

Electric Power Monthly with Data for October 2017

December 2017

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Preface

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

Background

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

Data sources

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

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				Net Ger	neration and Co	onsumption of F	uels for Octobe	r						
		Т	otal (All Sectors)			Electric Po	wer Sector		Comm	nercial	Indu	strial	Resid	dential
			,				Independe	ent Power						
					Electric	Utilities	Produ	ıcers						
Fuel	Facility Type	October 2017	October 2016	Percentage Change	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	90,094	99,194	-9.2%	66,665	72,950	22,716	25,524	24	27	689	693	0	0
Petroleum Liquids	Utility Scale Facilities	999	937	6.7%	752	658	203	232	7	5	37	41	0	0
Petroleum Coke	Utility Scale Facilities	535	635	-15.8%	405	418	84	141	1	0	45	75	0	0
Natural Gas	Utility Scale Facilities	106,983	102,898	4.0%	51,519	47,710	47,758	47,044	628	617	7,077	7,527	0	0
Other Gas	Utility Scale Facilities	1,011	913	10.7%	10	7	306	228	0	0	696	679	0	0
Nuclear	Utility Scale Facilities	65,995	60,733	8.7%	35,038	30,016	30,957	30,717	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	17,208	17,339	-0.8%	15,748	16,149	1,345	1,080	NM	21	102	88	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	36,112	29,749	21.4%	4,530	3,661	28,961	23,514	266	260	2,354	2,314	0	0
Wind	Utility Scale Facilities	24,789	20,335	21.9%	3,731	3,077	21,036	17,241	14	12	8	6	0	0
Solar Thermal and Photovoltaic	Utility Scale Facilities	4,804	3,191	50.5%	313	182	4,432	2,965	53	42	6	2	0	0
Wood and Wood-Derived Fuels	Utility Scale Facilities	3,572	3,176	12.5%	295	187	1,012	764	5	4	2,260	2,220	0	0
Other Biomass	Utility Scale Facilities	1,686	1,693	-0.4%	112	120	1,300	1,286	194	202	80	86	0	0
Geothermal	Utility Scale Facilities	1,261	1,353	-6.8%	80	95	1,181	1,258	0	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-463	-561	-17.4%	-388	-471	-75	-90	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	1,021	1,121	-9.0%	41	36	519	562	89	90	372	433	0	0
All Energy Sources	Utility Scale Facilities	319,494	312,958	2.1%	174,320	171,134	132,775	128,952	1,027	1,021	11,372	11,851	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	2,006	1,552	29.2%	0	0	0	0	636	493	214	174	1,156	884
Estimated Total Solar Photovoltaic	All Facilities	6,496	4,495	44.5%	312	179	4,119	2,719	689	536	220	176	1,156	884
Estimated Total Solar	All Facilities	6,810	4,743	43.6%	313	182	4,432	2,965	689	536	220	176	1,156	884
Consumption of Fossil Fuels for Electricity Ger	neration	-	•	•			•		•		•			
Coal (1000 tons)	Utility Scale Facilities	50,172	54,537	-8.0%	36,285	39,319	13,644	14,974	7	8	236	237	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,731	1,629	6.3%	1,331	1,156	346	423	15	7	40	43	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	222	250	-11.4%	171	171	36	61	0	0	15	18	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	797,995	760,610	4.9%	399,415	368,087	353,498	345,831	3,719	3,675	41,363	43,017	0	0
Consumption of Fossil Fuels for Useful Therma	al Output													
Coal (1000 tons)	Utility Scale Facilities	1,274	1,260	1.1%	225	224	101	105	36	42	913	889	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	145	174	-16.7%	4	3	18	18	17	9	106	144	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	83	92	-9.4%	1	1	9	11	1	0	72	80	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	95,155	92,360	3.0%	3,585	2,740	27,351	27,138	6,130	6,125	58,089	56,357	0	0
Consumption of Fossil Fuels for Electricity Ger	neration and Useful Therma	al Output												
Coal (1000 tons)	Utility Scale Facilities	51,446	55,798	-7.8%	36,510	39,543	13,744	15,079	43	50	1,149	1,126	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,876	1,803	4.1%	1,335		364	441	31	16	146			0
Petroleum Coke (1000 tons)	Utility Scale Facilities	305	342	-10.9%	172	172	45	72	2	0	87	99	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	893,150	852,970	4.7%	403,000	370,827	380,849	372,969	9,849	9,800	99,452	99,374	0	0
Fuel Stocks (end-of-month)	<u> </u>		·		·		·							
Coal (1000 tons)	Utility Scale Facilities	142,128	162,428	-12.5%	114,806	131,510	26,363	29,422	98	161	860	1,335	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	31,680	38,022	-16.7%	20,002		9,641	14,732		590	1,584	1,678		0
Petroleum Coke (1000 tons)	Utility Scale Facilities	1,283		16.8%	W						W			0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for October												
	Total U.S. Electric Power Industry											
	Sales of Electricity to Ultimate Customers Revenue from Sales of Electricity to Ultimate Average Price of Electricity to Ultimate											
	(mi	illion kWh)		Custo	mers (million de	ollars)	Cus	tomers (cents/k	Wh)			
			Percentage			Percentage			Percentage			
Sector	October 2017	October 2016	Change	October 2017	October 2016	Change	October 2017	October 2016	Change			
Residential	102,984	101,508	1.5%	13,220	12,648	4.5%	12.84	12.46	3.0%			
Commercial	113,035	112,963	0.1%	12,230	11,914	2.7%	10.82	10.55	2.6%			
Industrial	79,432	81,597	-2.7%	5,524	5,491	0.6%	6.95	6.73	3.3%			
Transportation	626	613	2.2%	60	59	1.7%	9.57	9.62	-0.5%			
All Sectors	296,077	296,681	-0.2%	31,034	30,111	3.1%	10.48	10.15	3.3%			

NM = Not meaningful due to large relative standard error.

W = Withheld to avoid disclosure of individual company data.

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

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

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

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

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

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

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

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

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

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

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

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

			1	Net Generation	and Consumption	on of Fuels for .	January through (October						
		То	tal (All Sectors)			Electric Po			Comm	ercial	Indus	strial	Residen	tial
							Independer							
		0.4.5.5.0047	0-1-1	Danasastasas	Electric (Produc		0-1-10047	0 -1 -1 0040	0-1-1	0.1.1	0-1-1	O-1-b 0046
Fuel	Facility Type	October 2017 YTD	October 2016 YTD	Percentage Change		October 2016 YTD	October 2017 YTD	YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 (October 2016 YTD
Net Generation (Thousand Megawatthours)	•		•		•						•	•		
Coal	Utility Scale Facilities	1,009,899	1,033,461	-2.3%	752,747	770,277	250,096	255,156	273	307	6,782	7,722	0	0
Petroleum Liquids	Utility Scale Facilities	9,956	10,772	-7.6%	7,339	7,557	2,181	2,729	84	60	353	425	0	0
Petroleum Coke	Utility Scale Facilities	7,109	9,528	-25.4%	5,573	7,618	879	1,161	7	4	650	745	0	0
Natural Gas	Utility Scale Facilities	1,074,019	1,188,002	-9.6%	523,059	564,276	470,888	541,109	6,294	6,611	73,779	76,005	0	0
Other Gas	Utility Scale Facilities	11,815	10,757	9.8%	122	111	3,320	3,133	0	0	8,373	7,513	0	0
Nuclear	Utility Scale Facilities	665,097	668,853	-0.6%	351,565	354,050	313,532	314,803	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	257,699	226,476	13.8%	237,927	209,389	18,387	15,825	210	179	1,174	1,083	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	320,696	280,231	14.4%	37,649	34,307	256,197	219,458	2,648	2,705	24,201	23,761	0	0
Wind	Utility Scale Facilities	207,769	184,441	12.6%	29,886	27,961	177,718	156,319	109	106	56	55	0	0
Solar Thermal and Photovoltaic	Utility Scale Facilities	46,605	30,863	51.0%	2,989	1,702	43,051	28,677	518	460	47	24	0	0
Wood and Wood-Derived Fuels	Utility Scale Facilities	35,874	33,941	5.7%	2,732	2,526	9,764	8,594	58	61	23,320	22,760	0	0
Other Biomass	Utility Scale Facilities	17,198	17,977	-4.3%	1,171	1,226	13,285	13,752	1,963	2,078	778	922	0	0
Geothermal	Utility Scale Facilities	13,249	13,008	1.9%	871	892	12,378	12,116	0	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-5,361	-5,326	0.6%	-4,497	-4,450	-863	-876	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	10,795	11,644	-7.3%	388	350	5,400	5,895	866	898	4,141	4,500	0	0
All Energy Sources	Utility Scale Facilities	3,361,725	3,434,397	-2.1%	1,911,873	1,943,485	1,320,017	1,358,393	10,382	10,764	119,453	121,755	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	21,092	16,388	28.7%	0	0	0	0	6,716	5,378	2,190	1,794	12,186	9,217
Estimated Total Solar Photovoltaic	All Facilities	64,681	44,143	46.5%	2,974	1,634	40,050	25,636	7,234	5,838	2,237	1,818	12,186	9,217
Estimated Total Solar	All Facilities	67,696	47,252	43.3%	2,989	1,702	43,051	28,677	7,234	5,838	2,237	1,818	12,186	9,217
Consumption of Fossil Fuels for Electricity Gen		31,555	,		_,,,,	.,	,		,,	2,000	_,	1,010	,	2,211
Coal (1000 tons)	Utility Scale Facilities	554,330	564,448	-1.8%	407,457	414,045	144,476	147,777	79	89	2,317	2,537	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	17,262	18,739	-7.9%	12,895	13,478	3,829	4,723	156	85	381	453	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	2,804	3,611	-22.4%	2,266	2,927	369	491	2	1	167	192	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	8,080,844	8,804,710	-8.2%		4,341,538		3,978,477	37,474	39,813		444,882	0	0
Consumption of Fossil Fuels for Useful Therma			· · · · · ·		· · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		·	· .	· .	·	<u>,</u>	
Coal (1000 tons)	Utility Scale Facilities	12,625	13,816	-8.6%	2,328	2,445	1,101	1,102	416	459	8,779	9,810	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,453	1,933	-24.8%	50	55	165	197	216	184	1,022	1,496	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	781	904	-13.6%	8	5	97	93	12	7	664	799	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	952,774	962,885	-1.1%		31,764	279,040	300,659	62,819	68,412	575,923	562,050	0	0
Consumption of Fossil Fuels for Electricity Ger	neration and Useful Therma	al Output	•								•		,	
Coal (1000 tons)	Utility Scale Facilities	566,955	578,264	-2.0%	409,786	416,491	145,578	148,878	496	548	11,096	12,347	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	18,715	20,671	-9.5%	12,945	13,532	3,995	4,920	373	270	1,403	1,949	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	3,585	4,515	-20.6%		2,932	465	584	14	8	831	991	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	9,033,618	9,767,594	-7.5%	4,097,877	4,373,301	3,825,309	4,279,136	100,294	108,225	1,010,138	1,006,932	0	0

	Sales, Revenue, and Average Price of Electricity to Ultimate Customers for January through October												
		Total U.S. Electric Power Industry											
	Sales of Electricit	ty to Ultimate Cu	istomers		Sales of Electric	•	Average Pri	ce of Electricity t	o Ultimate				
	(mi	illion kWh)		Custo	mers (million do	llars)	Customers (cents/kWh)						
		October 2016	Percentage	October 2017	October 2016	Percentage	October 2017	October 2016	Percentage				
Sector	October 2017 YTD	YTD	Change	YTD	YTD	Change	YTD	YTD	Change				
Residential	1,157,094	1,196,533	-3.3%	149,730	150,360	-0.4%	12.94	12.57	2.9%				
Commercial	1,131,265	1,151,959	-1.8%	121,366	120,596	0.6%	10.73	10.47	2.5%				
Industrial	792,957	819,677	-3.3%	55,060	55,601	-1.0%	6.94	6.78	2.4%				
Transportation	6,264	6,252	0.2%	609	605	0.7%	9.73	9.68	0.5%				
All Sectors	3,087,579	3,174,422	-2.7%	326,766	327,163	-0.1%	10.58	10.31	2.6%				

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										
	Rece	eipts	Co	st			Rece	ipts	Cos	st			
	(Physica	al Units)	its) (Dollars / Physical Unit)			of Plants	(Physica	l Units)	(Dollars / Physical Unit)				
Fuel	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016			
Coal (1000 tons)	51,848	59,814	38.86	39.59	268	313	530,701	536,031	39.92	40.84			
Petroleum Liquids (1000 barrels)	1,212	1,390	71.73	60.48	137	162	12,385	13,885	68.91	55.63			
Petroleum Coke (1000 tons)	297	317	W	55.43	7	9	2,756	3,479	W	43.45			
Natural Gas (1000 Mcf)	670,086	770,111	3.27	3.23	491	778	6,791,159	8,870,549	3.48	2.87			

	Electric Utilities												
Year-to-Date													
	Rece	eipts	Co	ost			Rece	eipts	Cost				
	(Physical Units)		(Dollars / Ph	(Dollars / Physical Unit) Number of Plants (Physical Units)		(Dollars / Physical Unit)							
Fuel	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016			
Coal (1000 tons)	37,915	43,693	40.19	40.99	186	206	388,284	394,169	41.01	42.18			
Petroleum Liquids (1000 barrels)	796	851	73.15	59.94	88	98	9,221	9,954	68.69	54.79			
Petroleum Coke (1000 tons)	265	253	66.84	52.47	6	6	2,684	2,976	59.24	39.71			
Natural Gas (1000 Mcf)	319,249	358,541	3.70	3.65	255	413	3,271,909	4,243,119	3.76	3.16			

				Independent Pow	er Producers						
								Year-to	o-Date		
	Rece	eipts	Co	st			Receipts Cost				
	(Physica	al Units)	(Dollars / Ph	ysical Unit)	Number	of Plants	(Physica	ıl Units)	(Dollars / Ph	ysical Unit)	
Fuel	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	
Coal (1000 tons)	13,227	15,236	34.24	34.66	61	80	135,134	133,426	36.03	35.83	
Petroleum Liquids (1000 barrels)	393	492	68.89	61.12	40	51	2,941	3,594	69.55	57.27	
Petroleum Coke (1000 tons)	0	56		W	0	2	0	391		68.92	
Natural Gas (1000 Mcf)	300,091	350,675	2.69	2.69	190	312	2,987,549	4,027,058	3.13	2.52	

