut	0	0	0	0	0	0	0	11
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	108	63	0	0	44
New Hampshire	0	0	0	0	0	0	0	10
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	56	22	0	0	16
Middle Atlantic	**0**	**0**	**0**	**44**	**44**	**0**	**0**	**2**
New Jersey	0	0	0	44	44	0	0	36
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**	**24**	**10**	**0**	**3**	**1**
Illinois	0	0	0	0	38	0	0	14
Indiana	0	0	0	36	17	0	0	1
Michigan	0	0	0	32	12	0	0	2
Ohio	0	0	0	138	120	0	0	3
Wisconsin	0	0	0	0	18	0	34	2
West North Central	**0**	**0**	**0**	**81**	**4**	**0**	**9**	**1**
Iowa	0	0	0	107	5	0	0	2
Kansas	0	0	0	0	6	0	0	2
Minnesota	0	0	0	179	10	0	0	2
Missouri	0	0	0	0	52	0	0	2
Nebraska	0	0	0	0	30	0	0	3
North Dakota	0	0	0	0	8	0	50	2
South Dakota	0	0	0	0	17	0	0	7
South Atlantic	**0**	**0**	**0**	**7**	**12**	**0**	**0**	**1**
Delaware	0	0	0	152	152	0	0	30
Florida	0	0	0	6	5	0	0	1
Georgia	0	0	0	17	17	0	0	1
Maryland	0	0	0	137	137	0	0	41
North Carolina	0	0	0	18	18	0	0	1
South Carolina	0	0	0	0	10	0	0	1
Virginia	0	0	0	26	22	0	0	2
West Virginia	0	0	0	0	0	0	0	1
East South Central	**0**	**0**	**0**	**40**	**26**	**0**	**0**	**1**
Alabama	0	0	0	64	64	0	0	1
Kentucky	0	0	0	48	28	0	0	2
Mississippi	0	0	0	0	0	0	0	4
Tennessee	0	0	0	0	0	0	0	1
West South Central	**0**	**0**	**0**	**90**	**7**	**0**	**0**	**2**
Arkansas	0	0	0	271	271	0	0	4
Louisiana	0	0	0	0	0	0	0	3
Oklahoma	0	0	0	0	7	0	0	4
Texas	0	0	0	156	25	0	0	4
Mountain	**0**	**23**	**0**	**12**	**9**	**0**	**0**	**1**
Arizona	0	0	0	14	14	0	0	0
Colorado	0	0	0	162	33	0	0	1
Idaho	0	0	0	0	96	0	0	9
Montana	0	0	0	0	34	0	0	8
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	25	25	0	0	1
Utah	0	23	0	0	23	0	0	1
Wyoming	0	0	0	0	12	0	0	4
Pacific Contiguous	**0**	**0**	**0**	**18**	**5**	**0**	**0**	**1**
California	0	0	0	18	5	0	0	2
Oregon	0	0	0	167	10	0	0	3
Washington	0	0	0	0	7	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**33**	**0**	**0**	**7**
Alaska	0	0	0	0	52	0	0	13
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**6**	**0**	**6**	**4**	**0**	**3**	**0**

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

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

Independent Power Producers by Census Division and State, November 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**8**	**0**	**5**	**0**	**0**	**8**
Connecticut	0	34	0	1	0	0	38
Maine	0	1	0	60	0	0	9
Massachusetts	0	7	0	8	0	0	22
New Hampshire	0	28	0	0	0	0	19
Rhode Island	0	66	0	27	0	0	0
Vermont	0	0	0	0	0	0	19
Middle Atlantic	**2**	**12**	**0**	**3**	**0**	**0**	**9**
New Jersey	0	68	0	11	0	0	193
New York	0	43	0	4	0	0	8
Pennsylvania	2	10	0	2	0	0	12
East North Central	**0**	**2**	**0**	**2**	**8**	**0**	**26**
Illinois	0	9	0	12	0	0	36
Indiana	0	0	0	3	0	0	0
Michigan	0	0	0	1	0	0	76
Ohio	0	3	0	1	24	0	35
Wisconsin	0	0	0	0	0	0	73
West North Central	**0**	**60**	**0**	**39**	**0**	**0**	**48**
Iowa	0	202	0	0	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	62	0	27	0	0	54
Missouri	0	0	0	63	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**3**	**14**	**0**	**5**	**0**	**0**	**5**
Delaware	0	86	0	30	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	45	0	21	0	0	0
Georgia	0	177	0	8	0	0	282
Maryland	0	8	0	7	0	0	2
North Carolina	0	116	0	29	0	0	59
South Carolina	0	0	0	6	0	0	65
Virginia	0	9	0	2	0	0	44
West Virginia	5	0	0	32	0	0	26
East South Central	**0**	**160**	**0**	**3**	**0**	**0**	**146**
Alabama	0	246	0	3	0	0	0
Kentucky	0	0	0	0	0	0	146
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**20**	**0**	**2**	**5**	**0**	**13**
Arkansas	0	0	0	6	0	0	60
Louisiana	0	0	0	0	0	0	13
Oklahoma	0	0	0	0	0	0	0
Texas	0	20	0	2	5	0	0
Mountain	**4**	**10**	**0**	**2**	**0**	**0**	**22**
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	3	0	0	59
Idaho	0	0	0	37	0	0	27
Montana	5	12	0	23	0	0	66
Nevada	0	0	0	0	0	0	54
New Mexico	0	0	0	3	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**30**	**0**	**1**	**0**	**0**	**27**
California	0	0	0	1	0	0	37
Oregon	0	0	0	1	0	0	47
Washington	0	36	0	18	0	0	37
Pacific Noncontiguous	**5**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	42	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**0**	**2**	**0**	**1**	**5**	**0**	**6**

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

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

Independent Power Producers by Census Division and State, November 2017 (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**	**12**	**8**	**0**	**1**	**2**
Connecticut	0	0	0	49	14	0	0	1
Maine	0	0	0	114	11	0	0	12
Massachusetts	0	0	0	13	8	0	2	5
New Hampshire	0	0	0	0	23	0	0	3
Rhode Island	0	0	0	99	9	0	0	24
Vermont	0	0	0	46	39	0	0	17
Middle Atlantic	**0**	**0**	**0**	**12**	**5**	**0**	**0**	**1**
New Jersey	0	0	0	14	7	0	0	5
New York	0	0	0	24	6	0	0	2
Pennsylvania	0	0	0	52	7	0	0	1
East North Central	**0**	**0**	**0**	**20**	**3**	**0**	**16**	**0**
Illinois	0	0	0	36	4	0	0	1
Indiana	0	0	0	28	6	0	0	3
Michigan	0	0	0	0	8	0	25	2
Ohio	0	0	0	40	5	0	0	0
Wisconsin	0	0	0	69	10	0	0	1
West North Central	**0**	**0**	**0**	**11**	**3**	**0**	**0**	**3**
Iowa	0	0	0	237	7	0	0	4
Kansas	0	0	0	137	2	0	0	2
Minnesota	0	0	0	12	6	0	0	6
Missouri	0	0	0	40	6	0	0	19
Nebraska	0	0	0	75	7	0	0	7
North Dakota	0	0	0	0	6	0	0	6
South Dakota	0	0	0	271	12	0	0	12
South Atlantic	**0**	**0**	**0**	**4**	**3**	**0**	**1**	**2**
Delaware	0	0	0	60	36	0	0	25
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	10	5	0	2	13
Georgia	0	0	0	8	6	0	0	6
Maryland	0	0	0	20	12	0	0	1
North Carolina	0	0	0	5	4	0	0	7
South Carolina	0	0	0	34	31	0	0	7
Virginia	0	0	0	25	16	0	0	2
West Virginia	0	0	0	0	12	0	0	5
East South Central	**0**	**0**	**0**	**13**	**11**	**0**	**0**	**3**
Alabama	0	0	0	31	17	0	0	3
Kentucky	0	0	0	0	0	0	0	4
Mississippi	0	0	0	6	8	0	0	0
Tennessee	0	0	0	32	25	0	0	23
West South Central	**0**	**0**	**0**	**5**	**1**	**0**	**0**	**1**
Arkansas	0	0	0	0	22	0	0	3
Louisiana	0	0	0	0	35	0	0	2
Oklahoma	0	0	0	0	2	0	0	1
Texas	0	0	0	5	1	0	0	1
Mountain	**0**	**10**	**0**	**3**	**2**	**0**	**0**	**2**
Arizona	0	0	0	4	6	0	0	2
Colorado	0	0	0	13	2	0	0	2
Idaho	0	40	0	16	10	0	0	10
Montana	0	0	0	66	13	0	0	4
Nevada	0	10	0	4	6	0	0	4
New Mexico	0	0	0	13	3	0	0	2
Utah	0	24	0	9	7	0	0	5
Wyoming	0	0	0	0	12	0	0	9
Pacific Contiguous	**0**	**4**	**0**	**3**	**2**	**0**	**0**	**1**
California	0	4	0	3	2	0	0	1
Oregon	0	24	0	21	8	0	0	4
Washington	0	0	0	0	10	0	0	4
Pacific Noncontiguous	**0**	**23**	**0**	**22**	**12**	**0**	**0**	**4**
Alaska	0	0	0	0	68	0	0	36
Hawaii	0	23	0	22	12	0	0	3
U.S. Total	**0**	**5**	**0**	**3**	**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.3.B. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Independent Power Producers by Census Division and State, Year-to-Date through November 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**8**	**0**	**5**	**0**	**0**	**8**
Connecticut	0	34	0	1	0	0	38
Maine	0	1	0	60	0	0	9
Massachusetts	0	7	0	8	0	0	22
New Hampshire	0	28	0	0	0	0	19
Rhode Island	0	66	0	27	0	0	0
Vermont	0	0	0	0	0	0	19
Middle Atlantic	**2**	**12**	**0**	**3**	**0**	**0**	**9**
New Jersey	0	68	0	11	0	0	193
New York	0	43	0	4	0	0	8
Pennsylvania	2	10	0	2	0	0	12
East North Central	**0**	**2**	**0**	**2**	**8**	**0**	**26**
Illinois	0	9	0	12	0	0	36
Indiana	0	0	0	3	0	0	0
Michigan	0	0	0	1	0	0	76
Ohio	0	3	0	1	24	0	35
Wisconsin	0	0	0	0	0	0	73
West North Central	**0**	**60**	**0**	**39**	**0**	**0**	**48**
Iowa	0	202	0	0	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	62	0	27	0	0	54
Missouri	0	0	0	63	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**3**	**14**	**0**	**5**	**0**	**0**	**5**
Delaware	0	86	0	30	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	45	0	21	0	0	0
Georgia	0	177	0	8	0	0	282
Maryland	0	8	0	7	0	0	2
North Carolina	0	116	0	29	0	0	59
South Carolina	0	0	0	6	0	0	65
Virginia	0	9	0	2	0	0	44
West Virginia	5	0	0	32	0	0	26
East South Central	**0**	**160**	**0**	**3**	**0**	**0**	**146**
Alabama	0	246	0	3	0	0	0
Kentucky	0	0	0	0	0	0	146
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**20**	**0**	**2**	**5**	**0**	**13**
Arkansas	0	0	0	6	0	0	60
Louisiana	0	0	0	0	0	0	13
Oklahoma	0	0	0	0	0	0	0
Texas	0	20	0	2	5	0	0
Mountain	**4**	**10**	**0**	**2**	**0**	**0**	**22**
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	3	0	0	59
Idaho	0	0	0	37	0	0	27
Montana	5	12	0	23	0	0	66
Nevada	0	0	0	0	0	0	54
New Mexico	0	0	0	3	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**30**	**0**	**1**	**0**	**0**	**27**
California	0	0	0	1	0	0	37
Oregon	0	0	0	1	0	0	47
Washington	0	36	0	18	0	0	37
Pacific Noncontiguous	**5**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	42	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**0**	**2**	**0**	**1**	**5**	**0**	**6**

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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 November 2017 (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**	**12**	**8**	**0**	**1**	**2**
Connecticut	0	0	0	49	14	0	0	1
Maine	0	0	0	114	11	0	0	12
Massachusetts	0	0	0	13	8	0	2	5
New Hampshire	0	0	0	0	23	0	0	3
Rhode Island	0	0	0	99	9	0	0	24
Vermont	0	0	0	46	39	0	0	17
Middle Atlantic	**0**	**0**	**0**	**12**	**5**	**0**	**0**	**1**
New Jersey	0	0	0	14	7	0	0	5
New York	0	0	0	24	6	0	0	2
Pennsylvania	0	0	0	52	7	0	0	1
East North Central	**0**	**0**	**0**	**20**	**3**	**0**	**16**	**0**
Illinois	0	0	0	36	4	0	0	1
Indiana	0	0	0	28	6	0	0	3
Michigan	0	0	0	0	8	0	25	2
Ohio	0	0	0	40	5	0	0	0
Wisconsin	0	0	0	69	10	0	0	1
West North Central	**0**	**0**	**0**	**11**	**3**	**0**	**0**	**3**
Iowa	0	0	0	237	7	0	0	4
Kansas	0	0	0	137	2	0	0	2
Minnesota	0	0	0	12	6	0	0	6
Missouri	0	0	0	40	6	0	0	19
Nebraska	0	0	0	75	7	0	0	7
North Dakota	0	0	0	0	6	0	0	6
South Dakota	0	0	0	271	12	0	0	12
South Atlantic	**0**	**0**	**0**	**4**	**3**	**0**	**1**	**2**
Delaware	0	0	0	60	36	0	0	25
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	10	5	0	2	13
Georgia	0	0	0	8	6	0	0	6
Maryland	0	0	0	20	12	0	0	1
North Carolina	0	0	0	5	4	0	0	7
South Carolina	0	0	0	34	31	0	0	7
Virginia	0	0	0	25	16	0	0	2
West Virginia	0	0	0	0	12	0	0	5
East South Central	**0**	**0**	**0**	**13**	**11**	**0**	**0**	**3**
Alabama	0	0	0	31	17	0	0	3
Kentucky	0	0	0	0	0	0	0	4
Mississippi	0	0	0	6	8	0	0	0
Tennessee	0	0	0	32	25	0	0	23
West South Central	**0**	**0**	**0**	**5**	**1**	**0**	**0**	**1**
Arkansas	0	0	0	0	22	0	0	3
Louisiana	0	0	0	0	35	0	0	2
Oklahoma	0	0	0	0	2	0	0	1
Texas	0	0	0	5	1	0	0	1
Mountain	**0**	**10**	**0**	**3**	**2**	**0**	**0**	**2**
Arizona	0	0	0	4	6	0	0	2
Colorado	0	0	0	13	2	0	0	2
Idaho	0	40	0	16	10	0	0	10
Montana	0	0	0	66	13	0	0	4
Nevada	0	10	0	4	6	0	0	4
New Mexico	0	0	0	13	3	0	0	2
Utah	0	24	0	9	7	0	0	5
Wyoming	0	0	0	0	12	0	0	9
Pacific Contiguous	**0**	**4**	**0**	**3**	**2**	**0**	**0**	**1**
California	0	4	0	3	2	0	0	1
Oregon	0	24	0	21	8	0	0	4
Washington	0	0	0	0	10	0	0	4
Pacific Noncontiguous	**0**	**23**	**0**	**22**	**12**	**0**	**0**	**4**
Alaska	0	0	0	0	68	0	0	36
Hawaii	0	23	0	22	12	0	0	3
U.S. Total	**0**	**5**	**0**	**3**	**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.4.A. Relative Standard Error for Net Generation by Fuel Type: Commercial Sector by Census Division and State, November 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**29**	**0**	**20**	**0**	**0**	**0**
Connecticut	0	2,379	0	30	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	78	0	33	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**	**117**	**0**	**18**	**0**	**0**	**0**
New Jersey	0	0	0	19	0	0	0
New York	0	156	0	26	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	**41**	**67**	**0**	**9**	**0**	**0**	**0**
Illinois	126	352	0	37	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	7	0	5	0	0	0
Ohio	0	0	0	0	0	0	0
Wisconsin	0	0	0	17	0	0	0
West North Central	**0**	**40**	**0**	**2**	**0**	**0**	**0**
Iowa	0	0	0	2	0	0	0
Minnesota	0	67	0	5	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	1,938	0	0	0	0	0
South Atlantic	**0**	**1**	**0**	**0**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	31	0	0	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**33**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	33	0	0	0
West South Central	**0**	**22**	**0**	**34**	**0**	**0**	**504**
Arkansas	0	0	0	0	0	0	0
Louisiana	0	0	0	40	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	22	0	44	0	0	504
Mountain	**0**	**0**	**0**	**12**	**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	50	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**40**	**0**	**4**	**0**	**0**	**0**
California	0	53	0	4	0	0	0
Oregon	0	0	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**46**	**7**	**0**	**0**	**0**	**0**	**59**
Alaska	46	8	0	0	0	0	59
Hawaii	0	0	0	0	0	0	0
U.S. Total	**16**	**16**	**0**	**5**	**0**	**0**	**52**