				Commercia	l Sector					
								Year-to	o-Date	
	Rece	eipts	Co	st			Rece	ipts	Cos	st
	(Physica	al Units)	(Dollars / Ph	ysical Unit)	Number	of Plants	(Physica	l Units)	(Dollars / Phy	/sical Unit)
Fuel	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016
Coal (1000 tons)	2	7	W	W	1	1	20	37	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)	588	575	W	W	3	3	6,156	6,628	W	W

				Industrial S	Sector					
								Year-to	-Date	
	Rece	eipts	Co	st			Rece	ipts	Cos	st
	(Physica	ıl Units)	(Dollars / Ph	ysical Unit)	Number	of Plants	(Physica	ll Units)	(Dollars / Phy	ysical Unit)
Fuel	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016
Coal (1000 tons)	704	879	W	W	20	26	7,264	8,399	W	W
Petroleum Liquids (1000 barrels)	24	48	71.09	63.78	9	13	223	338	69.29	63.38
Petroleum Coke (1000 tons)	32	8	W	W	1	1	71	112	W	W
Natural Gas (1000 Mcf)	50,157	60,320	W	W	43	50	525,545	593,745	W	W

 $^{{\}sf NM}={\sf Not}$ meaningful due to large relative standard error. ${\sf W}={\sf Withheld}$ 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 Se	ectors)					
								Year-to	o-Date	
	Recei	pts	Co	st			Rece	ipts	Cos	st
	(Billion	Btu)	(Dollars / N	lillion Btu)	Number	of Plants	(Billior	n Btu)	(Dollars / M	illion Btu)
Fuel	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016
Coal	990,301	1,141,983	2.03	2.07	268	313	10,177,346	10,324,062	2.08	2.12
Petroleum Liquids	7,328	8,387	11.87	10.01	137	162	74,410	84,155	11.47	9.17
Petroleum Coke	8,347	8,844	W	1.98	7	9	77,280	97,632	W	1.55
Natural Gas	691,894	795,915	3.16	3.13	491	778	7,019,637	9,171,038	3.37	2.78
Fossil Fuels	1,697,870	1,955,129	W	2.51	655	975	17,348,672	19,676,888	W	2.44

				Electric Ut	tilities					
								Year-to	-Date	
	Rece	ipts	Co	st			Rece	eipts	Cos	st
	(Billion	n Btu)	(Dollars / N	lillion Btu)	Number (of Plants	(Billio	n Btu)	(Dollars / M	illion Btu)
Fuel	October 2017	October 2016								
Coal	728,591	842,651	2.09	2.12	186	206	7,502,204	7,669,928	2.12	2.17
Petroleum Liquids	4,858	5,205	11.98	9.80	88	98	55,752	60,948	11.36	8.95
Petroleum Coke	7,454	7,088	2.37	1.87	6	6	75,309	83,818	2.11	1.41
Natural Gas	329,450	370,666	3.59	3.53	255	413	3,381,051	4,387,305	3.64	3.06
Fossil Fuels	1,070,353	1,225,610	2.60	2.58	369	547	11,014,316	12,202,000	2.63	2.51

				Independent Pow	er Producers					
								Year-to	o-Date	
	Recei	pts	Co	st			Rece	ipts	Cos	st
	(Billion	Btu)	(Dollars / N	lillion Btu)	Number	of Plants	(Billior	n Btu)	(Dollars / M	illion Btu)
Fuel	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016
Coal	246,724	280,681	1.83	1.88	61	80	2,521,769	2,473,551	1.93	1.93
Petroleum Liquids	2,321	2,885	11.66	10.39	40	51	17,270	21,121	11.84	9.73
Petroleum Coke	0	1,549		W	0	2	0	10,778		2.50
Natural Gas	310,113	362,466	2.60	2.60	190	312	3,089,468	4,164,340	3.03	2.44
Fossil Fuels	559,159	647,582	2.26	W	238	371	5,628,508	6,669,790	2.50	W

				Commercia	I Sector					
								Year-to	o-Date	
	Rece	ipts	Co	st			Rece	eipts	Cos	st
	(Billion	Btu)	(Dollars / N	lillion Btu)	Number	of Plants	(Billion	n Btu)	(Dollars / M	illion Btu)
Fuel	October 2017	October 2016								
Coal	35	159	W	W	1	1	446	837	W	W
Petroleum Liquids	0	0			0	0	0	0		
Petroleum Coke	0	0			0	0	0	0		
Natural Gas	605	598	W	W	3	3	6,358	6,825	W	W
Fossil Fuels	640	757	W	W	3	3	6,803	7,662	W	W

				Industrial	Sector					
								Year-to	o-Date	
	Recei	ipts	Cos	st			Rece	ipts	Cos	st
	(Billion	Btu)	(Dollars / M	illion Btu)	Number of	of Plants	(Billior	n Btu)	(Dollars / M	illion Btu)
Fuel	October 2017	October 2016								
Coal	14,951	18,491	W	W	20	26	152,927	179,745	W	W
Petroleum Liquids	149	297	11.43	10.34	9	13	1,388	2,086	11.11	10.26
Petroleum Coke	893	207	W	W	1	1	1,971	3,037	W	W
Natural Gas	51,726	62,185	W	W	43	50	542,760	612,568	W	W
Fossil Fuels	67,718	81,180	W	W	45	54	699,045	797,436	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-October 2017

(Thousand Megaw	attriours)			Small Scale	Net Generation From	•									
Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Generation at Utili Nuclear	Hydroelectric Conventional	Solar	Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	To Other	otal Generation at Utility Scale Facilities	Generation Estimated Solar Photovoltaic	Scale Fa Estimated Total Solar Photovoltaic	cilities Estimated Tota Sola
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		-6,288	11,804	4,119,388	N/A	N/A	N//
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		-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 2015	1,581,710 1,352,398	18,276 17,372	11,955 10,877	1,126,609	12,022 13,117	797,166 797,178	259,367 249,080	17,691 24,893	261,522 270,268	-6,174	13,461 14,028	4,093,606 4,077,601	11,233 14,139	26,482 35,805	28,92 ⁴ 39,032
2015	1,239,149	13,008	11,197	1,333,482 1,378,307	12,807	805,694	267,812	36,054	305,579	-5,091 -6,686	13,907	4,077,801	18,812	51,483	54,86
Year 2015	1,239,149	13,000	11,197	1,370,307	12,007	805,094	207,012	30,034	303,379	-0,000	13,907	4,070,027	10,012	31,403	54,000
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	21,900	-456	985	334,476	816	2,138	2,29
March	108,488	1,061	717	99,423	1,023	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 Year 2016	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
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		3,386
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 Voor 2017	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	1,119	64,053	24,543	2,147	28,381	-508	993	290,166	1,397	3,752	3,887
March	89,426	979	709	94,956	1,169	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		-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	8,06
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	7,38
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
Year to Date	•	<u>'</u>					1		-	•	'	•			
2015	1,175,676	15,429	9,413	1,121,469	11,105	667,280	206,577	21,593	216,901	-4,526	11,603	3,452,520	12,243	30,940	33,83
2016	1,033,461	10,772	9,528	1,188,002	10,757	668,853	226,476	30,863	249,368	-5,326	11,644	3,434,397	16,388	44,143	47,25
2017	1,009,899	9,956	7,109	1,074,019	11,815	665,097	257,699	46,605	274,091	-5,361	10,795	3,361,725	21,092	64,681	67,690
Rolling 12 Months Endin	<u> </u>														
2016	1,210,184	12,714	10,993	1,400,014	12,768	798,750	268,980	34,163		-5,892	14,069	4,059,478	18,284	49,008	52,447
2017	1,215,587	12,193	8,777	1,264,324	13,866	801,938	299,035	51,795	330,302	-6,720	13,058	4,004,156	23,516	72,021	75,31 <i>°</i>

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 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-October 2017

(Thousand Me	-gawattilouis)					Generation at Utility	Scale Facilities					Small Scale Generation	Generation From Util Facili	-
	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								<u>'</u>	<u> </u>					
	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 2012	120,177 140,822	1,012 3,451	806 876	37,449 37,799	9,044 9,803	7,354 7,320	2,824 2,700	15,316 15,562	319,355 276,240	513,336 494,573	N/A N/A	N/A 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 N/A
	2014	181,655	15,250	2,441	42,340	11,220	7,100	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		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		· L	· .	· L	,		·		· <u> </u>	, [·	· · · · · · · · · · · · · · · · · · ·	· .	·
	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 13,080	2,247 2,295	380 392	3,806 3,788	1,035 982	661 651	293 288	1,357 1,344	21,014 19,122	44,469 41,943	1,487 1,468	3,734 3,763	4,114 4,156
	August 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	•	· · · · · · · · · · · · · · · · · · ·		·		1	1	,	<u> </u>					
	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		3,386
	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 3,473	412 471	3,414 3,658	934 943	614 635	247 262	1,251 1,311	23,237	49,473 49,828	1,928 2,000	4,990 5,474	5,401 5,945
	July August	17,618 13,589	3,602	368	3,722	943	634	285	1,324	21,455 19,570	44,035	1,942	5,543	5,945
	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		4,024
	December	23,146	2,333	91	3,615		640	293	1,454	22,528	55,111	1,167		3,591
Year 2017						•	•	•	•	•	•			
	January	20,607	2,057	90	3,589	972	620	271	1,399	27,858	57,463	1,230		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		6,408
	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 July	19,642 15,846	5,766 5,171	465 311	3,625 3,922	884 916	582 597	223 239	1,265 1,368	30,423 25,741	62,873 54,111	2,503 2,578	8,268 7,749	8,733 8,061
	August	13,147	5,038	341	3,880	925	611	232	1,357	21,239	46,769	2,578	7,749	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		6,810
Year to Date		, <u>, , , , , , , , , , , , , , , , , , </u>	, , , ,		,			· · ·	· .	· · · · · · · · · · · · · · · · · · ·	, - <u>1</u>	,	, ,	, -
	2015	150,938	18,696	2,897	34,923	9,270	5,950	2,613	13,207	206,577	445,071	12,243	30,940	33,837
	2016	184,441	27,755	3,109	33,941	9,214	6,022	2,741	13,008	226,476	506,707	16,388	44,143	47,252
	2017	207,769	43,589	3,016	35,874	9,042	5,732	2,425	13,249	257,699	578,395	21,092	64,681	67,696
Rolling 12 Months														
	2016	224,221	30,724	3,439	40,946		7,284	3,329	15,719	268,980	605,877	18,284		52,447
	2017	250,320	48,505	3,290	42,881	11,045	6,975	3,014	16,067	299,035	681,133	23,516	72,021	75,311

Wood and Wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and 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 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.

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-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 Pla

Table 1.2.A. Net Generation by Energy Source: Electric Utilities, 2007-October 2017

						Generation at Utili	ty Scale Facilities					
Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Tota
nnual Totals			•		•	!		•	•	-		
2007	1,490,985	33,325	7,395	313,785	141	427,555	226,734	11	8,943	-5,328	586	2,504,13
2008	1,466,395	22,206	5,918	320,190	46	424,256	229,645	17	11,291	-5,143	545	2,475,36
2009	1,322,092	18,035	7,182	349,166	96	417,275	247,198	28	14,589	-3,369	483	2,372,77
2010	1,378,028	17,258	8,807	392,616	52	424,843	236,104	101	17,826	-4,466	462	2,471,63
2011	1,301,107	11,688	9,428	414,843	29	415,298	291,413	216	21,717	-5,492	604	2,460,85
2012	1,146,480	9,892	5,664	504,958	0	394,823	252,936	639	27,378	-4,202	603	2,339,17
2013	1,188,452	9,446	9,522	501,427	798	406,114	243,040	943	31,474	-3,773	615	2,388,05
2014	1,173,073	10,696	9,147	501,414	112	419,871	238,185	1,218	33,278	-5,144	622	2,382,47
2015 2016	998,385 922,399	10,386 9,069	8,278 8,881	617,817 654,780	199 154	416,680 424,400	229,640 247,787	1,494 1,995	35,992 40,666	-4,105 -5,629	558 421	2,315,32 2,304,92
/ear 2015	922,399	9,069	0,001	654,760	154	424,400	247,707	1,995	40,000	-5,629	421	2,304,92
January	94,835	1,147	813	46,573	26	39,377	22,523	68	3,130	-460	41	208,07
February	90,828	2,014	879	43,951	24	33,478	21,075	87	2,877	-387	45	194,87
March	78,606	696	502	45,972	21	33,328	22,523	126	3,123	-319	31	184,60
April	66,628	695	565	43,065	20	31,053	20,156	145	3,157	-153	47	165,37
May	79,341	701	691	46,882	20	35,089	18,481	156	3,043	-292	54	184,16
June	93,799	765	604	57,292	17	35,150	18,429	153	2,311	-300	50	208,27
July	104,128	834	898	64,971	15	37,055	19,004	155	2,514	-413	49	229,21
August	100,129	794	827	63,376	21	38,482	17,813	159	2,554	-513	53	223,69
Sept	85,932	690	797	56,266	20	35,034	15,062	130	2,771	-477	49	196,27
October	71,408	682	610	49,533	12	31,886	15,378	114	3,261	-364	42	172,56
November	64,191	718	490	47,590	1	30,751	17,901	103	3,673	-218	48	165,24
December	68,558	650	604	52,345	1	35,997	21,296	98	3,577	-210	49	182,96
ear 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	179,18
March	56,982	623	724	49,949	5	34,445	25,125	151	3,696	-291	42	171,45
April	53,542	602	858	46,425	7	34,036	23,742	169	3,887	-367	34	162,93
May	62,093	695	763	52,908	10	36,531	23,508	187	3,098	-257	33	179,56
June	86,611	710	793	63,858	16	37,000	21,716	188	3,034	-409	40	213,55
July	100,856	926	833	71,913	21	37,919	20,030	197	2,837	-678	34	234,89
August	100,156	905	856	72,293	13	37,927	18,241	207	2,432	-787	33	232,27
Sept	83,223	644	807	58,392	23	33,919	15,283	190	3,215	-626	35	195,10
October	72,950	658	418	47,710	7	30,016	16,149	182	3,479	-471	36	171,13
November	64,830	700	596	44,171	22	33,082	17,599	154	3,635	-522	35	164,30
December 2017	87,293	811	667	46,333	22	37,268	20,799	139	4,425	-657	36	197,13
ear 2017 January	86,110	888	743	43,988	14	38,425	25,705	148	3,283	-346	37	198,99
February	64,900	709	540	39,009	19	34,403	22,670	172	3,745	-418	31	165,78
March	66,118	779	536	46,089	17	34,693	28,010	279	4,409	-455	35	180,51
April	59,110	665	261	42,093	19	30,217	27,070	300	4,173	-368	38	163,57
May	68,773	729	654	47,959	6	31,728	29,777	363	3,672	-350	35	183,34
June	81,394	719	698	56,423	12	35,022	28,303	377	3,402	-474	38	205,91
July	96,950	671	673	70,860	21	37,874	23,733	354	2,639	-646	43	233,17
August	90,771	722	540	68,465	NM	38,667	19,462	348	2,265	-531	46	220,76
Sept	71,956	705	523	56,654	NM	35,496	17,449	335	2,855	-522	42	185,49
October	66,665	752	405	51,519	10	35,038	15,748	313	4,218	-388	41	174,32
ear to Date	,	-		,		-,	-, -		, -			, , ,
2015	865,636	9,018	7,184	517,881	196	349,932	190,443	1,293	28,742	-3,677	461	1,967,11
2016	770,277	7,557	7,618	564,276	111	354,050	209,389	1,702	32,605	-4,450	350	1,943,48
2017	752,747	7,339	5,573	523,059	122	351,565	237,927	2,989	34,660	-4,497	388	1,911,87
Rolling 12 Months Ending	g in October	<u> </u>	<u> </u>		<u> </u>	<u>'</u>		<u>'</u>	<u> </u>	•	•	
2016	903,026	8,925	8,712	664,212	113	420,798	248,586	1,902	39,855	-4,878	447	2,291,69
2017	904,870	8,850	6,837	613,563	NM	421,915	276,326	3,282	42,720	-5,676	459	2,273,31

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-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.

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Table 1.2.B Net Generation by Energy Source: Independent Power Producers, 2007-October 2017

					Ge	neration at Utility	Scale Facilities					
Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Tot
Annual Totals	- Cour	Liquido	CONO	Guo	Guo	Hadioai	Conventional	Oolar	una colai	Otorago	Carlor	
2007	507,406	13,645	6,942	500,967	3,901	378,869	19,109	601	65,150	-1,569	6,191	1,501,2
2008	502,442	8,021	6,737	482,182	3,154	381,952	23,451	847	84,928	-1,145	6,414	1,498,9
2009	419,031	6,306	4,288	491,839	2,962	381,579	24,308	863	100,997	-1,259	6,146	1,437,0
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,
2011	416,783	3,655	3,431	511,447	2,911	374,906	26,117	1,511	140,442	-928	7,059	1,487,
2012	354,076	2,757	1,758	627,833	2,984	374,509	20,923	3,525	156,539	-748	7,030	1,551,
2013	379,270	3,761	1,780	527,522	3,524	382,902	22,018	7,782	181,263	-908	6,742	1,515,0
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,
2015	342,608	6,240	1,601	619,839	3,517	380,498	17,996	22,962	202,858	-987	6,838	1,603,9
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,
ear 2015	007,200	0,000	1,401	024,000	0,700	001,204	10,000	00,002	200,000	1,007	7,001	1,010,
January	36,595	701	128	46,877	368	34,893	1,491	1,066	16,096	-92	560	138,
February	35,196	3,049	132	40,256	305	29,984	1,104	1,372	15,785	-69	489	127,
March	28,865	306	141	46,138	306	31,218	1,625	1,911	16,184	-90	527	127,
April	21,519	170	140	42,762	269	28,732	2,175	2,193	18,393	-62	528	116,
May	24,330	257	144	47,242	318	30,737	1,515	2,300	18,059	-78	561	125,
June	30,878	215	138	56,098	282	33,366	1,867	2,359	15,117	-98	574	140,
July	33,932	314	140	67,295	295	34,357	1,892	2,425	15,512	-101	617	156,
August	33,522	250	142	66,938	311	33,933	1,216	2,481	14,856	-113	624	154,
Sept	31,074	273	140	58,525	311	31,442	954	2,047	15,075	-67	571	140,
October	24,463	216	149	52,489	216	28,685	1,135	1,762	16,981	-79	589	126,
November	22,171	235	140	46,542	233	29,513	1,301	1,599	20,046	-67	591	122,
December	20,063	254	67	48,676	302	33,637	1,721	1,448	20,754	-71	607	127,
rear 2016	20,000	204		40,070	502	00,007	1,721	1,440	20,704		007	121,-
January	28,612	379	42	48,969	341	34,551	1,884	1,363	19,168	-82	589	135,8
February	22,057	416	99	42,840	295	31,357	1,991	2,065	20,345	-66	553	121,9
March	14,363	210	138	45,900	355	31,704	2,100	2,420	22,164	-93	563	119,
April	17,877	188	97	44,832	311	28,696	1,993	2,662	20,487	-84	568	117,
May	18,842	233	124	49,574	303	30,046	1,847	3,188	19,608	-64	625	124,
June	28,585	214	131	59,185	335	30,175	1,410	3,229	17,117	-88	610	140,
July	34,564	291	136	70,645	324	32,430	1,306	3,690	18,856	-106	624	162,
August	34,607	309	140	73,317	319	33,599	1,217	3,701	15,341	-115	631	163,
Sept	30,124	258	113	58,805	323	31,529	996	3,394	17,145	-89	571	143,
October	25,524	232	141	47,044	228	30,717	1,080	2,965	20,549	-90	562	128,
November	21,446	325	116	41,736	330	32,097	1,122	2,576	19,760	-85	573	119,
December	30,661	307	124	41,755	296	34,394	1,591	2,250	23,013	-96	625	134,
ear 2017	00,001	007	12-1	41,700	200	04,004	1,001	2,200	20,010		020	104,
January	28,593	264	116	38,890	337	34,695	2,007	1,976	21,487	-90	581	128,
February	21,279	203	92	33,982	317	29,650	1,740	2,291	22,092	-90	515	112,
March	22,607	155	93	40,859	355	30,400	2,059	4,091	25,753	-66	520	126,
April	21,810	179	95	36,529	280	26,526	2,102	4,405	25,386	-71	507	117,
May	23,035	229	41	40,989	340	29,581	2,242	5,314	22,857	-73	546	125
June	25,605	246	100	51,506	331	31,988	1,971	5,775	20,207	-93	550	138
July	30,301	227	47	65,183	356	33,440	1,867	5,058	17,432	-114	572	154
August	28,375	232	113	62,813	366	33,717	1,651	4,963	15,077	-114	582	147
Sept	25,775	243	97	52,380	332	32,577	1,402	4,745	18,326	-84	509	136
October	22,716	203	84	47,758	306	30,957	1,345	4,745	24,529	-04 -75	519	132
	22,710	203	04	41,130	300	30,937	1,345	4,432	24,529	-/5	319	132
ear to Date 2015	300,374	5,751	1,394	524,621	2,981	317,349	14,974	10.045	162,058	-849	5,640	1,354
		· ·		·				19,915	·			
2016	255,156	2,729	1,161	541,109	3,133	314,803	15,825	28,677	190,781	-876	5,895	1,358
2017	250,096	2,181	879	470,888	3,320	313,532	18,387	43,051	213,146	-863	5,400	1,320
olling 12 Months Ending i		2.040	4 200	626 227	2 000	277 050	40.047	04 700	004 504	4 04 4	7 000	4.000
2016	297,391	3,218	1,368	636,327	3,668	377,953	18,847	31,723	231,581	-1,014	7,093	1,608
2017	302,204	2,813	1,118	554,378	3,946	380,023	21,100	47,876	255,919	-1,044	6,599	1,574

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.

Other Gas includes blast furnace gas and other manufactured and waste 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-October 2017