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, November 2017 (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**	**98**	**2**	**0**	**0**	**14**
Connecticut	0	0	0	0	0	0	0	30
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	98	9	0	0	29
New Hampshire	0	0	0	0	0	0	0	1
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	**0**	**0**	**0**	**32**	**5**	**0**	**4**	**8**
New Jersey	0	0	0	33	12	0	0	8
New York	0	0	0	152	5	0	8	15
Pennsylvania	0	0	0	167	8	0	0	3
East North Central	**0**	**0**	**0**	**267**	**7**	**0**	**0**	**7**
Illinois	0	0	0	0	249	0	0	35
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	0	0	0	0	3
Ohio	0	0	0	267	35	0	0	4
Wisconsin	0	0	0	0	19	0	0	13
West North Central	**0**	**0**	**0**	**0**	**21**	**0**	**45**	**7**
Iowa	0	0	0	0	25	0	0	5
Kansas	0	0	0	0	179	0	0	179
Minnesota	0	0	0	0	62	0	45	22
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	1,938
South Atlantic	**0**	**0**	**0**	**34**	**9**	**0**	**0**	**3**
Delaware	0	0	0	344	54	0	0	54
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	228	26	0	0	18
Georgia	0	0	0	238	238	0	0	131
Maryland	0	0	0	154	31	0	0	2
North Carolina	0	0	0	36	32	0	0	15
South Carolina	0	0	0	0	0	0	0	0
Virginia	0	0	0	0	3	0	0	1
East South Central	**0**	**0**	**0**	**174**	**174**	**0**	**0**	**33**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	174	174	0	0	33
West South Central	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29**
Arkansas	0	0	0	0	0	0	0	0
Louisiana	0	0	0	0	0	0	0	40
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	0	0	0	36
Mountain	**0**	**0**	**0**	**41**	**30**	**0**	**0**	**11**
Arizona	0	0	0	83	83	0	0	8
Colorado	0	0	0	102	102	0	0	35
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	52	52	0	0	21
New Mexico	0	0	0	0	250	0	0	49
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**35**	**6**	**0**	**0**	**3**
California	0	0	0	35	6	0	0	4
Oregon	0	0	0	0	30	0	0	13
Washington	0	0	0	0	49	0	0	20
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**
Alaska	0	0	0	0	0	0	0	31
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**17**	**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 November 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**29**	**0**	**20**	**0**	**0**	**0**
Connecticut	0	2,379	0	30	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	78	0	33	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**	**117**	**0**	**18**	**0**	**0**	**0**
New Jersey	0	0	0	19	0	0	0
New York	0	156	0	26	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	**41**	**67**	**0**	**9**	**0**	**0**	**0**
Illinois	126	352	0	37	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	7	0	5	0	0	0
Ohio	0	0	0	0	0	0	0
Wisconsin	0	0	0	17	0	0	0
West North Central	**0**	**40**	**0**	**2**	**0**	**0**	**0**
Iowa	0	0	0	2	0	0	0
Minnesota	0	67	0	5	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	1,938	0	0	0	0	0
South Atlantic	**0**	**1**	**0**	**0**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	31	0	0	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**33**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	33	0	0	0
West South Central	**0**	**22**	**0**	**34**	**0**	**0**	**504**
Arkansas	0	0	0	0	0	0	0
Louisiana	0	0	0	40	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	22	0	44	0	0	504
Mountain	**0**	**0**	**0**	**12**	**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	50	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**40**	**0**	**4**	**0**	**0**	**0**
California	0	53	0	4	0	0	0
Oregon	0	0	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**46**	**7**	**0**	**0**	**0**	**0**	**59**
Alaska	46	8	0	0	0	0	59
Hawaii	0	0	0	0	0	0	0
U.S. Total	**16**	**16**	**0**	**5**	**0**	**0**	**52**

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 November 2017 (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**	**98**	**2**	**0**	**0**	**14**
Connecticut	0	0	0	0	0	0	0	30
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	98	9	0	0	29
New Hampshire	0	0	0	0	0	0	0	1
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	**0**	**0**	**0**	**32**	**5**	**0**	**4**	**8**
New Jersey	0	0	0	33	12	0	0	8
New York	0	0	0	152	5	0	8	15
Pennsylvania	0	0	0	167	8	0	0	3
East North Central	**0**	**0**	**0**	**267**	**7**	**0**	**0**	**7**
Illinois	0	0	0	0	249	0	0	35
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	0	0	0	0	3
Ohio	0	0	0	267	35	0	0	4
Wisconsin	0	0	0	0	19	0	0	13
West North Central	**0**	**0**	**0**	**0**	**21**	**0**	**45**	**7**
Iowa	0	0	0	0	25	0	0	5
Kansas	0	0	0	0	179	0	0	179
Minnesota	0	0	0	0	62	0	45	22
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	1,938
South Atlantic	**0**	**0**	**0**	**34**	**9**	**0**	**0**	**3**
Delaware	0	0	0	344	54	0	0	54
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	228	26	0	0	18
Georgia	0	0	0	238	238	0	0	131
Maryland	0	0	0	154	31	0	0	2
North Carolina	0	0	0	36	32	0	0	15
South Carolina	0	0	0	0	0	0	0	0
Virginia	0	0	0	0	3	0	0	1
East South Central	**0**	**0**	**0**	**174**	**174**	**0**	**0**	**33**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	174	174	0	0	33
West South Central	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29**
Arkansas	0	0	0	0	0	0	0	0
Louisiana	0	0	0	0	0	0	0	40
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	0	0	0	36
Mountain	**0**	**0**	**0**	**41**	**30**	**0**	**0**	**11**
Arizona	0	0	0	83	83	0	0	8
Colorado	0	0	0	102	102	0	0	35
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	52	52	0	0	21
New Mexico	0	0	0	0	250	0	0	49
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**35**	**6**	**0**	**0**	**3**
California	0	0	0	35	6	0	0	4
Oregon	0	0	0	0	30	0	0	13
Washington	0	0	0	0	49	0	0	20
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**
Alaska	0	0	0	0	0	0	0	31
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**17**	**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, November 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**198**	**42**	**0**	**14**	**0**	**0**	**22**
Connecticut	0	0	0	20	0	0	0
Maine	198	45	0	35	0	0	23
Massachusetts	0	0	0	12	0	0	0
New Hampshire	0	0	0	0	0	0	0
Middle Atlantic	**22**	**14**	**66**	**12**	**19**	**0**	**19**
New Jersey	0	0	0	13	0	0	0
New York	0	0	0	13	0	0	19
Pennsylvania	35	103	146	19	25	0	0
East North Central	**6**	**3**	**0**	**6**	**14**	**0**	**27**
Illinois	6	0	0	20	0	0	0
Indiana	0	1	0	8	15	0	0
Michigan	82	516	0	11	0	0	54
Ohio	90	0	0	20	0	0	0
Wisconsin	21	268	0	10	0	0	30
West North Central	**4**	**0**	**0**	**4**	**0**	**0**	**26**
Iowa	3	0	0	0	0	0	0
Kansas	0	0	0	39	0	0	0
Minnesota	12	0	0	0	0	0	26
Missouri	0	0	0	0	0	0	0
Nebraska	6	0	0	0	0	0	0
North Dakota	58	0	0	0	0	0	0
South Atlantic	**19**	**46**	**69**	**8**	**32**	**0**	**21**
Delaware	0	0	0	22	34	0	0
Florida	85	154	0	18	0	0	0
Georgia	64	54	69	27	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	14	80	0	26	0	0	454
South Carolina	0	0	0	0	0	0	0
Virginia	23	210	0	7	0	0	0
West Virginia	0	0	0	0	0	0	21
East South Central	**7**	**120**	**0**	**13**	**0**	**0**	**0**
Alabama	76	179	0	22	0	0	0
Kentucky	0	0	0	15	0	0	0
Mississippi	0	0	0	30	0	0	0
Tennessee	0	0	0	12	0	0	0
West South Central	**0**	**0**	**39**	**2**	**7**	**0**	**0**
Arkansas	0	0	0	24	0	0	0
Louisiana	0	0	0	2	8	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	57	3	10	0	0
Mountain	**20**	**0**	**0**	**2**	**5**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	119	0	0	37	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	21	0	0	5	5	0	0
Pacific Contiguous	**0**	**74**	**0**	**3**	**2**	**0**	**0**
California	0	79	0	3	2	0	0
Oregon	0	0	0	30	0	0	0
Washington	0	86	0	25	0	0	0
Pacific Noncontiguous	**0**	**4**	**0**	**0**	**0**	**0**	**66**
Alaska	0	30	0	0	0	0	0
Hawaii	0	0	0	0	0	0	66
U.S. Total	**3**	**10**	**28**	**2**	**8**	**0**	**12**