Period Annual Totals 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January February March April May June July August Sept October November December Year 2016 January February March April Agust Sept October November December Year 2016 January February March April May June July August Sept October	1,371 1,261 1,096 1,111 1,049 883 839 595 509 383 56 59 52 38 32 45 44 39 33 34 35 41	Petroleum Liquids 180 136 157 117 86 191 118 247 183 77 22 72 11 8 10 10 10 12 12 7 6 6 6 7	Petroleum Coke 9 6 5 7 3 6 5 9 8 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Natural Gas 4,257 4,188 4,225 4,725 5,487 6,603 7,154 7,227 7,471 7,730 564 499 560 513 583 662 769 760 716 643 583	Other Gas 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nuclear	Hydroelectric	Solar 0 0 0 5 84 148 294 371 416 529 20 23 33 39 46 43 45	1,614 1,555 1,769 1,709 2,392 2,397 2,662 2,862 2,803 2,697 225 198 227 231 237	Hydroelectric Pumped Storage 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	764 720 842 834 950 1,046 1,118 1,171 1,170 1,068 88 77 91 98 101	8,273 7,926 8,165 8,592 10,080 11,301 12,234 12,520 12,595 12,706	Seneration Estimated Solar Photovoltaic N/A S,146 5,689 6,158 327 356 479 525 574	N/A	N/A N/A N/A N/A N/A N/A N/A N/A N/A 3,516 6,106 6,687 347 379 512 564
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January February March April Andre April August Sept October November December Year 2016 January February March April May June July August Sept October November December Year 2016 January February March April May June July August Sept	1,261 1,096 1,111 1,049 883 839 595 509 383 56 59 52 38 32 45 44 39 33 34 35 41	136 157 117 86 191 118 247 183 77 22 72 11 8 10 10 12	9 6 5 7 3 6 5 9 8 6 1 1 1 1 1 0 0 0 0	4,188 4,225 4,725 5,487 6,603 7,154 7,227 7,471 7,730 564 499 560 513 583 662 769 760 716 643	0 0 0 3 3 3 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	60 71 80 26 28 44 38 35	148 294 371 416 529 20 23 33 39 46 43	1,555 1,769 1,709 2,392 2,397 2,662 2,862 2,803 2,697 225 198 227 231 237	0 0 0 0 0 0 0 0 0 0	720 842 834 950 1,046 1,118 1,171 1,170 1,068 88 77 91 98 101	7,926 8,165 8,592 10,080 11,301 12,234 12,520 12,595 12,706 981 932 977 931 1,013	N/A N/A N/A N/A N/A N/A 5,146 5,689 6,158 327 356 479 525	N/A N/A N/A N/A N/A N/A N/A N/A N/A S,516 6,106 6,687 347 379 512 564	N/A N/A N/A N/A N/A 5,510 6,100 6,687 347 379 512
2008 2009 2010 2011 2012 2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January February March April Andust Sept October November December Year 2016 January February March April May June July August Sept October November December Year 2016 January February March April May June July August Sept	1,261 1,096 1,111 1,049 883 839 595 509 383 56 59 52 38 32 45 44 39 33 34 35 41	136 157 117 86 191 118 247 183 77 22 72 11 8 10 10 12	9 6 5 7 3 6 5 9 8 6 1 1 1 1 0 0 0 0	4,188 4,225 4,725 5,487 6,603 7,154 7,227 7,471 7,730 564 499 560 513 583 662 769 760 716 643	0 0 0 3 3 3 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0	60 71 80 26 28 44 38 35	148 294 371 416 529 20 23 33 39 46 43	1,555 1,769 1,709 2,392 2,397 2,662 2,862 2,803 2,697 225 198 227 231 237	0 0 0 0 0 0 0 0 0 0	720 842 834 950 1,046 1,118 1,171 1,170 1,068 88 77 91 98 101	7,926 8,165 8,592 10,080 11,301 12,234 12,520 12,595 12,706 981 932 977 931 1,013	N/A N/A N/A N/A N/A N/A 5,146 5,689 6,158 327 356 479 525	N/A N/A N/A N/A N/A N/A N/A N/A N/A S,516 6,106 6,687 347 379 512 564	N/A N/A N/A N/A N/A 5,516 6,106 6,687 347 379 512
2009 2010 2011 2012 2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January February March April Andre April August Sept October November December Year 2016 January February March April May June July August Sept October November December Year 2016 January February March April May June July August Sept	1,096 1,111 1,049 883 839 595 509 383 56 59 52 38 32 45 44 39 33 34 35 41	157 117 86 191 118 247 183 77 22 72 11 8 10 10 12	6 5 7 3 6 5 9 8 6 1 1 1 1 0 0 0 0	4,225 4,725 5,487 6,603 7,154 7,227 7,471 7,730 564 499 560 513 583 662 769 760 716 643	0 0 3 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0	71 80 26 28 44 38 35	148 294 371 416 529 20 23 33 39 46 43	1,769 1,709 2,392 2,397 2,662 2,862 2,803 2,697 225 198 227 231 237	0 0 0 0 0 0 0 0 0	842 834 950 1,046 1,118 1,171 1,170 1,068 88 77 91 98 101	8,165 8,592 10,080 11,301 12,234 12,520 12,595 12,706 981 932 977 931 1,013	N/A N/A N/A N/A N/A 5,146 5,689 6,158 327 356 479 525	N/A N/A N/A N/A N/A 5,516 6,106 6,687 347 379 512	N/A N/A N/A N/A N/A 5,516 6,106 6,687 347 379 512
2010 2011 2012 2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January February March April Andre April August Sept October November December Year 2016 January February March April May June July August Sept October November Sept October November December Year 2016	1,111 1,049 883 839 595 509 383 56 59 52 38 32 45 44 39 33 34 35 41	117 86 191 118 247 183 77 22 72 11 8 10 10 12	5 7 3 6 5 9 8 6 1 1 1 1 0 0 0 0	4,725 5,487 6,603 7,154 7,227 7,471 7,730 564 499 560 513 583 662 769 760 716 643	0 3 3 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	80 26 28 44 38 35	148 294 371 416 529 20 23 33 39 46 43	1,709 2,392 2,397 2,662 2,862 2,803 2,697 225 198 227 231 237	0 0 0 0 0 0 0 0	834 950 1,046 1,118 1,171 1,170 1,068 88 77 91 98 101	8,592 10,080 11,301 12,234 12,520 12,595 12,706 981 932 977 931 1,013	N/A N/A N/A N/A 5,146 5,689 6,158 327 356 479 525	N/A N/A N/A N/A 5,516 6,106 6,687 347 379 512 564	N/A N/A N/A N/A 5,510 6,100 6,683 341 379 512
2011 2012 2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January February March April August Sept October November December Year 2016 January February March April May June July August Sept October November December Year 2016	1,049 883 839 595 509 383 56 59 52 38 32 45 44 39 33 34 35 41	86 191 118 247 183 77 22 72 11 8 10 10	7 3 6 5 9 8 6 1 1 1 1 0 0 0 0	5,487 6,603 7,154 7,227 7,471 7,730 564 499 560 513 583 662 769 760 716 643	3 3 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	26 28 44 38 35	148 294 371 416 529 20 23 33 39 46 43	2,392 2,397 2,662 2,862 2,803 2,697 225 198 227 231 237	0 0 0 0 0 0 0 0	950 1,046 1,118 1,171 1,170 1,068 88 77 91 98	10,080 11,301 12,234 12,520 12,595 12,706 981 932 977 931 1,013	N/A N/A N/A 5,146 5,689 6,158 327 356 479 525	N/A N/A N/A N/A 5,516 6,106 6,687 347 379 512 564	N/A N/A N/A 5,510 6,100 6,687 347 379 512
2012 2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January February March April April August Sept October November July August Sept January February March April May June July August Sept	883 839 595 509 383 56 59 52 38 32 45 44 39 33 34 35 41	191 118 247 183 77 22 72 11 8 10 10	3 6 5 9 8 6 1 1 1 1 0 0 0 0 1 1 1 1	6,603 7,154 7,227 7,471 7,730 564 499 560 513 583 662 769 760 716 643	3 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	28 44 38 35	148 294 371 416 529 20 23 33 39 46 43	2,397 2,662 2,862 2,803 2,697 225 198 227 231 237	0 0 0 0 0 0 0	1,046 1,118 1,171 1,170 1,068 88 77 91 98	11,301 12,234 12,520 12,595 12,706 981 932 977 931 1,013	N/A N/A 5,146 5,689 6,158 327 356 479 525	N/A N/A 5,516 6,106 6,687 347 379 512 564	N/A N/A 5,516 6,106 6,687 347 379 512
2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January February March April May June July August Sept October November December Year 2016 January February March April May June July August Sept	839 595 509 383 56 59 52 38 32 45 44 39 33 34 35 41	118 247 183 77 22 72 11 8 10 10 12	6 5 9 8 6 1 1 1 1 0 0 0 0 1 1 1 1	7,154 7,227 7,471 7,730 564 499 560 513 583 662 769 760 716 643	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	44 38 35	294 371 416 529 20 23 33 39 46 43	2,662 2,862 2,803 2,697 225 198 227 231 237	0 0 0 0 0 0	1,118 1,171 1,170 1,068 88 77 91 98	12,234 12,520 12,595 12,706 981 932 977 931 1,013	N/A 5,146 5,689 6,158 327 356 479 525	N/A 5,516 6,106 6,687 347 379 512 564	N/A 5,516 6,106 6,687 347 379 512
2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January February March April May August Sept October November July August Sept October November July August Sept April May June July August Sept	595 509 383 56 59 52 38 32 45 44 39 33 34 35 41	247 183 77 22 72 11 8 10 10	5 9 8 6 1 1 1 1 0 0 0 0	7,227 7,471 7,730 564 499 560 513 583 662 769 760 716 643	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	38 35	371 416 529 20 23 33 39 46 43	2,862 2,803 2,697 225 198 227 231 237	0 0 0 0 0 0 0	1,171 1,170 1,068 88 77 91 98 101	12,520 12,595 12,706 981 932 977 931 1,013	5,146 5,689 6,158 327 356 479 525	5,516 6,106 6,687 347 379 512 564	5,516 6,106 6,687 347 379 512
2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January February March April May June July August Sept October November December Year 2016 January February March April May June July August Sept	509 383 56 59 52 38 32 45 44 39 33 34 35 41	183 77 22 72 11 8 10 10	9 8 6	7,471 7,730 564 499 560 513 583 662 769 760 716 643	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	35	20 23 33 39 46 43	2,803 2,697 225 198 227 231 237	0 0 0 0 0 0 0	1,170 1,068 88 77 91 98 101	12,595 12,706 981 932 977 931 1,013	5,689 6,158 327 356 479 525	6,106 6,687 347 379 512 564	6,106 6,687 347 379 512 564
Z016 Year 2015 January February March April May June July August Sept October November December Year 2016 January February March April May June July August Sept October	383 56 59 52 38 32 45 44 39 33 34 35 41	77 22 72 11 8 10 10	8 6 1 1 1 1 0 0 0 0 1 1 1 1	7,730 564 499 560 513 583 662 769 760 716 643	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0		20 23 33 39 46 43	2,697 225 198 227 231 237	0 0 0 0 0	1,068 88 77 91 98 101	981 932 977 931 1,013	327 356 479 525	347 379 512 564	6,687 347 379 512 564
January February March April May June July August Sept October November December Year 2016 January February March April May June July August Sept October November December Year 2016 January February March April May June July August Sept	56 59 52 38 32 45 44 39 33 34 35 41	22 72 11 8 10 10	6	564 499 560 513 583 662 769 760 716 643	0 0 0 0 0 0 0 0	0 0 0 0 0 0	3 3 3 3 3 4 4	20 23 33 39 46 43	225 198 227 231 237	0 0 0 0 0	88 77 91 98 101	981 932 977 931 1,013	327 356 479 525	347 379 512 564	34 379 512 564
January February March April May June July August Sept October November December Year 2016 January February March April May June July August Sept	59 52 38 32 45 44 39 33 34 35 41	72 11 8 10 10	1 1 1 1 0 0 0 0 1 1 1 1	499 560 513 583 662 769 760 716 643	0 0 0 0 0 0 0	0 0 0 0 0 0	3 3 3 3 4 4	23 33 39 46 43	198 227 231 237	0 0 0 0	77 91 98 101	932 977 931 1,013	356 479 525	379 512 564	379 512 564
February March April May June July August Sept October November December Year 2016 January February March April May June July August Sept	59 52 38 32 45 44 39 33 34 35 41	72 11 8 10 10	1 1 1 1 0 0 0 0 1 1 1 1	499 560 513 583 662 769 760 716 643	0 0 0 0 0 0 0	0 0 0 0 0 0	3 3 3 3 4 4 3	23 33 39 46 43	198 227 231 237	0 0 0 0	77 91 98 101	932 977 931 1,013	356 479 525	379 512 564	379 512 564
March April May June July August Sept October November December Year 2016 January February March April May June July August Sept	39 52 38 32 45 44 39 33 34 35 41	11 8 10 10 12	1 1 0 0 0 0 1 1 1	560 513 583 662 769 760 716 643	0 0 0 0 0 0 0	0 0 0 0 0	3 3 3 4 3	33 39 46 43	227 231 237	0 0 0	91 98 101	977 931 1,013	479 525	512 564	512 564
April May June July August Sept October November December Year 2016 January February March April May June July August Sept	38 32 45 44 39 33 34 35 41	8 10 10 12	1 0 0 0 1 1 1	513 583 662 769 760 716 643	0 0 0 0 0 0	0 0 0 0	3 3 3 4 3	39 46 43	231 237	0 0 0	98 101	931 1,013	525	564	564
May June July August Sept October November December Year 2016 January February March April May June July August Sept	32 45 44 39 33 34 35 41	10 10 12	1 0 0 0 1 1 1	583 662 769 760 716 643	0 0 0 0 0	0 0 0	3 4 3	46 43	237	0	101	1,013			
June July August Sept October November December Year 2016 January February March April May June July August Sept	45 44 39 33 34 35 41	10 12	0 0 0 1 1 1	662 769 760 716 643	0 0 0 0 0	0 0	3 4 3	43		0		·	574	619	
July August Sept October November December Year 2016 January February March April May June July August Sept	44 39 33 34 35 41	12	0 0 1 1 1 1	769 760 716 643	0 0 0 0	0 0	3		222						619
August Sept October November December Year 2016 January February March April May June July August Sept	39 33 34 35 41		0 1 1 1 1	760 716 643	0 0 0	0	3	45		0	102	1,098	571	614	614
Sept October November December Year 2016 January February March April May June July August Sept	33 34 35 41	12 7 6 6 7	1 1 1 1 1 1 1	716 643	0 0	0	2		256	0	108	1,238	596	641	641
October November December Year 2016 January February March April May June July August Sept	34 35 41	7 6 6 7	1 1 1	643	0	Λ	-	46	243	0	104	1,206	575		621
November December Year 2016 January February March April May June July August Sept	35 41	6 6 7	1 1		0	0	2	37	242	0	106	1,145	515		553
December Year 2016 January February March April May June July August Sept	41	6 7	1	583		0	3	32	234	0	95	1,049	455		488
Year 2016 January February March April May June July August Sept		7	1	505	0	0	3	27	236	0	102	992	367	394	394
January February March April May June July August Sept	<u> </u>		ı	617	0	0	4	24	242	0	98	1,033	349	373	373
February March April May June July August Sept															
March April May June July August Sept	43	8	1	605	0	0	21	26		0	89	1,022	346		373
April May June July August Sept	45	8	1	570	0	0	18	39	210	0	75	967	398	437	437
May June July August Sept	46	3	1	579	0	0	22	44	225	0	90	1,011	520	564	564
June July August Sept	24	6	0	551	0	0	15	46	221	0	97	961	566		612
July August Sept	20	6	0	607	0	0	12	48	230	0	96	1,019	616	663	663
August Sept	23	5	0	692	0	0	13	53	220	0	83	1,089	623	676	676
Sept	24	8	1	831	0	0	15	55	234	0	96	1,263	640	696	696
,	26	7	0	859	0	0	19	58	234	0	95	1,298	620	677	677
October	29	4	0	700	0	0	23	48	223	0	87	1,114	556	605	605
	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
Year to Date		<u> </u>									I		- 1		
2015	433	171	7	6,270	ol	0	28	366	2,325	0	970	10,570	4,973	5,339	5,339
2016	307	60	4	6,611	0	0	179	460	2,245	0	898	10,764	5,378	5,838	5,838
2017	273	84	7	6,294	0	0	210	518	2,130	0	866	10,382	6,716		7,234
Rolling 12 Months Ending in Octob		- '[- 1	-,	3]	<u> </u>		3.0	_,	-1		,	3,	- ,	. ,=0
2016	ober	72	6	7,812	ol	0	186	511	2,723	ol	1,098	12,790	6,094	6,605	6,60
2017	ober 383	100	8	7,412	0	0	NM	587	2,582	0	1,036	12,325	7,496	8,083	8,083

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-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.D. Net Generation by Energy Source: Industrial Sector, 2007-October 2017

(Thousand Megawatthours)	(Thousand	Megawatthours)	
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(Thousand Megawa	attiiouro)					Company	in Cools Facility						Small Scale Generation	Net Generation From	•
Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Generation at Util	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	To Other	etal Generation at Utility Scale Facilities	Estimated Solar	Scale Fa Estimated Total Solar Photovoltaic	Cilities Estimated Tota Sola
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//
2012	12,603	563	2,359	86,500	8,913	0	2,353	14	21,000	0	5,108	146,107	N/A	N/A	N//
2013	12,554	495	2,036	88,733	8,531	0	3,463	17	20,011	0	5,113	150,015	N/A	N/A	N//
2014	12,341	544	1,389	86,209	8,664	0	1,282	16	20,000	0	4,978	144,083	1,139	1,156	1,15
2015	10,896	563	990	88,355	9,401	0	1,410	21	· ·	0	5,462	145,712	1,451	1,472	1,47
2016	9,103	503	909	91,197	8,895	0	1,269	27	28,663	0	5,324	145,890	2,060	2,087	2,08
Year 2015	20.1	₅₋₁	1	T		-		.1	a =I	<u>-1</u>		40 =	<u>.</u> -1		-
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	12 ⁻
April	804	45	104	6,465	690	0	138	2	2,335	0	423	11,005	129	132	132
May	881	48	87 78	6,809	761		127	2	2,339	0	469	11,522	144	146	146
June	951	49	70	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	<u> </u>	475	12,970	93	94	94
Year 2016	793	45	91	7,653	851	0	130	4	2,492	٥	442	12,497	112	115	111
January February	750	45	76	7,033	763	0	115	2	2,317	0	396	11,597	113 124	126	115 126
March	781	39	63	7,133	837	0	142	2	2,381	0	409	12,117	171	173	173
April	670	37	50	7,462	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	731	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	7,700	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	700			7,070	720		111	'	2,400	<u> </u>	400	12,200	120	120	120
January	757	41	57	7,884	768	0	123	NM	2,465	ol	383	12,481	135	NM	NN
February	662	35	55	6,954	853	0	112	NM	· ·	0	367	11,380	146	NM	NN.
March	669	35	79	7,371	882	0	127	NM	· ·	0	413	12,025	209	NM	NN.
April	593	34	48	7,171	854	0	124	NM	,	0	413	11,593	226	NM	NN.
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	24
October	689	37	45	7,077	696	0	102	6	2,348	0	372	11,372	214	220	220
Year to Date				, = -		-			, , , ,	-	-	,			
2015	9,234	489	827	72,697	7,928	0	1,132	19	23,775	Ol	4,531	120,632	1,258	1,276	1,276
2016	7,722	425	745	76,005	7,513	0	1,083	24		0	4,500	121,755	1,794	1,818	1,818
2017	6,782	353	650	73,779	8,373	0	1,174	47		0	4,141	119,453	2,190	2,237	2,23
Rolling 12 Months Ending	·	.			, -		· · · · · · · · · · · · · · · · · · ·		,		· .	· · · · · · · · · · · · · · · · · · ·	, -	,	
2016	9,385	499	908	91,663	8,987	0	1,361	26	28,576	0	5,431	146,836	1,987	2,014	2,014
2017	8,163	430	814	88,971	9,755	0	1,361	NM		0	4,964	143,588	2,456	NM	NN

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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Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations 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.E. Net Generation by Energy Source: Residential Sector, 2014-October 2017

(Thousand Megawatthours)

(Thousand Mega	Small Scale Generation
Period	Estimated Small Scale Solar Photovoltaic Generation
Annual Totals	Estimated offian ocale dotal i notovoltale deficiation
2014	4,947
2015	·
2016	
Year 2015	10,000
January	340
February	
March	
April	
May	
June	
July	
August	
Sept	
October	
November	
December	
Year 2016	
January	520
February	
March	
April	
 May	
June	
July	
August	
Sept	
October	
November	
December	
Year 2017	
January	690
February	
March	
April	
May	
June	
July	
August	
Sept	
October	
Year to Date	
2015	6,012
2016	
2017	12,186
Rolling 12 Months Er	
2016	10,203
2017	13,564

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:

Table 1.3.A. Utility Scale Facility Net Generation

by State, by Sector, October 2017 and 2016 (Thousand Megawatthours)

by State, by Sector, Oct	DDEI ZUTT al	All Sectors	Jusanu Meg	awattiiouis)	Electric Po	wer Sector		Commerc	ial Sector	Industri	al Sector
				Electric (l Itilities	_	endent roducers				
	Generation	at Utility Scal	e Facilities		Utility Scale	Generation a		Generation a			t Utility Scale
Census Division	October	October	Percentage	October	October	October	October	October	October	October	October
and State	2017	2016	Change		2016				2016		2016
New England	7,830	7,936	-1.3%		106	7,316	The state of the s	110	97	211	182 38
Connecticut Maine	2,484 903	3,088 815	-19.5% 10.8%		5 0	2,403 738			19		
Massachusetts	2,372	2,060	15.2%		23				35		
New Hampshire	1,444	1,477	-2.2%		40				5		2
Rhode Island	NM	423	NM		1	NM		5	5		0
Vermont	165	74	121.9%		38			0	0		0
Middle Atlantic	32,479	32,475	0.0%		2,538				162	361	361
New Jersey	5,716		-10.7%		17	5,575			52		
New York	10,689	10,469	2.1%	2,469	2,517	8,044	7,778	104	96	72	78
Pennsylvania	16,074	15,602	3.0%	4	4	15,809	15,360	32	13	229	225
East North Central	46,020	44,373	3.7%	19,228	17,782	25,746	25,710	152	153	894	728
Illinois	15,050	14,868	1.2%	409	233	14,369	14,394	30	33	244	207
Indiana	8,417	7,850	7.2%	7,120	6,868	922	716	22	22	353	244
Michigan	8,697	8,012	8.5%	5,679	5,402	2,832	2,434	68	72	119	104
Ohio	8,506	9,033	-5.8%	1,548	1,859	6,881	7,106		19	54	
Wisconsin	5,349	4,610	16.0%	· · · · · ·	3,419		· · · · · · · · · · · · · · · · · · ·	10	8		
West North Central	26,741	24,203	10.5%	· ·	19,893	5,620			48		
Iowa	4,315		1.9%		3,392	1,138			15		
Kansas	4,243	3,254	30.4%	· ·	1,923	1,623			0		
Minnesota	4,988	4,599	8.5%	,	3,589	1,112			13		131
Missouri	6,067	5,419	12.0%		5,288				18		4
Nebraska	2,778	2,617	6.2%		2,275				2		
North Dakota	3,663	·	10.0%		2,923				0	15	17
South Dakota	688	750	-8.2%		503	218		NM	0	0	0
South Atlantic	63,302	60,825	4.1%		50,179	9,469	· · · · · · · · · · · · · · · · · · ·		89	·	1,516
Delaware District of Columbia	590	788 6	-25.1% -17.2%		7	476	663	NM	2	110	117
Florida	20,600	19,266	6.9%		17,684	1,186	1,172	6	6	424	403
Georgia	10,409	10,157	2.5%		9,032	1,332	· · · · · · · · · · · · · · · · · · ·	NM	1	418	
Maryland	2,592	3,023	-14.3%		3,032	2,531	2,968		32		
North Carolina	9,589	9,097	5.4%		8,110				12		
South Carolina	7,592	7,267	4.5%		6,925	,		0	0		
Virginia	6,350	5,868	8.2%		4,560	1,138		25	35		195
West Virginia	5,576	·	4.2%		3,860	1,315		0	0	92	
East South Central	27,356	26,862	1.8%		22,794	2,914	3,366	15	14	687	689
Alabama	10,983	10,307	6.6%	8,120	6,825	2,540	3,165	0	0	324	318
Kentucky	5,265	6,173	-14.7%	5,170	6,125	46	6	0	0	50	42
Mississippi	4,814	4,131	16.5%	4,345	3,787	302	177	0	0	166	167
Tennessee	6,294	6,251	0.7%	6,105	6,058	26	17	15	14	147	161
West South Central	56,086	56,263	-0.3%	· ·	18,119		31,700	57	76	,	6,368
Arkansas	4,952	4,030	22.9%		2,756	-		0	3		124
Louisiana	8,013	7,755	3.3%		4,385				12	,	2,657
Oklahoma	6,472	6,972	-7.2%		3,957	3,390			0		_
Texas	36,649	37,506	-2.3%	,	7,022	27,491	26,913	49	60	,	
Mountain	29,073	29,373	-1.0%		22,134	6,959	· · · · · · · · · · · · · · · · · · ·		47		308
Arizona Colorado	8,671 4,169	8,708 4,119	-0.4% 1.2%	·	6,905 3,115	1,585 1,119			13 5		0
Idaho	4,169 1,157	4,119 861	34.3%		3,115	1,119			3	32	48
Montana	2,074	2,274	-8.8%		667	1,454			3	32	48 2
Nevada	3,239	2,274	9.6%		2,080	935	·		9	28	20
New Mexico	2,739	3,319	-17.5%		2,587	755			10		0
Utah	3,129	3,358	-6.8%		2,962				6		97
Wyoming	3,894	3,778	3.1%		3,358	307			0	136	
Pacific Contiguous	29,232	·		·	16,699				265		
California	17,002	16,865	0.8%		6,613				257		
Oregon	4,397	4,255	3.3%		3,295				5	,	44
Washington	7,833	8,143	-3.8%		6,791			3	3		
Pacific Noncontiguous	1,375		-0.8%		890				71		
Alaska	496	520	-4.5%	443	457	23	22	23	32	8	8
Hawaii	879	866	1.5%	480	433	340	363	33	39	25	31
U.S. Total	319,494	312,958	2.1%	174,320	171,134	132,775	128,952	1,027	1,021	11,372	11,851

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.

Table 1.3.B. Utility Scale Facility Net Generation

by State, by Sector, Yea			el 2017 allo	2016 (11100				Commons	ial Castar	lu di satui al	Conton
	1	All Sectors			Electric Po	wer Sector Indepe	ndent	Commerc	iai Sector	Industrial	Sector
				Electric	Utilities	Power Pro					
	Generation	at Utility Scale	e Facilities	Generation a	t Utility Scale	Generation at	•	Generation at	•	Generation at Facili	•
Census Division	October	October	Percentage		October	October	October	October	October	October	October
and State	2017 YTD	2016 YTD		2017 YTD	2016 YTD	2017 YTD	2016 YTD		2016 YTD		2016 YTD
New England	84,668	90,931	-6.9%	1,932	2,037	79,339	85,632	1,052	1,080		2,182
Connecticut Maine	28,048 9,217	30,199 9,829	-7.1% -6.2%	67	60	27,243 7,366	29,376 8,115	314 177	344 175	424 1,674	420 1,539
Massachusetts	26,714	27,594	-3.2%	387	420	25,654	26,531	452	447	221	196
New Hampshire	14,446	15,970	-9.5%	704	806	13,660	15,074	56	62		28
Rhode Island	4,500	5,698	-21.0%	3	8	4,446	5,640		50		0
Vermont	1,743	1,642	6.1%	771	743	969	897	3	3		0
Middle Atlantic	334,829	357,963	-6.5%	28,620	29,943	300,525	322,424	1,895	1,801	3,788	3,795
New Jersey	62,602	65,827	-4.9%	143	134	61,276	64,562	571	548		582
New York	106,750	113,590		28,389	29,741	76,624	82,012	1,000	1,019		817
Pennsylvania	165,476	178,546	-7.3%	88	67	162,626	175,849	325	233		2,396
East North Central	479,015	490,169	-2.3%	204,562	208,113	263,570	272,543	1,545	1,623		7,890
Illinois	150,469	156,576	-3.9%	4,688	4,494	143,056	149,557	304	304	2,421	2,220
Indiana	82,432	84,690	-2.7%	70,197	72,008	8,053	9,768	221	236	3,961	2,678
Michigan	94,217	95,230	-1.1%	67,978	66,728	24,434	26,693	680	750	1,125	1,059
Ohio	98,434	98,857	-0.4%	19,465	21,977	78,177	76,087	237	194	555	598
Wisconsin	53,463	54,817	-2.5%	42,234	42,906	9,850	10,439	103	138		1,334
West North Central	281,021	271,145	3.6%	230,445	228,016	46,660	39,286	503	552	3,413	3,292
Iowa	46,673	44,680	4.5%	34,574	33,210	10,248	9,641	184	196		1,633
Kansas	42,587	39,784	7.0%	28,713	28,705	13,839	11,034	NM	0		45
Minnesota	48,714	48,956	-0.5%	38,135	39,772	9,166	7,872	154	171	1,258	1,142
Missouri	71,265	66,571	7.1%	68,388	63,862	2,691	2,502	148	168		39
Nebraska	29,727	30,573		*	27,486	3,967	2,778		17		291
North Dakota	33,422	31,072			27,644	5,053	3,285		0		142
South Dakota	8,633	9,509	-9.2%	6,937	7,335	1,696	2,173		0	ŭ	0
South Atlantic	674,362	691,432	-2.5%	560,113	574,474	97,021	100,319	948	1,118		15,521
Delaware District of Columbia	6,641 57	7,792 64	-14.8% -11.4%	21	70	5,379	6,626	6	5	1,235	1,090
Florida	203,647	203,987	-0.2%	187,334	184,641	38 11,888	14,809	19 63	20 71	4,363	4,465
Georgia	108,891	113,608	-4.2%	92,108	98,368	12,515	11,313		71	4,363	3,921
Maryland	28,068	32,245	-13.0%	10	50,500	27,413	31,599	412	420		219
North Carolina	109,472	111,002	-1.4%	97,014	100,591	10,664	8,629	174	218		1,564
South Carolina	78,533	81,549	-3.7%	74,238	77,060	2,610	2,977	1	2.0	,	1,509
Virginia	77,651	78,088	-0.6%	61,883	64,123	13,518	11,558	267	374	1,982	2,033
West Virginia	61,404	63,096	-2.7%	47,504	49,613	12,996	12,764	0	0		719
East South Central	293,826	308,735	-4.8%	252,371	260,831	33,893	40,315	156	160	7,406	7,429
Alabama	116,668	119,881	-2.7%	84,893	82,213	28,227	34,134	0	0	3,547	3,533
Kentucky	60,681	67,631	-10.3%	59,860	66,618	328	498	0	0	493	515
Mississippi	51,391	55,126	-6.8%	44,679	47,987	5,105	5,516	3	0	1,605	1,623
Tennessee	65,085	66,097	-1.5%	62,939	64,012	232	167	152	160	1,761	1,757
West South Central	576,915	594,052	-2.9%	188,032	206,560	327,147	321,554	731	835	61,005	65,103
Arkansas	51,206	51,263	-0.1%	37,671	36,908	12,121	13,019	5	37	1,409	1,299
Louisiana	81,130	90,949	-10.8%	47,426	55,031	8,940	8,792	110	146		26,979
Oklahoma	64,560	66,160		33,327	38,281	30,561	27,137	0	0	5. .	742
Texas	380,020	385,680	-1.5%	69,608	76,339	275,524	272,605	616	653		36,083
Mountain	301,611	304,931	-1.1%	234,706	237,226	63,795	64,246		510	*	2,950
Arizona	89,670	93,405	-4.0%	75,958	76,232	13,571	17,022	140	150		0
Colorado	45,397	45,213		34,899	35,199	10,403	9,926	35	27		61
Idaho	13,488	13,703		8,703	8,987	4,302	4,178		44		493
Montana	23,153	22,213	4.2%	9,604	8,419	13,525	13,769	0	0		25
Nevada	32,309	33,811	-4.4%	22,925	25,231	9,025	8,233	109	108		238
New Mexico	28,466	26,836	6.1%	21,198	20,225	7,172	6,507	95	103		1
Utah Wyoming	30,326	31,474 38,277	-3.6% 1.4%	26,275 35,144	28,189	3,274 2,523	2,232 2,378	71 0	77		976 1,156
Wyoming Pacific Continuous	38,802	38,277	1.4%	35,144	34,743					,	-
Pacific Contiguous California	322,249 176,367	311,594 167,619		202,298 78,975	187,338		108,563		2,484		13,209
	48,912	49,617	-1.4%		68,565 36,940	83,832 10,903	85,168 12,143	-	2,396 58		11,490 477
Oregon Washington	96,970	94,358		·	81,833		12,143		30		1,242
Pacific Noncontiguous	13,229	13,444	-1.6%	85,874	81,833	3,493	3,511	605	600		384
Alaska	4,952	5,136		4,370	4,578		209		262		88
Hawaii	8,277	8,309		4,423	4,370	3,295	3,302		339		296
	5,211	5,555	J. → /0	1,420	1,071	5,255	0,002	1 0.0	10,764		200

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.

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

by State, by Sector, October 2017 and 2016 (Thousand Megawatthours)

	DEL ZOTT AT	All Sectors	usaria ivieg	jawatthours)	Electric Po			Commerc	ial Sector	Industria	al Sector
				Electric (Itilities	-	endent roducers				
	Generation	at Utility Scale	e Facilities	Generation at	Utility Scale	Generation a		Generation a	-	Generation a	
Census Division	October	October	Percentage	October	October	October	October	October	October	October	October
and State	2017	2016	Change	2017	2016	2017	2016	2017	2016		2016
New England Connecticut	/	65	-89.0% -45.3%	0	0	-1	64	0	0	NM	1
Maine	7	-2 5	33.4%		0	-1	-2 5	0	0	ŭ	1
Massachusetts	0	61	-100.0%		0	0	61	0	0		0
New Hampshire	1	0	395.3%		0	0	0	0	0	·	0
Rhode Island	0	0		0	0	0	0	0	0	Ů	0
Vermont	0	0		0	0	0	0	0	0	Ů	0
Middle Atlantic	2,913	3,508	-17.0%	0	0	2,873	3,452	0	0	40	56
New Jersey	89	94	-5.6%	0	0	89	94	0	0	0	0
New York	19	82	-77.1%	0	0	0	57	0	0	19	26
Pennsylvania	2,805	3,332	-15.8%	0	0	2,784	3,301	0	0	21	30
East North Central	20,642	20,708	-0.3%	13,046	12,357	7,405	8,197	6	3	184	151
Illinois	4,453	4,637	-4.0%	204	118	4,103	4,408	NM	2	145	109
Indiana	5,991	5,581	7.3%	5,730	5,491	257	88	5	1	0	1
Michigan	2,944	2,871	2.5%	2,900	2,823	40	42	0	0	NM	7
Ohio	4,326	5,040	-14.2%	1,319	1,380	3,006	3,659	0	0	NM	1
Wisconsin	2,928	2,579	13.5%	· · · · · ·	2,545	0	0	0	0		34
West North Central	13,491	13,988	-3.6%	·	13,774	0	0	6	13		201
Iowa	1,377	2,156	-36.1%		2,022	0	0	5	5		129
Kansas	1,230	1,743	-29.4%		1,743	0	0	0	0	·	0
Minnesota	1,831	1,854	-1.3%		1,815	0	0	0	0	.0	40
Missouri	5,161	3,982	29.6%		3,974	0	0	1	8	_	0
Nebraska	1,528	1,933	-21.0%		1,912		0	0	0		21
North Dakota	2,289	2,293	-0.2%		2,282	0	0	0	•		11
South Dakota	75	26	195.5%		26	0	0	0	0	ŭ	0
South Atlantic	15,082	17,250	-12.6%	13,394	14,837	1,618	2,330	3	2	68	80
Delaware District of Columbia	2	0		0	0	2	0	0	0	·	0
Florida	3,322	3,556	-6.6%	3,281	3,505	29	37	0	0	Ů	12
Georgia	2,544	2,882	-11.8%	2,527	2,867	29	0	0	0		16
Maryland	607	1,108	-45.2%		2,007	602	1,102	0	0		6
North Carolina	2,062	2,724	-24.3%		2,697	9	8	3	2	Ů	17
South Carolina	1,046	1,015	3.0%	1,043	1,006	0	0	0	0		9
Virginia	476	1,064	-55.3%		975	31	69	0	0	Ŭ	
West Virginia	5,024	4,901	2.5%		3,786	944			0		0
East South Central	8,995	10,622	-15.3%	· ·	10,393	134	·		0	57	54
Alabama	2,457	3,120	-21.2%		3,119	0	0	0	0		1
Kentucky	4,339	5,232	-17.1%		5,232	0	0	0	0		0
Mississippi	355	393	-9.6%	· ·	218	134	175	0	0	0	0
Tennessee	1,844	1,877	-1.8%		1,824	0	0	0	0	54	53
West South Central	14,470	17,477	-17.2%		8,487	8,471	8,957	0	0	23	33
Arkansas	1,755	2,368	-25.9%	1,425	1,914	327	451	0	0	3	3
Louisiana	803	751	7.0%	527	439	276	312	0	0	0	0
Oklahoma	1,397	2,329	-40.0%	1,206	2,106	171	194	0	0	20	30
Texas	10,514	12,029	-12.6%	2,818	4,028	7,696	-	0	0	ŭ	0
Mountain	13,355	14,567	-8.3%		12,928	1,315	1,551	0	0	75	88
Arizona	2,684	2,947	-8.9%		2,947	0	0	0	0	0	0
Colorado	2,234	2,365	-5.5%		2,365	0	0	0	0	ŭ	1
Idaho	NM	4	NM		0	0	0	0	0		4
Montana	1,179	1,407	-16.2%		17	1,162			0		1
Nevada	57	134	-57.3%		68	60			0	Ů	0
New Mexico	1,416	2,047	-30.8%		2,047	0	0	0	0	· ·	0
Utah	2,502	2,444	2.4%		2,363	28			0		48
Wyoming	3,281	3,218	2.0%	·	3,120	64			0	• .	35
Pacific Contiguous	969		15.8%		153						29
California	26	27	-3.0%		0	0		Ŭ	0		27
Oregon	183	153	19.5%		153		_	· ·	0		0
Machington	761	658	15.7%	0	0	758		U	0	3	
	460	470	4 407	N I N	24	407	1 1 1	0	^	^	^
Washington Pacific Noncontiguous	169 NM	172 46	-1.4% NM		21	137		9	9		0
	169 NM 119	172 46 126	-1.4% NM -5.4%	NM	21 21 0	17	15	9	9	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.

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

by State, by Sector, Yea	di-to-Date till	All Sectors	er 2017 and	2016 (1110u		watthours) wer Sector		Commerci	ial Sector	Industrial	Sector
		All Octions			LICCUICIO	Indepe	ndent	Commerci	iai occioi	industrial	Sector
				Electric	Utilities	Power Pr	oducers				
		at Utility Scale		Generation at Facil	ities	Facili	ties	Facil	ities	Generation at Facili	ties
Census Division and State	October 2017 YTD	October 2016 YTD	Percentage Change		October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD
New England	1,461	1,921	-24.0%	167	265		1,648	0	0		8
Connecticut	95	89	5.7%	0	0	95	89	0	0	0	0
Maine	62	56	12.3%	0	0	47	48	0	0	NM	8
Massachusetts	1,136	1,511	-24.8%	0	0	1,136	1,511	0	0	0	0
New Hampshire	167	265	-36.8%	167	265	0	0	0	0	Ĭ	0
Rhode Island	0	0		0	0	0	0	0	0	Ĭ	0
Vermont Middle Atlantic	40,000	49.120	-16.9%	0	0	20.552	47.506	0	0		614
New Jersey	40,002 1,000	48,120 1,109	-10.9%	0	0	39,553 1,000	47,506 1,109	0	0		014
New York	636	1,661	-61.7%	0	0	422	1,377	0	0	<u> </u>	284
Pennsylvania	38,367	45,350	-15.4%	0	0	38,131	45,020	0	0		330
East North Central	230,780	229,850	0.4%	139,658	137,585	·	90,425	54	68		1,772
Illinois	47,984	50,150	-4.3%	3,358	2,871	43,151	46,043	26	14	1,449	1,222
Indiana	59,817	60,631	-1.3%	57,650	57,669		2,918		39		5
Michigan	35,913	33,987	5.7%	35,503	33,531	370	370		15		71
Ohio	57,720	57,276	0.8%	14,153	16,072	43,556	41,093	0	0		111
Wisconsin West North Central	29,346 154,772	27,805 152,072	5.5% 1.8%	28,994 152,566	27,441 149,889	0	0	0 89	109		363 2,074
lowa	21,647	21,323	1.6%	20,274	19,854	1	0	69	73		1,396
Kansas	16,120	19,164	-15.9%	16,120	19,054	0	0	09	0		1,390 N
Minnesota	18,756	18,729	0.1%	18,314	18,427	0	0	1	2		300
Missouri	56,634	51,108	10.8%	56,615	51,073	1	0	18	35		0
Nebraska	17,819	18,022	-1.1%	17,529	17,732	0	0	0	0	290	290
North Dakota	22,159	22,055	0.5%	22,078	21,967	0	0	0	0	82	88
South Dakota	1,637	1,672	-2.1%	1,637	1,672	0	0	0	0	Ĭ	0
South Atlantic	179,899	202,571	-11.2%	160,898	177,023	18,323	24,512	41	42		994
Delaware District of Columbia	261	471	-44.6%	0	0	261	471	0	0	Ĭ	0
Florida	32,675	33,157	-1.5%	32,446	32,297	109	704	0	0		156
Georgia	28,124	32,724	-14.1%	27,990	32,544		0	0	0		180
Maryland	7,004	12,111	-42.2%	0	0	6,944	12,050	0	0		61
North Carolina	29,831	32,451	-8.1%	29,566	32,105	90	142	33	35	142	169
South Carolina	15,648	17,955	-12.8%	15,629	17,861	0	0	0	0		94
Virginia	9,243	14,242	-35.1%	8,692	13,483		531	8	6		222
West Virginia	57,112	59,459	-3.9%	46,575	48,732	10,537	10,614	0	0	_	112
East South Central	102,270	115,644	-11.6%	99,764	112,409	1,884	2,412	0	0		823
Alabama Kentucky	26,634 48,489	28,738 56,109	-7.3% -13.6%	26,598 48,489	28,671 56,109	0	0	0	0		67
Mississippi	3,919	4,530	-13.5%	2,036	2,118		2,412	0	0		0
Tennessee	23,228	26,267	-11.6%	22,642	25,511	0	0	0	0	Ĭ	756
West South Central	159,178	144,476	10.2%	76,960	73,380	81,939	70,749	0	0		348
Arkansas	21,650	19,361	11.8%	19,024	15,607	2,590	3,714	0	0	36	41
Louisiana	10,476	10,111	3.6%	6,136	6,805	4,341	3,306	0	0	_	0
Oklahoma	14,838	15,513	-4.3%	13,199	13,614	1,396	1,592	0	0		307
Texas	112,213	99,491	12.8%	38,602	37,353		62,137	0	0		0
Mountain	134,189	131,829	1.8%	120,827	117,946		13,088	0	0		795
Arizona Colorado	26,178 24,379	25,168 24,474	4.0% -0.4%	26,178 24,373	25,168 24,446		0 21	0	0		0
Idaho	24,379	24,474	-6.3%	24,373	2 - 7,440	0	0	0	0		23
Montana	11,314	11,621	-2.6%	225	207	11,084	11,409	0	0		5
Nevada	1,703	2,029	-16.1%	908	1,288		740	0	0		0
New Mexico	15,734	14,533	8.3%	15,734	14,533	0	0	0	0	0	0
Utah	21,472	21,092	1.8%	20,918	20,324	337	330	0	0		437
Wyoming	33,387	32,890	1.5%	32,491	31,980		587	0	0		324
Pacific Contiguous	5,749	5,237	9.8%	1,688	1,530	3,800	3,416		0		291
California	238	265 1 530	-10.2%	0	0	0	0	0	0		265
Oregon Washington	1,688 3,823	1,530 3,442	10.4% 11.1%		1,530	3,800	3,416	0	0		26
Pacific Noncontiguous	1,599	1,742	-8.2%	218	252		1,399		88		20
Alaska	458	498	-7.9%		252	·	158		88		0
Hawaii	1,141	1,244	-8.3%		0	1,141	1,241	0	0		3
U.S. Total	1,009,899	1,033,461	-2.3%	752,747	770,277	250,096	255,156	273	307	6,782	7,722

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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.

Table 1.5.A. Utility Scale Facility Net Generation from Petroleum Liquids by State. by Sector. October 2017 and 2016 (Thousand Megawatthours)

		All Sectors		awatthours)	Electric Po	wer Sector		Commerc	ial Sector	Industria	al Sector
П				Flootrical	14:1:4:		endent				
	Generation	at Utility Scal	le Facilities	Electric Generation at	Utility Scale	Generation a	roducers at Utility Scale lities		t Utility Scale		t Utility Scale
Census Division	October	October	Percentage		October	October					October
and State	2017	2016			2016	2017			2016		2016
New England	13	61	-79.4%		2	7	55		3	NM	1
Connecticut	5	-1	-576.9%	NM	0	5	-1	NM			
Maine Massachusetta	2	2 58	-30.9% -93.7%	0 2	0	NM	55	0	0	NM	1
Massachusetts New Hampshire	4	0		2	0	NM	0	1	0	0	
Rhode Island	NM	1	342.0% NM	0	1	NM	0	0		·	(
Vermont	1 1	0		1	0	0	0	0	0	·	
Middle Atlantic	34	28		9	5	20	·	O	0	Ŭ	
New Jersey	1	1	-3.7%	NM	0	1	1	0	0		
New York	20	9		9	5	6	2	NM	0	3	2
Pennsylvania	13			0	0	12		0	0	NM	1
East North Central	42	29		28	15	11		1	1	2	1
Illinois	4	4	-6.5%	1	1	3		NM	0	0	(
Indiana	13	6		11	5	0	0	0	0	2	1
Michigan	9	6	53.6%	9	6	0	0	1	0	NM	(
Ohio	14	12	10.3%	5	3	8	8	0	1	0	(
Wisconsin	3	0	000.070	3	0	0	0	0	0	NM	(
West North Central	39			38	31	0	3	0	0	0	(
Iowa	21	23		20	23	NM	0	0	0	0	C
Kansas	5	2	117.1%	5	2	0	0	0	ū	0	(
Minnesota	4	5	-17.0%	4	2	0	3	NM	0	0	C
Missouri	7	3		7	3	0	0	0	•		C
Nebraska	NM	-1	NM	NM	-1	0	0		0	·	(
North Dakota	1	1	19.8%	1	1	0	0	_	·	·	C
South Dakota	0	1	-52.9%	0	1	0	0	NM	0		(
South Atlantic	148	113		106	89	34			0		9
Delaware District of Columbia	2	-2		0	0	2		0	0		(
Florida	0 49	0 56		0 47	0 52	0 NM	0	0	0		(
Georgia	8	7	19.3%	47	4	NM	0	0	0	.	
Maryland	1	10		1	0	0	10	ű	0		
North Carolina	23	14		21	13	NM	0		0	·	
South Carolina	5	5		5	3	0	0		<u> </u>		
Virginia	51	12		20	5	28	5	3	0		
West Virginia	8	11	-32.8%	8	11	0	0	0	0		(
East South Central	22	21	4.2%	19	18	1	0	0	0	NM	3
Alabama	3	3	14.7%	1	1	1	0	0	0	NM	2
Kentucky	7	9	-29.1%	7	9	0	0	0	0	0	(
Mississippi	1	2	-61.9%	1	1	0	0	0	0	0	1
Tennessee	11	6		11	6	0	0	0	0	0	(
West South Central	14	7	95.1%	9	4	4	3	0	0	1	(
Arkansas	6		561.9%	4	1	2	0	0	0	0	(
Louisiana	2	1	86.8%	2	1	0	0	0	0	0	(
Oklahoma	1	1	29.2%	1	1	0	0	0	0	0	(
Texas	6	5		3	2	2	2	0	0		(
Mountain	15			14	13	1	2	0	0	·	(
Arizona	5	4	30.9%	5	4	0	0	0	0	, ,	(
Colorado	1	1	93.0%	1	1	0	0		•		-
Idaho	0	0		0	0	0	0	0	0	·	(
Montana	1	1	-40.0%	NM	0	0	1	0	0		(
Nevada New Mexico	0		-33.5%	0	0	0	0	0	•	·	(
New Mexico Utah	3		60.3% -18.0%	3	3	0	0	0	0	, ,	
	2	4	-18.0% -49.7%	2	<u>3</u>	0	0	Ŭ	0		(
Wyoming Pacific Contiguous	8	8			3			·	•		
California	8	6			3	2					
Oregon	4	0			0	0	0	_	_		
Washington	3				0	2	_	0	_		
Pacific Noncontiguous	666				478	123		ū			2
Alaska	67	68			64	0			0		2
Hawaii	599				414		_	0			10
U.S. Total	999				658				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.