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, November 2017 (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**	**0**	**9**	**0**	**0**	**8**
Connecticut	0	0	0	0	0	0	0	20
Maine	0	0	0	0	9	0	0	9
Massachusetts	0	0	0	0	0	0	0	11
New Hampshire	0	0	0	0	0	0	0	0
Middle Atlantic	**0**	**0**	**0**	**98**	**8**	**0**	**0**	**8**
New Jersey	0	0	0	136	136	0	0	7
New York	0	0	0	0	16	0	0	8
Pennsylvania	0	0	0	141	9	0	0	11
East North Central	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**5**
Illinois	0	0	0	0	0	0	0	6
Indiana	0	0	0	0	25	0	0	9
Michigan	0	0	0	0	9	0	0	6
Ohio	0	0	0	0	16	0	0	10
Wisconsin	0	0	0	0	9	0	55	8
West North Central	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**
Iowa	0	0	0	0	0	0	0	2
Kansas	0	0	0	0	0	0	0	36
Minnesota	0	0	0	0	0	0	0	5
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	6
North Dakota	0	0	0	0	66	0	0	32
South Atlantic	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**3**
Delaware	0	0	0	0	54	0	0	19
Florida	0	0	0	0	7	0	0	6
Georgia	0	0	0	0	5	0	13	6
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	5	0	0	5
South Carolina	0	0	0	0	3	0	0	2
Virginia	0	0	0	0	0	0	0	3
West Virginia	0	0	0	0	0	0	0	10
East South Central	**0**	**0**	**0**	**0**	**3**	**0**	**61**	**4**
Alabama	0	0	0	0	4	0	0	6
Kentucky	0	0	0	0	19	0	0	13
Mississippi	0	0	0	0	5	0	0	9
Tennessee	0	0	0	0	8	0	61	4
West South Central	**0**	**0**	**0**	**0**	**4**	**0**	**3**	**2**
Arkansas	0	0	0	0	5	0	91	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	6	3
Mountain	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**3**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	4	0	0	12
Montana	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	6
Pacific Contiguous	**0**	**0**	**0**	**59**	**7**	**0**	**3**	**2**
California	0	0	0	59	12	0	3	3
Oregon	0	0	0	0	14	0	0	13
Washington	0	0	0	0	8	0	0	8
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**
Alaska	0	0	0	0	0	0	0	14
Hawaii	0	0	0	0	0	0	0	7
U.S. Total	**0**	**0**	**0**	**47**	**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 November 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**198**	**42**	**0**	**14**	**0**	**0**	**22**
Connecticut	0	0	0	20	0	0	0
Maine	198	45	0	35	0	0	23
Massachusetts	0	0	0	12	0	0	0
New Hampshire	0	0	0	0	0	0	0
Middle Atlantic	**22**	**14**	**66**	**12**	**19**	**0**	**19**
New Jersey	0	0	0	13	0	0	0
New York	0	0	0	13	0	0	19
Pennsylvania	35	103	146	19	25	0	0
East North Central	**6**	**3**	**0**	**6**	**14**	**0**	**27**
Illinois	6	0	0	20	0	0	0
Indiana	0	1	0	8	15	0	0
Michigan	82	516	0	11	0	0	54
Ohio	90	0	0	20	0	0	0
Wisconsin	21	268	0	10	0	0	30
West North Central	**4**	**0**	**0**	**4**	**0**	**0**	**26**
Iowa	3	0	0	0	0	0	0
Kansas	0	0	0	39	0	0	0
Minnesota	12	0	0	0	0	0	26
Missouri	0	0	0	0	0	0	0
Nebraska	6	0	0	0	0	0	0
North Dakota	58	0	0	0	0	0	0
South Atlantic	**19**	**46**	**69**	**8**	**32**	**0**	**21**
Delaware	0	0	0	22	34	0	0
Florida	85	154	0	18	0	0	0
Georgia	64	54	69	27	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	14	80	0	26	0	0	454
South Carolina	0	0	0	0	0	0	0
Virginia	23	210	0	7	0	0	0
West Virginia	0	0	0	0	0	0	21
East South Central	**7**	**120**	**0**	**13**	**0**	**0**	**0**
Alabama	76	179	0	22	0	0	0
Kentucky	0	0	0	15	0	0	0
Mississippi	0	0	0	30	0	0	0
Tennessee	0	0	0	12	0	0	0
West South Central	**0**	**0**	**39**	**2**	**7**	**0**	**0**
Arkansas	0	0	0	24	0	0	0
Louisiana	0	0	0	2	8	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	57	3	10	0	0
Mountain	**20**	**0**	**0**	**2**	**5**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	119	0	0	37	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	21	0	0	5	5	0	0
Pacific Contiguous	**0**	**74**	**0**	**3**	**2**	**0**	**0**
California	0	79	0	3	2	0	0
Oregon	0	0	0	30	0	0	0
Washington	0	86	0	25	0	0	0
Pacific Noncontiguous	**0**	**4**	**0**	**0**	**0**	**0**	**66**
Alaska	0	30	0	0	0	0	0
Hawaii	0	0	0	0	0	0	66
U.S. Total	**3**	**10**	**28**	**2**	**8**	**0**	**12**

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 November 2017 (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**	**0**	**9**	**0**	**0**	**8**
Connecticut	0	0	0	0	0	0	0	20
Maine	0	0	0	0	9	0	0	9
Massachusetts	0	0	0	0	0	0	0	11
New Hampshire	0	0	0	0	0	0	0	0
Middle Atlantic	**0**	**0**	**0**	**98**	**8**	**0**	**0**	**8**
New Jersey	0	0	0	136	136	0	0	7
New York	0	0	0	0	16	0	0	8
Pennsylvania	0	0	0	141	9	0	0	11
East North Central	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**5**
Illinois	0	0	0	0	0	0	0	6
Indiana	0	0	0	0	25	0	0	9
Michigan	0	0	0	0	9	0	0	6
Ohio	0	0	0	0	16	0	0	10
Wisconsin	0	0	0	0	9	0	55	8
West North Central	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**
Iowa	0	0	0	0	0	0	0	2
Kansas	0	0	0	0	0	0	0	36
Minnesota	0	0	0	0	0	0	0	5
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	6
North Dakota	0	0	0	0	66	0	0	32
South Atlantic	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**3**
Delaware	0	0	0	0	54	0	0	19
Florida	0	0	0	0	7	0	0	6
Georgia	0	0	0	0	5	0	13	6
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	5	0	0	5
South Carolina	0	0	0	0	3	0	0	2
Virginia	0	0	0	0	0	0	0	3
West Virginia	0	0	0	0	0	0	0	10
East South Central	**0**	**0**	**0**	**0**	**3**	**0**	**61**	**4**
Alabama	0	0	0	0	4	0	0	6
Kentucky	0	0	0	0	19	0	0	13
Mississippi	0	0	0	0	5	0	0	9
Tennessee	0	0	0	0	8	0	61	4
West South Central	**0**	**0**	**0**	**0**	**4**	**0**	**3**	**2**
Arkansas	0	0	0	0	5	0	91	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	6	3
Mountain	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**3**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	4	0	0	12
Montana	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	6
Pacific Contiguous	**0**	**0**	**0**	**59**	**7**	**0**	**3**	**2**
California	0	0	0	59	12	0	3	3
Oregon	0	0	0	0	14	0	0	13
Washington	0	0	0	0	8	0	0	8
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**
Alaska	0	0	0	0	0	0	0	14
Hawaii	0	0	0	0	0	0	0	7
U.S. Total	**0**	**0**	**0**	**47**	**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, November 2017

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

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

by End-Use Sector, Census Division, and State, Year-to-Date through November 2017

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**0**	**3**	**0**	**0**
Connecticut	0	1	4	0	1
Maine	0	1	2	0	0
Massachusetts	1	1	6	0	1
New Hampshire	0	1	4	0	1
Rhode Island	0	0	0	0	0
Vermont	2	3	6	0	2
Middle Atlantic	**0**	**0**	**1**	**0**	**0**
New Jersey	0	0	2	0	0
New York	0	0	2	0	0
Pennsylvania	0	0	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	0	1	1	0	0
Indiana	1	1	2	0	1
Michigan	0	1	2	0	1
Ohio	1	1	1	0	1
Wisconsin	0	3	3	0	2
West North Central	**0**	**1**	**2**	**0**	**1**
Iowa	1	5	3	0	2
Kansas	1	1	4	0	1
Minnesota	1	3	4	0	2
Missouri	1	1	5	0	1
Nebraska	1	5	5	0	3
North Dakota	1	3	6	0	3
South Dakota	1	7	8	0	3
South Atlantic	**0**	**0**	**1**	**0**	**0**
Delaware	1	1	6	0	1
District of Columbia	0	0	0	0	0
Florida	0	0	3	0	0
Georgia	1	1	2	0	1
Maryland	0	0	3	0	0
North Carolina	0	0	2	0	0
South Carolina	1	1	2	0	1
Virginia	0	0	2	0	0
West Virginia	0	0	0	0	0
East South Central	**0**	**1**	**1**	**0**	**1**
Alabama	1	1	1	0	1
Kentucky	1	1	3	0	1
Mississippi	1	1	3	0	1
Tennessee	1	1	3	0	1
West South Central	**1**	**0**	**1**	**0**	**0**
Arkansas	1	1	2	0	1
Louisiana	1	1	1	0	0
Oklahoma	1	1	3	0	1
Texas	1	0	1	0	0
Mountain	**0**	**1**	**1**	**0**	**1**
Arizona	0	2	2	0	1
Colorado	1	4	4	0	2
Idaho	0	3	2	0	1
Montana	1	6	5	0	3
Nevada	0	2	1	0	1
New Mexico	1	6	5	0	3
Utah	1	4	2	0	2
Wyoming	1	6	2	0	2
Pacific Contiguous	**0**	**1**	**2**	**0**	**1**
California	0	1	1	0	0
Oregon	0	3	6	0	2
Washington	0	3	5	0	2
Pacific Noncontiguous	**0**	**3**	**2**	**0**	**2**
Alaska	1	7	9	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, November 2017