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, Ye	ar-to-Date thro		er 2017 and	2016 (Thou		watthours) wer Sector		Communication	al Castar	lu di satui al	Castan
		All Sectors			Electric Po	wer Sector Indepe	ndent	Commerci	iai Sector	Industrial	Sector
				Electric	Utilities	Power Pro					
	Generation	at Utility Scale	e Facilities	Generation at	t Utility Scale	Generation at Facili		Generation at		Generation at Facili	
Census Division	October	October	•		October	October	October	October	October		October
and State New England	2017 YTD 233	2016 YTD 435	-46.4%	2017 YTD 34	2016 YTD 46	2017 YTD 159	2016 YTD 348		2016 YTD		2016 YTD
Connecticut	38	74	-48.6%	5	5	31	65		2	0	2
Maine	39	103	-62.2%	0	0	31	94		2	6	7
Massachusetts	118	208	-43.5%	8	13	91	182	19	13	1	0
New Hampshire	25	32	-22.0%	15	18	NM	1	10	14	0	0
Rhode Island	10	15	-32.5%	3	8	NM	6	2	1	0	0
Vermont	3	2	26.9%	3	2	0	0	0	0		0
Middle Atlantic	487	861	-43.5%	135	294	305	522	11	10		35
New Jersey	30	61	-50.8%	0	1	29	60		1	NM	0
New York	277	570	-51.4%		293	103	239		8	31	30
Pennsylvania East North Central	180 423	230 446	-21.9% -5.1%	0 271	270	172 134	223 157	3	1	14	15
Illinois	423	59	-28.4%	7	270	34	50	NM	1	14	10
Indiana	98	95	3.4%	88	85	04 0	0	0	0	10	٥
Michigan	96	104	-6.9%	92	100	0	0	3	2	2	2
Ohio	159	164	-3.2%	57	56	100	104	0	1	2	3
Wisconsin	28	25	12.0%	27	21	0	3	0	0	NM	1
West North Central	378	303	24.7%	371	294	4	6	1	1	1	2
lowa	211	193	9.4%	210	192	1	1	0	0	0	0
Kansas	45	18	146.6%	45			0	0	0	0	0
Minnesota	35	27	31.1%	29	19		5	1	1	1	1
Missouri	47	57	-18.4%	47	57	0	0	0	0	_	0
Nebraska	6	-16	-138.7%		-16		0	0	0		0
North Dakota	30	22	37.0%	30	21	0	0		0		0
South Dakota	4 400	3	62.7%	4 470	3	0	0	NM	0		0
South Atlantic Delaware	1,482	1,898 58	-21.9% -55.0%	1,172 0	1,401	230 26	416 51	27	5		76
District of Columbia	20	1	-100.0%	0	0	0	0	0	1	0	0
Florida	570	653	-12.7%	552	625	2	7	0	0	16	22
Georgia	87	104	-15.8%	55	53	12	21	2	2		27
Maryland	91	159	-42.9%	1	-2	87	158	1	1	2	2
North Carolina	173	213	-18.7%	157	175	9	31	0	0	7	7
South Carolina	74	97	-24.2%	66	82	1	2	0	0	7	14
Virginia	362	513	-29.3%	245	365	91	142	24	1	3	5
West Virginia	98	100	-2.1%	97	96	1	4	0	0		0
East South Central	220	233	-5.6%	203	210	3	5	0	0		18
Alabama	33	40	-16.8%	20	22	3	5	0	0		13
Kentucky Mississippi	81	75 16	6.7% -42.3%	81 7	75 13	0	0	0	0		0
Mississippi Tennessee	97	101	-42.3% -4.7%	95	99	0	0		0		2
West South Central	124	126	-1.0%	65	81	54	39		1	4	5
Arkansas	41	29	40.9%	16	19	24	8		0	2	3
Louisiana	7	13	-43.5%	7	11	0	2	0	0		0
Oklahoma	11	16	-27.5%	10	15	0	0	0	0		1
Texas	65	68	-5.0%	32	36	31	30	0	1	1	2
Mountain	179	193	-7.1%	163	163	16	18	0	0	0	11
Arizona	46	43	5.5%	46	43	0	0		0		0
Colorado	7	5	39.7%	7	5	0	0		0		0
Idaho	0	0	-90.8%	0	0		0	Ĭ Ť	0	_	0
Montana	12	15	-19.8%	NM	0	11	14	0	0		0
Nevada New Mexico	8	11 43	-21.3% -14.8%	5 37	8	3	3	0	0		0
Utah	37	27	-14.8% 24.0%	37	43 25	U 1	0	0	0		0
Wyoming	33	49	-26.1%	36	38	0	0		0		11
Pacific Contiguous	69	105	-34.4%		33	ŭ l	14		1	<u> </u>	58
California	40	84	-52.7%	29	28		5		0		51
Oregon	10	3	189.9%		3	0	0		0		0
Washington	20	18	10.1%	2	2	10	9	0	0	7	7
Pacific Noncontiguous	6,362	6,172	3.1%	*	4,764	1,262	1,205	6	5	210	198
Alaska	747	607	23.1%		570		0	-1	2		35
Hawaii	5,615	5,566	0.9%		4,195		1,205		3		163
U.S. Total	9,956	10,772	-7.6%	7,339	7,557	2,181	2,729	84	60	353	425

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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.

Table 1.6.A. Utility Scale Facility Net Generation from Petroleum Coke by State, by Sector, October 2017 and 2016 (Thousand Megawatthours)

by State, by Sector, Oct	ober 2017 ar	All Sectors	ousand Meg	jawattnours)	Electric Po	wer Sector		Commerc	ial Sector	Industri	al Sector
		П		Electric	Litilities	-	endent roducers				
	Generation	at Utility Scal	o Facilities		Utility Scale	Generation a		Generation a			t Utility Scale
Census Division	October				October	October			October		
and State	2017	2016	Change		2016	2017	2016	2017	2016	2017	2016
New England	0	0		0	0	0	0	0	0	0	0
Connecticut	0	0		0	0	0	0	0	0		0
Maine	0	0		0	0	0	0	0	0		0
Massachusetts	0	0		0	0	0	0	0	0	0	0
New Hampshire Rhode Island	0	0		0	0	0	0	0	0	0	
Vermont	0	0		0	0	0	0	0	0	Ů	
Middle Atlantic	NM	15	NM		0	0	0	0	0		15
New Jersey	6		-4.5%		0	0	0	0	0	6	6
New York	0	0		0	0	0	0	0	0	0	C
Pennsylvania	NM	9	NM	0	0	0	0	0	0	NM	9
East North Central	161	162	-0.2%	103	48	NM	100	0	0	16	13
Illinois	0	0		0	0	0	0	0	0	0	0
Indiana	0	0		0	0	0	0	0	0	0	0
Michigan	100		109.7%		37	0	0	0	0	16	10
Ohio	NM	101	NM		0	NM	100	0	0	0	1
Wisconsin	18	-	42.8%		11		0	0	0		1
West North Central	1	0		0	0	0	0	1	0	0	0
Iowa Kansas	1	0		0	0	0	0	1	0	0	0
Minnesota	0	0		0	0	0	0	0	0	0	0
Missouri	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
South Dakota	0	0		0	0	0	0	0	0		0
South Atlantic	99	95	4.1%		89	0	0	0	0	NM	6
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	96	89	7.9%	96	89	0	0	0	0	0	0
Georgia	NM	6	NM	0	0	0	0	0	0	NM	6
Maryland	0	0		0	0	0	0	0	0	0	0
North Carolina	0			0	0	0		Ŭ	0		0
South Carolina	0	0		0	0	0	0	0	0		0
Virginia	0	0		0	0	0	0	0	0		0
West Virginia East South Central	0	0 84	-100.0%	0	0 84	0	0	Ŭ	0	0	0
Alabama	0		-100.0%	0	04	0	Ů	0	0	0	0
Kentucky	0	84	-100.0%		84	0		0	0		0
Mississippi	0	0		0	0	0	0	0	0		0
Tennessee	0	0		0	0	0	0	0	0		0
West South Central	223	231	-3.2%	206	196	0	0	0	0	17	34
Arkansas	0	0		0	0	0	0	0	0	0	0
Louisiana	218	222	-2.0%	206	196	0	0	0	0	11	26
Oklahoma	0	0		0	0	0	0	0	0	0	0
Texas	6	8	-34.5%		0	0	ŭ	0	0		8
Mountain	41	41	-0.1%		0	41	41	0	0	0	0
Arizona	0			0	0	0		0	0		0
Colorado	0	0		0	0	0	·	0	0		0
Idaho	0	0 41	-0.1%	0	0	0 41	0 41	0	0	0	0
Montana Nevada	41	41 0	-0.1%	0	0	0		U	0	0	0
New Mexico	0	•		0	0	0	·	0	0	·	0
Utah	0	•		0	0	0		0	0		0
Wyoming	0	0		0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	-100.0%	_	0	0	0	0		-	8
California	0		-100.0%		0	0			0		
Oregon	0	_		0	0	0	0	0	0		_
Washington	0	0		0	0	0	0	0	0	0	C
Pacific Noncontiguous	0	0		0	0	0	0	0	0	0	C
Alaska	0	0		0	0	0	0	0	0	0	C
Hawaii	0	0		0	0	0	ū	0	0		_
U.S. Total	535	635	-15.8%	405	418	84	141	1	0	45	75

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Negative generation denotes that electric power consumed for plant use exceeds gross generation.

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

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

, and the same of			er 2017 and	2016 (1nous	sand Megar Electric Po			Commoroi	al Castar	la di intrini	Cootor
		All Sectors			Electric Po	wer Sector Indeper	ndent	Commercia	al Sector	Industrial	Sector
				Electric	Utilities	Power Pro					
	Generation a	at Utility Scale	Facilities	Generation at	-	Generation at Facilit	-	Generation at Facili	-	Generation at l	
Census Division	October	October	Percentage	October	October	October	October	October	October	October	October
and State New England	2017 YTD	2016 YTD	Change	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD
Connecticut	0	0		0	0	0	0	0	0	0	0
Maine	0	0		0	0	0	0	0	0	0	0
Massachusetts	0	0		0	0	0	0	0	0	0	0
New Hampshire	0	0		0	0	0	0	0	0	0	0
Rhode Island	0	0		0	0	0	0	0	0	0	0
Vermont	0	0		0	0	0	0	0	0	0	0
Middle Atlantic	124	124	0.7%	0	0	0	1	0	0	124	123
New Jersey	62	52	18.8%	0	0	0	0	0	0	62	52
New York	0	0		0	0	0	0	0	0	-	0
Pennsylvania	63	72	-12.5%	0	0	0	1	0	0		71
East North Central	1,441	2,005	-28.1%	807	1,050	510	799		0		156
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	852	600	42.1%	728	483	0	3	0	0	124	114
Ohio Winganain	510	805	-36.7%	0	0	510	797	0	0	0	8
Wisconsin West North Central	79	103	-23.4% 25.3%	79 0	70	0	0	0	0	0	34
West North Central	29	23	25.3%	0	0	U	0	/	4	23	19 19
Iowa Kansas	29	23	25.3%	0	0	0	0	0	0	23	19
Minnesota	0	0		0	0	0	0	0	0	0	0
Missouri		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
South Atlantic	904	1,997	-54.7%	786	1,917	0	0	0	0	<u> </u>	80
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	786	1,917	-59.0%	786	1,917	0	0	0	0	0	0
Georgia	118	80	46.9%	0	0	0	0	0	0	118	80
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	972	-56.1%	427	972	0	0	0	0		0
Alabama	0	0		0	0	0	0	0	0	0	0
Kentucky	427	972	-56.1%	427	972	0	0	0	0	0	0
Mississippi	0	0		0	0	0	0	0	0		0
Tennessee	2 914	٠	4 10/	2.552	U	0	0	0	0		200
West South Central Arkansas	3,814	3,977	-4.1%	3,553	3,679	0	0	0	0		298
Louisiana	3,728	3,879	-3.9%	3,553	3,679	0	0	0	0		200
Oklahoma	0,720	0	J.J /0	0,555	0,079 N	0	0	0	0		
Texas	86	98	-12.5%	0	0	0	0	0	0		98
Mountain	369	361	2.2%	0	0	369	361	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	369	361	2.2%	0	0	369	361	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
Wyoming	0	0		0	0	0	0	0	0		0
Pacific Contiguous	0	69	-100.0%		0		0		0		69
California	0	69	-100.0%	0	0	0	0		0		69
Oregon	0	0		0	0	0	0		0		0
Washington	0	0		0	0	0	0	0	0		0
Pacific Noncontiguous	0	0		0	0	0	0	0	0		0
•									Λ.		Λ
Alaska Hawaii	0	0		0	0	0	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.

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

by State, by Sector.	October 2017	and 2016 (Thousand	Megawatthours)

		All Sectors			Electric Po			Commerc	ial Sector	Industrial Sector		
		Generation at Utility Scale Facilities			Electric Utilities		endent roducers					
П	Generation					Generation a	at Utility Scale		t Utility Scale	Generation a	-	
Census Division	October	October	Percentage	October	October	October		October		October	Octobe	
and State	2017	2016	Change	2017	2016	2017	2016	2017	2016	2017	201	
New England	3,787	3,663	3.4%		15	•		81	70		84	
Connecticut	1,369	1,426	-4.0%		4	1,289		34	33	43	38	
Maine	NM	279	NM	0	0	NM	248	3	2		29	
Massachusetts	1,577	1,221	29.2%	NM	11	1,483	1,166	40	29	20	15	
New Hampshire	227	334	-31.9%	3	0	220	330	1	2	3	2	
Rhode Island	NM	403	NM	0	0	NM	399	5	4	0	(
Vermont	0	0	-93.1%	0	0	0	0	0	0	0	(
Middle Atlantic	12,509	12,812	-2.4%	565	775	11,684	11,792	88	81	172	164	
New Jersey	2,831	3,708	-23.6%	NM	23	2,765	3,639	15	16	32	30	
New York	3,753	3,898	-3.7%	543	752	3,117	3,060	63	56	29	30	
Pennsylvania	5,925	5,206	13.8%	1	1	5,802	5,093	10	9	111	104	
East North Central	8,923	7,687	16.1%	3,698	3,053	4,850	4,350	115	118	260	167	
Illinois	1,354	1,415	-4.3%	NM	107	1,069	1,216	27	31	60	60	
Indiana	1,578	1,518	4.0%		1,308	134	· · · · · · · · · · · · · · · · · · ·	14	18		4:	
Michigan	2,394	2,056	16.4%		648	1,594		47	46		24	
Ohio	2,205	2,054	7.3%		449	1,974		21	17			
Wisconsin	1,391	644	116.1%		540	80		5	5		24	
West North Central	1,901	1,329	43.0%	1,597	1,187	NM	83	26	19		4(
lowa	338	157	114.8%		129	1410	0.0	9	6		2.	
Kansas	282	111	155.6%	281	108	0	0	0	0	NM		
Minnesota	646	438	47.7%		343	97	80	7	6	2		
Missouri	NM	348	NM		335	NM		10	7	3		
Nebraska	36	43	-16.2%		43	NIVI	3	10	0	3		
North Dakota			-47.4%		172	0	0	0	0	0		
	92	175				0	0	0	0	1	•	
South Dakota	50	58	-13.7%	50	58	J	Ŭ	0	V	· ·	07(
South Atlantic	27,298	24,427	11.8%	22,145	19,875	4,729	-	42	36		379	
Delaware	550	762	-27.7%	3	6	463	657	0	0	0.	98	
District of Columbia	0	2	-100.0%	0	0	0	0	0	2	ū	(
Florida	14,335	13,253	8.2%	13,419	12,306	795		2	3		112	
Georgia	4,200	3,661	14.7%	3,050	3,028	1,106		0	0		53	
Maryland	463	396	16.9%		0	417		38	30			
North Carolina	3,087	2,364	30.6%	2,657	1,859	418		1	1	11	1	
South Carolina	1,436	1,406	2.1%	· ·	1,232	348		0	0			
Virginia	2,965	2,387	24.2%		1,434	988		1	1	55	50	
West Virginia	261	196	33.2%	17	8	196		0	0	.0	40	
East South Central	9,000	9,443	-4.7%		6,123	2,700		15	14		17 ⁻	
Alabama	4,183	4,392	-4.8%	1,593	1,186	2,502		0	0		7	
Kentucky	533	602	-11.5%		579	44		0	0		19	
Mississippi	3,467	3,616	-4.1%	· ·	3,581	153	1	0	0		34	
Tennessee	817	834	-2.0%	773	778	1	0	15	14		42	
West South Central	24,935	24,945	0.0%		7,309	12,289		47	67	4,932	5,47	
Arkansas	1,414	1,228	15.1%		523	833		0	3		19	
Louisiana	4,920	4,834	1.8%	2,767	2,368	356	290	MM	12	1,790	2,164	
Oklahoma	2,354	2,344	0.4%	1,463	1,477	863	854	0	0	28	13	
Texas	16,248	16,538	-1.8%	2,884	2,941	10,238	10,267	40	52	3,086	3,278	
Mountain	7,503	7,327	2.4%	5,505	4,923	1,823	2,250	39	35	136	119	
Arizona	2,880	2,749	4.8%	1,715	1,276	1,153	1,462	12	11	0	(
Colorado	845	764	10.6%		649	121		0	2	2		
Idaho	313	193	62.0%	166	50	135		3	2	8	(
Montana	41	36	13.4%		28	12		0	0		(
Nevada	2,347	2,110	11.3%		1,894	192		5	5	-	20	
New Mexico	720	835	-13.8%	519	496	191		10	10			
Utah	291	577	-49.6%	226	526	19		8	5		2:	
Wyoming	66	64	3.6%		520		.,	0	0		5	
Pacific Contiguous	10,864	11,064	-1.8%		4,253	5,895	5,708	176	v			
California	8,374	9,298	-9.9%		3,196						91	
		1,140	29.9%		665	4,758 869			3		91	
Oregon Washington	1,480	1,140 626	29.9% 61.2%		393	269		4	3	7		
Washington	1,009							2	1	9		
Pacific Noncontiguous	264	200	32.2%		196		0	0	0	-		
Alaska	264	200	32.2%		196		0	0	0			
Hawaii	0	0		0	0	. 0	ı 0	0	0	ı 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.