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**0**	**2**	**0**	**0**
Connecticut	0	1	2	0	0
Maine	0	1	2	0	1
Massachusetts	1	1	4	0	1
New Hampshire	0	1	4	0	1
Rhode Island	0	0	0	0	0
Vermont	2	3	6	0	2
Middle Atlantic	**0**	**0**	**1**	**0**	**0**
New Jersey	0	0	3	0	0
New York	0	0	2	0	0
Pennsylvania	0	0	1	0	0
East North Central	**0**	**1**	**2**	**0**	**0**
Illinois	1	1	3	0	1
Indiana	1	2	2	0	1
Michigan	1	1	4	0	1
Ohio	1	1	3	0	1
Wisconsin	1	3	6	0	2
West North Central	**1**	**2**	**4**	**0**	**1**
Iowa	2	6	8	0	3
Kansas	2	2	6	0	2
Minnesota	2	3	8	0	2
Missouri	1	2	6	0	1
Nebraska	3	6	12	0	4
North Dakota	2	4	9	0	3
South Dakota	3	7	14	0	4
South Atlantic	**0**	**1**	**2**	**0**	**0**
Delaware	1	3	10	0	2
District of Columbia	0	0	0	0	0
Florida	1	1	5	0	1
Georgia	1	1	4	0	1
Maryland	0	1	4	0	0
North Carolina	1	1	3	0	1
South Carolina	1	2	3	0	1
Virginia	1	1	4	0	1
West Virginia	0	1	0	0	0
East South Central	**1**	**1**	**2**	**0**	**1**
Alabama	1	2	3	0	1
Kentucky	1	2	4	0	1
Mississippi	2	3	5	0	2
Tennessee	1	2	5	0	1
West South Central	**1**	**1**	**2**	**0**	**1**
Arkansas	2	3	4	0	2
Louisiana	1	1	1	0	1
Oklahoma	2	2	5	0	2
Texas	1	1	2	0	1
Mountain	**1**	**2**	**3**	**0**	**1**
Arizona	1	3	6	0	1
Colorado	3	5	8	0	3
Idaho	1	4	6	0	2
Montana	3	5	18	0	4
Nevada	1	4	2	0	1
New Mexico	5	8	12	0	5
Utah	3	6	4	0	3
Wyoming	3	6	5	0	3
Pacific Contiguous	**0**	**1**	**2**	**0**	**1**
California	1	1	2	0	1
Oregon	1	3	11	0	2
Washington	1	3	9	0	2
Pacific Noncontiguous	**1**	**2**	**3**	**0**	**1**
Alaska	2	6	12	0	4
Hawaii	0	0	0	0	0
U.S. Total	**0**	**0**	**1**	**0**	**0**

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

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

by End-Use Sector, Census Division, and State, Year-to-Date through November 2017

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**0**	**2**	**0**	**0**
Connecticut	0	1	2	0	0
Maine	0	1	2	0	0
Massachusetts	1	1	4	0	1
New Hampshire	0	1	3	0	0
Rhode Island	0	0	0	0	0
Vermont	2	2	5	0	1
Middle Atlantic	**0**	**0**	**1**	**0**	**0**
New Jersey	0	0	2	0	0
New York	0	0	1	0	0
Pennsylvania	0	0	1	0	0
East North Central	**0**	**0**	**1**	**0**	**0**
Illinois	1	1	3	0	0
Indiana	1	1	1	0	1
Michigan	0	1	3	0	1
Ohio	1	1	2	0	0
Wisconsin	1	2	4	0	1
West North Central	**0**	**1**	**2**	**0**	**1**
Iowa	1	4	5	0	2
Kansas	1	1	4	0	1
Minnesota	1	2	5	0	2
Missouri	1	1	4	0	1
Nebraska	1	5	7	0	3
North Dakota	1	3	6	0	2
South Dakota	1	5	9	0	3
South Atlantic	**0**	**0**	**1**	**0**	**0**
Delaware	1	2	8	0	1
District of Columbia	0	0	0	0	0
Florida	0	1	3	0	0
Georgia	1	1	3	0	1
Maryland	0	0	3	0	0
North Carolina	1	1	2	0	1
South Carolina	1	1	2	0	1
Virginia	1	1	3	0	0
West Virginia	0	0	0	0	0
East South Central	**1**	**1**	**2**	**0**	**1**
Alabama	1	1	2	0	1
Kentucky	1	2	4	0	1
Mississippi	1	2	4	0	1
Tennessee	1	1	4	0	1
West South Central	**1**	**1**	**1**	**0**	**0**
Arkansas	1	2	3	0	1
Louisiana	1	1	1	0	1
Oklahoma	1	1	4	0	1
Texas	1	1	1	0	1
Mountain	**0**	**1**	**2**	**0**	**1**
Arizona	0	2	3	0	1
Colorado	1	4	5	0	2
Idaho	1	3	3	0	1
Montana	1	4	11	0	2
Nevada	0	3	1	0	1
New Mexico	2	6	8	0	3
Utah	1	4	3	0	2
Wyoming	1	5	3	0	2
Pacific Contiguous	**0**	**1**	**2**	**0**	**0**
California	0	1	1	0	0
Oregon	1	2	7	0	1
Washington	0	2	6	0	1
Pacific Noncontiguous	**0**	**2**	**2**	**0**	**1**
Alaska	1	5	9	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, November 2017

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

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

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

by End-Use Sector, Census Division, and State, Year-to-Date through November 2017

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

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

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

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, 2016

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
2016	1	01/10/2016 8:46 PM	01/11/2016 5:25 AM	8 Hours, 39 Minutes	ISO New England	NPCC	Maine: Connecticut: Massachusetts: Vermont: New Hampshire: Rhode Island:	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	59859
2016	1	01/22/2016 3:52 PM	01/24/2016 12:30 PM	44 Hours, 38 Minutes	Duke Energy Progress	SERC	North Carolina: South Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	150000
2016	1	01/23/2016 7:49 AM	01/23/2016 9:05 AM	1 Hours, 16 Minutes	FirstEnergy Corp. Jersey Central Power & Light	RFC	New Jersey:	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	50900
2016	2	02/05/2016 11:21 AM	02/06/2016 3:48 PM	28 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-Weather	Unknown	115057
2016	2	02/13/2016 12:44 PM	02/13/2016 4:27 PM	3 Hours, 43 Minutes	Pacific Gas & Electric Co	SERC	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-Islanding	7	4300
2016	2	02/16/2016 8:35 AM	02/16/2016 5:28 PM	8 Hours, 53 Minutes	American Electric Power - (RFC Reliability Region) (8400 Smiths Mill Road, New Albany Ohio 43054)	RFC	Virginia: Roanoke County, Montgomery County; West Virginia: Kanawha County, Cabell County; Tennessee: Sullivan County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	52640
2016	2	02/19/2016 10:00 PM	02/20/2016 11:13 PM	25 Hours, 13 Minutes	Detroit Edison Co	RFC	Michigan	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	145314
2016	2	02/24/2016 2:45 PM	02/25/2016 5:00 AM	14 Hours, 15 Minutes	Duke Energy Carolinas	SERC	North Carolina: South Carolina	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	400	284610
2016	2	02/25/2016 1:44 AM	02/25/2016 2:45 PM	13 Hours, 1 Minutes	ISO New England	NPCC	Connecticut: Maine: Massachusetts: Rhode Island: Vermont:	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	114190
2016	2	02/26/2016 12:01 AM	. .	. Hours, . Minutes	California Department of Water Resources	WECC	California: San Bernardino County	Fuel supply emergencies that could impact electric power system adequacy or reliability-Fuel Supply Deficiency	0	0
2016	3	03/01/2016 3:00 PM	. .	. Hours, . Minutes	Puget Sound Energy	WECC	Washington: King County, Whatcom County, Kitsap County, Skagit County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	56000
2016	3	03/03/2016 11:00 AM	04/16/2016 7:47 PM	1,064 Hours, 47 Minutes	California Department of Water Resources	WECC	California: San Bernardino County;	Fuel supply emergencies that could impact electric power system adequacy or reliability-Fuel Supply Deficiency	0	0
2016	3	03/23/2016 5:00 AM	03/25/2016 11:59 PM	66 Hours, 59 Minutes	Xcel Energy/Public Service Company of Colorado	WECC	Colorado: Denver, City and County of[12];	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	0	0
2016	4	04/02/2016 11:08 AM	04/02/2016 11:33 AM	0 Hours, 25 Minutes	California Department of Water Resources	WECC	California	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-System Operations	360	0
2016	4	04/18/2016 5:05 AM	04/20/2016 7:55 AM	50 Hours, 50 Minutes	CenterPoint Energy	TRE	Texas: Harris County	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	415103
2016	4	04/27/2016 5:50 AM	04/28/2016 1:35 AM	19 Hours, 45 Minutes	CenterPoint Energy	TRE	Texas: Harris County	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	214864
2016	5	05/08/2016 9:12 AM	. .	. Hours, . 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-Islanding	Unknown	Unknown
2016	5	05/10/2016 8:45 PM	05/13/2016 3:00 AM	54 Hours, 15 Minutes	Oncor Electric Delivery Company LLC	TRE	Texas: Dallas County, Tarrant County, Parker County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Distribution Interruption	Unknown	85000
2016	5	05/19/2016 9:36 PM	05/20/2016 1:00 AM	3 Hours, 24 Minutes	Pacificorp	WECC	Utah:	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-System Operations	461	85179
2016	5	05/20/2016 12:00 AM	05/22/2016 5:00 AM	53 Hours, 0 Minutes	Entergy Services, Inc.	SERC	Louisiana:	Loss of electric service to more than 50,000 customers for 1 hour or more-Distribution Interruption	Unknown	85000
2016	5	05/20/2016 1:15 AM	. .	. Hours, . Minutes	Entergy Transmission - SOC	SERC	Louisiana:	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	57184
2016	5	05/31/2016 7:30 AM	06/13/2016 7:27 AM	311 Hours, 57 Minutes	Upstate New York Power Producers	NPCC	New York: Tompkins County;	Fuel supply emergencies that could impact electric power system adequacy or reliability-Fuel Supply Deficiency	150	Unknown
2016	6	06/17/2016 3:40 PM	06/18/2016 8:34 AM	16 Hours, 54 Minutes	Southern Company	SERC	Georgia, Alabama, Mississippi, Florida	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	304	91260
2016	7	07/05/2016 2:45 AM	07/06/2016 3:00 AM	24 Hours, 15 Minutes	Oncor Electric Delivery Company LLC	TRE	Texas: Dallas County, Tarrant County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	52000
2016	7	07/05/2016 5:30 PM	07/06/2016 4:00 PM	22 Hours, 30 Minutes	Northern States Power Co	MRO	Minnesota, Wisconsin	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	250000
2016	7	07/07/2016 4:20 AM	07/07/2016 8:00 AM	3 Hours, 40 Minutes	Kansas City Power & Light Co	SERC	Kansas: Johnson County; Missouri: Jackson County, Platte County, Cass County, Buchanan County, Atchison County, Andrew County, Clay County, Nodaway County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	58500
2016	7	07/08/2016 6:00 PM	. .	. Hours, . Minutes	American Electric Power - (RFC Reliability Region) (8400 Smiths Mill Road, New Albany Ohio 43054)	RFC	West Virginia: Virginia	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	62961
2016	7	07/08/2016 7:00 PM	07/09/2016 12:00 AM	5 Hours, 0 Minutes	Detroit Edison Co	RFC	Michigan: Wayne County, Oakland County, Macomb County, St. Clair County, Lapeer County, Tuscola County, Sanilac County, Huron County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	160895
2016	7	07/08/2016 8:50 PM	07/09/2016 7:25 PM	22 Hours, 35 Minutes	Duke Energy Carolinas	SERC	North Carolina	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	600	203345
2016	7	07/09/2016 5:45 PM	07/11/2016 2:00 PM	44 Hours, 15 Minutes	Oncor Electric Delivery Company LLC	TRE	Texas: Dallas County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	62000

Table B.2 Major Disturbances and Unusual Occurrences, 2016

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
2016	7	07/12/2016 2:10 PM	07/12/2016 8:33 PM	6 Hours, 23 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico	Voltage Reduction-System Operations	450	218000
2016	7	07/13/2016 3:00 PM	. .	. Hours, . Minutes	Memphis Light Gas and Water Division	SERC	Tennessee: Shelby County	Public Appeal-System Operations	Unknown	Unknown
2016	7	07/14/2016 2:44 PM	07/15/2016 4:00 AM	13 Hours, 16 Minutes	American Electric Power - (SPP Reliability Region)	SPP	Oklahoma	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	96966
2016	7	07/14/2016 4:30 PM	07/16/2016 12:00 AM	31 Hours, 30 Minutes	Entergy Services, Inc.	SPP, SERC,	Arkansas: Louisiana: Mississippi: Texas	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	170244
2016	7	07/14/2016 5:30 PM	07/16/2016 8:00 PM	50 Hours, 30 Minutes	Oklahoma Gas & Electric Co	SPP	Oklahoma: Arkansas	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	7300
2016	7	07/19/2016 3:45 PM	07/19/2016 7:25 PM	3 Hours, 40 Minutes	Pacificorp	WECC	Idaho	Islanding, Uncontrolled Loss 300+ MW-System Operations	485	Unknown
2016	7	07/19/2016 3:45 PM	07/19/2016 7:29 PM	3 Hours, 44 Minutes	Bonneville Power Administration	WECC	Idaho	Islanding, Uncontrolled Loss 300+ MW-System Operations	290	Unknown
2016	7	07/21/2016 7:21 PM	07/22/2016 12:09 AM	4 Hours, 48 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico	Load Shed 100+ MW, Voltage Reduction-System Operations	200	266000
2016	7	07/22/2016 11:50 PM	07/23/2016 9:10 AM	9 Hours, 20 Minutes	ISO New England	NPCC	Massachusetts: Connecticut: Rhode Island: New Hampshire: Vermont: Maine	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	57058
2016	7	07/23/2016 3:15 PM	07/23/2016 7:53 PM	4 Hours, 38 Minutes	CAmbria Cogen Company	RFC	Pennsylvania: Cambria County	Voltage Reduction-System Operations	87	Unknown
2016	7	07/23/2016 7:30 PM	07/24/2016 7:30 AM	12 Hours, 0 Minutes	ISO New England	NPCC	Connecticut: Massachusetts: New Hampshire: Vermont: Rhode Island	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	101073
2016	7	07/25/2016 6:51 PM	07/26/2016 2:19 AM	7 Hours, 28 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico	Voltage Reduction-System Operations	0	0
2016	7	07/26/2016 6:51 PM	07/27/2016 1:45 AM	6 Hours, 54 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico	Voltage Reduction-System Operations	25	37100
2016	7	07/27/2016 6:50 PM	07/28/2016 1:38 AM	6 Hours, 48 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico	Voltage Reduction-System Operations	80	106300
2016	7	07/28/2016 6:51 PM	07/29/2016 2:02 AM	7 Hours, 11 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico	Voltage Reduction-System Operations	22	21600
2016	7	07/29/2016 7:09 PM	07/29/2016 7:57 PM	0 Hours, 48 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico	Voltage Reduction-System Operations	0	0
2016	8	08/07/2016 6:39 PM	08/07/2016 8:27 PM	1 Hours, 48 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-System Operations	Unknown	Unknown
2016	8	08/10/2016 6:00 AM	. .	. Hours, . 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
2016	8	08/11/2016 4:30 PM	08/11/2016 7:15 PM	2 Hours, 45 Minutes	FirstEnergy Corp	RFC	Ohio:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	62140
2016	8	08/13/2016 11:42 AM	08/13/2016 2:07 PM	2 Hours, 25 Minutes	Broad River Energy, LLC	SERC	South Carolina:	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-System Operations	506	0
2016	8	08/23/2016 5:00 PM	08/24/2016 12:05 AM	7 Hours, 5 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	72200
2016	8	08/24/2016 6:13 PM	08/24/2016 7:14 PM	1 Hours, 1 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico:	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-System Operations	600	400000
2016	8	08/24/2016 7:18 PM	08/24/2016 7:47 PM	0 Hours, 29 Minutes	Peak Reliability	WECC	Washington: King 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-Islanding	9232	Unknown
2016	8	08/31/2016 9:45 AM	08/31/2016 9:55 AM	0 Hours, 10 Minutes	Peak Reliability	WECC	Colorado:	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
2016	8	08/31/2016 2:52 PM	. .	. Hours, . 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-Islanding	0	0
2016	9	09/01/2016 10:00 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	100	Unknown
2016	9	09/02/2016 12:40 AM	09/04/2016 8:00 PM	67 Hours, 20 Minutes	City of Tallahassee - (FL)	FRCC	Florida: Leon County, Wakulla County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	450	75000
2016	9	09/02/2016 4:00 AM	09/02/2016 4:00 PM	12 Hours, 0 Minutes	Duke Energy Florida	FRCC	Florida: Alachua County, Bay County, Citrus County, Columbia County, Dixie County, Franklin County, Gilchrist County, Gulf County, Hamilton County, Hardee County, Hernando County, Highlands County, Jefferson County, Lafayette County, Lake County, Levy County, Madison County, Marion County, Orange County, Osceola County, Pasco County, Pinellas County, Polk County, Seminole County, Sumter County, Su	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	225	90000
2016	9	09/02/2016 5:45 AM	09/03/2016 12:30 AM	18 Hours, 45 Minutes	Southern Company	SERC	Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	57000

Table B.2 Major Disturbances and Unusual Occurrences, 2016

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
2016	9	09/06/2016 6:12 PM	09/06/2016 9:24 PM	3 Hours, 12 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-Islanding	300	Unknown
2016	9	09/08/2016 8:30 AM	09/25/2016 12:00 AM	399 Hours, 30 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
2016	9	09/08/2016 2:49 PM	09/08/2016 3:03 PM	0 Hours, 14 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-Islanding	0	0
2016	9	09/10/2016 9:42 AM	09/10/2016 9:57 AM	0 Hours, 15 Minutes	Peak Reliability	WECC	Washington: Clark County;	Load shedding of 100 Megawatts or more implemented under emergency operational policy-Generation Inadequacy	135	Unknown
2016	9	09/11/2016 12:05 PM	09/11/2016 3:10 PM	3 Hours, 5 Minutes	ISO New England	NPCC	Connecticut: Massachusetts: New Hampshire: Rhode Island: Vermont: Maine:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	57960
2016	9	09/12/2016 12:30 PM	09/12/2016 5:56 PM	5 Hours, 26 Minutes	Public Service Company of New Mexico	WECC	New Mexico: Bernalillo County, Sandoval County, Santa Fe County, Valencia County;	Load shedding of 100 Megawatts or more implemented under emergency operational policy-Generation Inadequacy	110	53753
2016	9	09/21/2016 2:30 PM	09/24/2016 2:30 AM	60 Hours, 0 Minutes	Puerto Rico Electric Power Authority		Puerto Rico:	Complete operational failure or shut-down of the transmission and/or distribution electrical system-System Operations	2750	1475000
2016	9	09/22/2016 10:56 AM	09/22/2016 11:41 AM	0 Hours, 45 Minutes	Cedar Falls Utilities	MRO	Iowa: Black Hawk County;	Complete operational failure or shut-down of the transmission and/or distribution electrical system-System Operations	69	19124
2016	10	10/02/2016 11:30 PM	10/05/2016 8:00 AM	56 Hours, 30 Minutes	Pacificorp	WECC	Utah:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Transmission Interruption	50	4000
2016	10	10/03/2016 3:09 PM	10/04/2016 7:00 PM	27 Hours, 51 Minutes	ERCOT	TRE	Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Public Appeal	Unknown	Unknown
2016	10	10/05/2016 11:32 AM	10/05/2016 7:00 PM	7 Hours, 28 Minutes	ERCOT	TRE	Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Public Appeal	Unknown	Unknown
2016	10	10/06/2016 9:50 AM	10/06/2016 7:00 PM	9 Hours, 10 Minutes	ERCOT	TRE	Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Public Appeal	Unknown	Unknown
2016	10	10/06/2016 7:30 PM	10/08/2016 6:00 PM	46 Hours, 30 Minutes	Florida Power & Light	FRCC	Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	5600	1200000
2016	10	10/07/2016 8:00 AM	10/09/2016 1:00 PM	53 Hours, 0 Minutes	Duke Energy Florida	FRCC	Florida: Alachua County, Bay County, Citrus County, Columbia County, Dixie County, Franklin County, Gilchrist County, Gulf County, Hamilton County, Hardee County, Hernando County, Highlands County, Jefferson County, Lafayette County, Lake County, Levy County, Madison County, Marion County, Orange County, Osceola County, Pasco County, Pinellas County, Polk County, Seminole County, Sumter County, Su	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	413	165000
2016	10	10/07/2016 11:08 AM	10/07/2016 7:00 PM	7 Hours, 52 Minutes	ERCOT	TRE	Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Generation Inadequacy	Unknown	Unknown
2016	10	10/07/2016 4:22 PM	10/12/2016 11:00 AM	114 Hours, 38 Minutes	Southern Company	SERC	Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	122	36384
2016	10	10/07/2016 10:45 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	Unknown
2016	10	10/08/2016 1:10 AM	. .	. Hours, . 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	1050	290824
2016	10	10/08/2016 8:21 AM	10/13/2016 5:30 PM	129 Hours, 9 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	Unknown
2016	10	10/10/2016 1:15 PM	10/10/2016 7:00 PM	5 Hours, 45 Minutes	ERCOT	TRE	Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Generation Inadequacy	Unknown	Unknown
2016	10	10/28/2016 1:29 PM	10/28/2016 1:38 PM	0 Hours, 9 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-Islanding	4	482
2016	11	11/09/2016 11:59 AM	11/09/2016 6:15 PM	6 Hours, 16 Minutes	Modesto Irrigation District	WECC	California: Stanislaus County, San Joaquin County, Alameda County, Tuolumne County;	Cyber event that could potentially impact electric power system adequacy or reliability-Cyber Attack	0	0

Table B.2 Major Disturbances and Unusual Occurrences, 2016

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
2016	12	12/15/2016 6:30 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	Unknown	Unknown
2016	12	12/28/2016 4:03 AM	12/31/2016 6:00 AM	73 Hours, 57 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
2016	12	12/30/2016 2:30 AM	12/30/2016 7:00 PM	16 Hours, 30 Minutes	ISO New England	NPCC	Maine:	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather or Natural Disaster	Unknown	85263

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

Table C.1 Average Heat Content of Fossil-Fuel Receipts, November 2017

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	25.40	5.94	--	1.03
Connecticut	--	5.80	--	1.03
Maine	25.40	5.86	--	--
Massachusetts	--	6.13	--	1.03
New Hampshire	--	5.74	--	1.03
Rhode Island	--	--	--	1.03
Vermont	--	--	--	--
Middle Atlantic	24.82	5.90	--	1.04
New Jersey	26.08	--	--	1.04
New York	22.32	5.95	--	1.03
Pennsylvania	24.79	5.90	--	1.04
East North Central	20.24	5.78	26.78	1.05
Illinois	17.80	5.79	--	1.00
Indiana	22.60	5.75	--	1.06
Michigan	18.51	5.81	26.65	1.04
Ohio	24.57	5.79	--	1.06
Wisconsin	17.79	5.80	27.23	1.03
West North Central	16.59	5.77	27.60	1.04
Iowa	17.67	5.73	27.60	1.06
Kansas	17.21	5.77	--	1.03
Minnesota	17.68	5.80	--	1.05
Missouri	17.52	5.77	--	1.02
Nebraska	16.97	--	--	1.06
North Dakota	13.19	5.79	--	1.00
South Dakota	16.66	--	--	--
South Atlantic	23.26	6.01	27.95	1.03
Delaware	--	--	--	1.04
District of Columbia	--	--	--	--
Florida	23.76	5.80	27.95	1.02
Georgia	19.83	6.03	--	1.03
Maryland	24.71	5.82	--	1.01
North Carolina	24.76	5.83	--	1.03
South Carolina	24.56	5.78	--	1.03
Virginia	20.70	6.22	--	1.05
West Virginia	24.44	5.69	--	1.09
East South Central	20.67	5.80	--	1.03
Alabama	19.23	5.53	--	1.03
Kentucky	22.12	5.84	--	1.03
Mississippi	14.84	5.80	--	1.02
Tennessee	21.71	5.77	--	1.01
West South Central	16.01	5.92	28.51	1.03
Arkansas	17.48	5.90	--	1.02
Louisiana	17.01	5.90	28.51	1.03
Oklahoma	17.44	6.00	--	1.03
Texas	15.53	5.87	--	1.03
Mountain	18.82	5.77	--	1.04
Arizona	19.41	5.77	--	1.04
Colorado	18.61	5.88	--	1.08
Idaho	--	--	--	--
Montana	17.10	5.92	--	1.04
Nevada	17.84	--	--	1.03
New Mexico	18.94	5.66	--	1.04
Utah	21.46	5.75	--	1.04
Wyoming	17.76	5.88	--	1.05
Pacific Contiguous	17.65	5.89	--	1.04
California	22.84	--	--	1.03
Oregon	17.43	--	--	1.05
Washington	16.88	5.89	--	1.09
Pacific Noncontiguous	18.31	6.16	--	1.00
Alaska	14.08	--	--	1.00
Hawaii	19.51	6.16	--	--
U.S. Total	18.95	6.05	28.07	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, 2014 through 2016

	Mean Absolute Value of Percent Change Total (All Sectors)		
Item	**2014**	**2015**	**2016**
Net Generation			
Coal	0.25%	0.33%	0.09%
Petroleum Liquids	2.32%	1.00%	3.08%
Petroleum Coke	2.96%	1.60%	1.46%
Natural Gas	0.42%	0.18%	0.30%
Other Gases	4.12%	3.90%	3.76%
Hydroelectric	0.49%	1.08%	0.76%
Nuclear	0.01%	0.01%	0.05%
Other	0.43%	0.80%	0.73%
Total	**0.08%**	**0.23%**	**0.08%**
Consumption of Fossil Fuels for Electricity Generation			
Coal	0.13%	0.24%	0.11%
Petroleum Liquids	2.17%	2.28%	5.81%
Petroleum Coke	3.19%	1.50%	0.87%
Natural Gas	0.48%	0.32%	2.26%
Fuel Stocks for Electric Power Sector			
Coal	0.38%	0.40%	0.72%
Petroleum Liquids	4.25%	2.92%	1.37%
Petroleum Coke	0.61%	0.04%	0.27%
Retail Sales			
Residential	0.30%	0.30%	0.26%
Commercial	0.38%	0.18%	0.55%
Industrial	4.39%	2.92%	4.31%
Transportation	0.44%	0.37%	0.06%
Total	**1.10%**	**0.93%**	**1.40%**
Revenue			
Residential	0.43%	0.15%	0.28%
Commercial	0.47%	0.62%	1.21%
Industrial	5.66%	3.15%	4.54%
Transportation	1.92%	1.09%	1.53%
Total	**1.01%**	**0.83%**	**1.34%**
Average Retail Price			
Residential	0.12%	0.15%	0.05%
Commercial	0.20%	0.44%	0.65%
Industrial	1.20%	0.31%	0.24%
Transportation	2.18%	0.83%	1.57%
Total	**0.16%**	**0.11%**	**0.10%**
Receipt of Fossil Fuels			
Coal	2.20%	1.70%	1.92%
Petroleum Liquids	0.49%	1.86%	1.16%
Petroleum Coke	2.03%	2.47%	0.01%
Natural Gas	0.26%	0.25%	0.21%
Cost of Fossil Fuels			
Coal	0.18%	0.04%	0.12%
Petroleum Liquids	0.04%	0.25%	0.35%
Petroleum Coke	1.03%	1.42%	0.12%
Natural Gas	0.06%	0.14%	0.12%

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, 2014 through 2016

	2014			2015			2016		
Item	Preliminary Annual Data	Final Annual Data	Percent Change	Preliminary Annual Data	Final Annual Data	Percent Change	Preliminary Annual Data	Final Annual Data	Percent Change
Net Generation (Thousand MWh)									
Coal	1,585,697	1,581,710	-0.25%	1,356,057	1,352,398	-0.27%	1,240,108	1,239,149	-0.08%
Petroleum Liquids	18,708	18,276	-2.31%	17,456	17,372	-0.48%	12,675	13,008	2.63%
Petroleum Coke	11,781	11,955	1.48%	10,987	10,877	-1.00%	11,232	11,197	-0.31%
Natural Gas	1,121,928	1,126,609	0.42%	1,335,068	1,333,482	-0.12%	1,380,295	1,378,307	-0.14%
Other Gases	11,578	12,022	3.83%	12,963	13,117	1.18%	13,000	12,807	-1.48%
Hydroelectric	252,540	253,193	0.26%	246,075	243,989	-0.85%	259,143	261,126	0.77%
Nuclear	797,067	797,166	0.01%	797,178	797,178	0.00%	805,327	805,694	0.05%
Other	293,636	292,674	-0.33%	311,597	309,189	-0.77%	357,299	355,540	-0.49%
Total	**4,092,935**	**4,093,606**	**0.02%**	**4,087,381**	**4,077,601**	**-0.24%**	**4,079,079**	**4,076,827**	**-0.06%**
Consumption of Fossil Fuels for Electricity Generation									
Coal (1,000 tons)	854,416	853,634	-0.09%	740,855	739,594	-0.17%	678,005	677,371	-0.09%
Petroleum Liquids (1,000 barrels)	32,084	31,531	-1.72%	29,545	28,925	-2.10%	21,225	22,405	5.56%
Petroleum Coke (1,000 tons)	4,325	4,412	2.02%	4,088	4,044	-1.07%	4,275	4,253	-0.52%
Natural Gas (1,000 Mcf)	8,502,964	8,544,387	0.49%	10,048,346	10,016,576	-0.32%	10,400,189	10,170,110	-2.21%
Fuel Stocks for Electric Power Sector									
Coal (1,000 tons)	151,362	151,548	0.12%	197,128	195,548	-0.80%	163,946	162,009	-1.18%
Petroleum Liquids (1,000 barrels)	32,139	33,505	4.25%	32,223	32,884	2.05%	30,880	31,702	2.66%
Petroleum Coke (1,000 tons)	847	827	-2.29%	1,342	1,340	-0.15%	872	845	-3.10%
Retail Sales (Million kWh)									
Residential	1,402,911	1,407,208	0.31%	1,399,884	1,404,096	0.30%	1,407,394	1,411,058	0.26%
Commercial	1,357,505	1,352,158	-0.39%	1,358,419	1,360,752	0.17%	1,359,617	1,367,191	0.56%
Industrial	955,488	997,576	4.40%	958,563	986,508	2.92%	936,269	976,715	4.32%
Transportation	7,776	7,758	-0.24%	7,659	7,637	-0.29%	7,499	7,497	-0.03%
Total	**3,723,681**	**3,764,700**	**1.10%**	**3,724,525**	**3,758,992**	**0.93%**	**3,710,779**	**3,762,462**	**1.39%**
Revenue (Million Dollars)									
Residential	175,404	176,178	0.44%	177,367	177,624	0.14%	176,585	177,077	0.28%
Commercial	145,889	145,253	-0.44%	143,893	144,781	0.62%	140,937	142,643	1.21%
Industrial	67,019	70,855	5.72%	66,088	68,166	3.14%	63,201	66,068	4.54%
Transportation	798	810	1.51%	779	771	-1.12%	711	722	1.53%
Total	**389,111**	**393,096**	**1.02%**	**388,127**	**391,341**	**0.83%**	**381,435**	**386,509**	**1.33%**
Average Retail Price (Cents/kWh)									
Residential	12.50	12.52	0.13%	12.67	12.65	-0.16%	12.55	12.55	0.02%
Commercial	10.75	10.74	-0.04%	10.59	10.64	0.44%	10.37	10.43	0.65%
Industrial	7.01	7.10	1.26%	6.89	6.91	0.22%	6.75	6.76	0.21%
Transportation	10.27	10.45	1.75%	10.17	10.09	-0.83%	9.48	9.63	1.55%
Total	**10.45**	**10.44**	**-0.08%**	**10.42**	**10.41**	**-0.10%**	**10.28**	**10.27**	**-0.06%**
Receipt of Fossil Fuels									
Coal (1,000 tons)	836,196	854,560	2.20%	769,866	782,929	1.70%	638,564	650,770	1.91%
Petroleum Liquids (1,000 barrels)	28,355	28,514	0.56%	24,512	24,320	-0.78%	16,610	16,807	1.18%
Petroleum Coke (1,000 tons)	5,091	5,195	2.03%	4,779	4,897	2.46%	4,166	4,166	0.01%
Natural Gas (1,000 Mcf)	8,423,883	8,431,423	0.09%	9,843,170	9,842,581	-0.01%	10,258,688	10,271,180	0.12%
Cost of Fossil Fuels (Dollars per Million Btu)									
Coal (1,000 tons)	2.37	2.37	0.02%	2.22	2.22	-0.03%	2.12	2.11	-0.15%
Petroleum Liquids (1,000 barrels)	19.89	19.89	-0.03%	11.48	11.49	0.10%	9.36	9.40	0.39%
Petroleum Coke (1,000 tons)	1.96	1.98	0.97%	1.87	1.84	-1.37%	1.65	1.65	0.15%
Natural Gas (1,000 Mcf)	4.99	4.99	0.01%	3.22	3.23	0.18%	2.88	2.87	-0.06%

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 2016 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.