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

by State, by Sector, Yea	All Sectors			2016 (Thous	Electric Po			Commerc	ial Sector	Industrial Sector	
		П		Electric I	Itilition		endent				
					Electric Utilities		roducers				
	Generation	at Utility Scale	o Escilitios	Generation at Facilit	•		t Utility Scale	Generation at	•	Generation at Facil	-
Census Division	October	October	Percentage	October	October			October	October		October
and State	2017 YTD	2016 YTD	Change		2016 YTD			2017 YTD			2016 YTD
New England	40,028	46,532	-14.0%	239	307	38,051	44,489	772	815		921
Connecticut	12,614	15,095	-16.4%	38	39	· ·	14,296	313	341	424	418
Maine Massachusetts	1,772 18,324	3,192 18,755	-44.5% -2.3%	0 NM	232	1,445 17,559	2,885 17,944	25 382	25 386		282 193
New Hampshire	3,134	4,005	-21.8%	31	36		3,923	8	19		28
Rhode Island	4,183	5,484	-23.7%	0	0	4,140	5,441	43	43		0
Vermont	1	2	-13.8%	1	1	0	0	1	1	0	0
Middle Atlantic	122,519	144,345	-15.1%	8,341	10,894	111,631	130,847	883	920	1,665	1,684
New Jersey	30,890	38,201	-19.1%	191	237	30,235	37,501	161	163		300
New York	41,255	49,086	-16.0%	8,144	10,647	32,230	37,494	611	656		290
Pennsylvania	50,374	57,057	-11.7%	6	10	,	55,852	111	100	· ·	1,095
East North Central Illinois	82,292 12,245	95,250 15,389	-13.6% -20.4%	34,794 1,260	41,507 1,542	43,933 10,120	50,953 12,975	1,164 272	1,230 284	2,401 593	1,561 589
Indiana	14,872	16,439	-20.4 <i>%</i> -9.5%	11,715	13,132	1,964	2,758	160	163		386
Michigan	21,658	25,251	-14.2%	7,061	8,907	13,759	15,596	451	492	386	256
Ohio	22,447	24,392	-8.0%	4,941	5,615		18,521	224	183		73
Wisconsin	11,070	13,778	-19.7%	9,817	12,310		1,104	57	109		256
West North Central	16,777	20,067	-16.4%	14,006	16,501	2,063	2,873	235	263		430
lowa	2,820	2,707	4.2%	2,448	2,469		0	70	77	302	161
Kansas	2,282	1,771	28.9%	2,252	1,725		0	0	0		45
Minnesota	5,954	8,070	-26.2%	4,877	6,472	894	1,332	82	97	99	170
Missouri Nebraska	3,697 609	5,332 457	-30.7% 33.4%	2,411 608	3,667 455	1,168 0	1,541 0	82	88	36	36
North Dakota	765	921	-17.0%	759	904	0	0		0	<u> </u>	17
South Dakota	650	809	-19.6%	650	809	0	0	0	0		0
South Atlantic	281,196	277,794	1.2%	229,270	224,623	47,630	49,405	452	465	3,845	3,301
Delaware	5,844	6,927	-15.6%	14	57	5,006	6,028	0	0	824	842
District of Columbia	19	20	-2.9%	0	0	0	0	19	20	0	C
Florida	138,196	137,288	0.7%	128,823	125,261	8,137	10,788	21	29	·	1,210
Georgia	44,823	45,532	-1.6%	34,121	35,018				0		364
Maryland North Carolina	5,396	5,294	1.9%	0	20 505	4,926	4,827	396	400		66
South Carolina	32,787 13,900	33,184 13,800	-1.2% 0.7%	28,288 11,674	28,595 11,165	4,379 2,119	4,488 2,585	9	8		92 49
Virginia	38,840	34,658	12.1%	26,208	24,399	12,073	9,731	7	7	552	521
West Virginia	1,390	1,091	27.4%	142	127	824	808	0	0		156
East South Central	99,792	109,189	-8.6%	66,401	69,828	31,323	37,473	150	158	1,919	1,730
Alabama	43,849	48,979	-10.5%	15,072	14,193	27,845	33,897	0	0	932	889
Kentucky	7,583	7,082	7.1%	7,064	6,387	314	478		0		216
Mississippi	39,588	43,377	-8.7%	36,074	39,932	3,153	3,096		0	358	349
Tennessee	8,772	9,752	-10.0%	8,191	9,316		2	147	158		276
West South Central Arkansas	264,340 14,939	301,658 15,701	-12.4% -4.9%	76,858 5,354	95,371 6,294	134,409 9,348	149,508 9,148	657 0	762 33	-	56,018 225
Louisiana	48,983	57,150	-4.9%	25,490	30,522	3,514	4,434	110	146		22,049
Oklahoma	27,034	31,378	-13.8%	16,580	21,070		10,165		0	202	143
Texas	173,384	197,429	-12.2%	29,434	37,485	111,295	125,761	547	583		33,601
Mountain	75,431	87,060	-13.4%	57,212	63,845	16,613	21,619	358	387	1,248	1,210
Arizona	25,797	31,373	-17.8%	16,490	17,668		13,575	121	130		0
Colorado	10,706	11,007	-2.7%	9,019	9,359		1,630	0	2		17
Idaho	2,376	2,965	-19.9%	1,294	1,641	946		33			115
Montana	397	418	-5.2% 7.6%	300	332	94	83	0	0 55	_	236
Nevada New Mexico	22,655 7,845	24,514 8,597	-7.6% -8.7%	20,577 4,992	22,391 5,328	1,780 2,760	1,832 3,167	49 92	101	248	∠30
Utah	5,018	7,550	-33.5%	4,992	6,972	176		62	64	367	356
Wyoming	638	637	0.0%		154		1	02			482
Pacific Contiguous	89,584	103,589	-13.5%	33,936	38,937	45,235	53,943				9,097
California	72,981	81,809	-10.8%	25,126	27,467	37,627	43,808	· ·	1,563		8,972
Oregon	9,306	12,382	-24.8%	3,922	5,993					61	55
Washington	7,296	9,397	-22.4%	4,888	5,478			12	17	77	71
Pacific Noncontiguous	2,059	2,517	-18.2%	-	2,465		0	2	1	54	52
Alaska	2,059	2,517	-18.2%	2,003	2,465	0	0	2	1	54	52
Hawaii U.S. Total	1,074,019	0 1,188,002	-9.6%	523,059	564.276	470,888	541,109	6,294	6,611	73,779	76,005
U.S. TUIdI	1,074,019	1,100,002	-9.0%	J∠J,UJ9	564,276	470,888	341,109	0,294	0,011	13,119	70,005

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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.

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

by State, by Sector, October 2017 and 2016 (Thousand Megawatthours)

by Clare, by Coccer, Co.		ober 2017 and 2016 (Thousand Meg All Sectors			Electric Po	wer Sector		Commercial Sector		Industrial Sector		
		П		Independent Electric Utilities Power Producers								
	O an amatian		- F1101	Generation a	t Utility Scale	Generation at Utility Scale						
Census Division	October	at Utility Scal October		Facilities October October			Facilities October October		ities October	Facilities October October		
and State	2017	2016		2017		2017	2016		2016		2016	
New England Connecticut	0	0		0	0	0	0	0	0	0	0	
Maine	0	0		0		0	-	ļ <u> </u>	0	0	0	
Massachusetts	0	0		0			·	ļ <u> </u>	0	0	0	
New Hampshire	0	0		0		0		ļ <u> </u>	0	0	0	
Rhode Island	0	0		0		·	·		0	0	0	
Vermont	0	0		0		Ŭ		·	0	0	0	
Middle Atlantic	55	52	6.4%	0		0			0	55	51	
New Jersey	17	15	9.4%	0	0	0	0	0	0	17	15	
New York	0	0		0	0	0	0	0	0	0	0	
Pennsylvania	38	36	5.1%	0	0	0	0	0	0	38	36	
East North Central	378	311	21.4%	10	7	138	111	0	0	230	194	
Illinois	14	17	-16.0%	0	0	0	2	0	0	14	16	
Indiana	204	171	19.6%	NM	0	0	0	0	0	204	171	
Michigan	106	95	11.1%	9	6	97	89	0	0	0	0	
Ohio	53	28	92.2%	0	0	41	20	0	0	12	7	
Wisconsin	0	0		0	0	0	0	0	0	0	0	
West North Central	4	3	53.9%	0	_	0	·		0	4	3	
Iowa	0	0		0		0	·		0	0	0	
Kansas	0	0		0		0	ŭ		0	0	0	
Minnesota	0	0		0		J	Ŭ		0	0	0	
Missouri	0	0		0		·		.	0		0	
Nebraska	0	0		0	_				0	0	0	
North Dakota	4	3	53.9%						0		3	
South Dakota	0	0		0		·	·		0	0	0	
South Atlantic	28	20	38.0%	0	_	J	·		0	28	20	
Delaware	24	17	38.4%	0	_	·			0	24	17	
District of Columbia Florida	0	0	-37.1%	0	_	·	·		0	0	0	
Georgia	0	0	-37.176	0			.		0	ŭ	0	
Maryland	0	0		0		·	.		0	0	0	
North Carolina	0	0		0		·			0	Ü	0	
South Carolina	0	0		0				.	0		0	
Virginia	0	0		0	_	0			0	0	0	
West Virginia	3	2	51.3%	0		0		.	0	3	2	
East South Central	NM	4	NM	0	0	0	0	0	0	NM	4	
Alabama	NM	3	NM	0	0	0	0	0	0	NM	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	-93.1%	0	0	ŭ	ŭ	_	0	_	1	
West South Central	343	333	2.8%	0	0	134	82	0	0	208	251	
Arkansas	0	0		0		0	· · ·		0	0	0	
Louisiana	131	161	-18.6%	0		Ŭ	·		0		161	
Oklahoma	0	0		0			ŭ	_	0	_	0	
Texas	212	172	22.7%	0					0		90	
Mountain	40	41	-3.2%	0	_	<u>'</u>	0		0	39	41	
Arizona	0	0		0					0		0	
Colorado	0	0		0	_		ŭ		0	_	0	
Idaho	0	0		0					0	0	0	
Montana Nevada	1	0		0			0		0		0	
New Mexico	0	0		0		Ŭ			0	0	0	
Utah	2	5	-56.2%	0					0		5	
Wyoming	36	36	1.7%	0	_			ļ	0	36	36	
Pacific Contiguous	160								0			
California	128	112	14.1%						0		112	
Oregon	0	0	1-r. 1 /0	0					0		<u> </u>	
Washington	32	34	-7.2%						0		0	
Pacific Noncontiguous	4	3							0		3	
Alaska	0	0		0					0		0	
Hawaii	4	3	39.0%	0		0			0		3	
U.S. Total	1,011	913					228		0		679	

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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.

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

Census Division and State New England Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont Middle Atlantic New Jersey New York Pennsylvania	October 2017 YTD 0 0 0 0 0 0 0 0	at Utility Scale October 2016 YTD 0 0 0 0 0	e Facilities Percentage Change	Generation at Facilit October 2017 YTD 0	Jtilities Utility Scale	Facil October	Oducers Utility Scale ities October	Generation at Facility October	Utility Scale		Jtility Scale		
Census Division and State New England Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont Middle Atlantic New Jersey New York	October 2017 YTD 0 0 0 0 0 0 0 0	at Utility Scale October 2016 YTD 0 0 0 0	Percentage	Generation at Facilities October 2017 YTD 0	Utility Scale ties October 2016 YTD	Power Pr Generation at Facil	Oducers Utility Scale ities October	Facilit	ties	Facilit	ies		
Census Division and State New England Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont Middle Atlantic New Jersey New York	October 2017 YTD 0 0 0 0 0 0 0 0	October 2016 YTD 0 0 0 0	Percentage	Facilit October 2017 YTD 0	October 2016 YTD	Facil October	ities October	Facilit	ties	Facilit	ies		
and State New England Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont Middle Atlantic New Jersey New York	October 2017 YTD 0 0 0 0 0 0 0 0	October 2016 YTD 0 0 0 0	Percentage	2017 YTD 0 0	2016 YTD			October	A - (- 1	Octobor	Facilities		
New England Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont Middle Atlantic New Jersey New York	0 0 0 0 0 0 0	0 0 0 0		0		2017 Y I DI	OOAC VID		October		October		
Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont Middle Atlantic New Jersey New York		0 0 0 0	 	0	U	0	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD		
Maine Massachusetts New Hampshire Rhode Island Vermont Middle Atlantic New Jersey New York		0 0		, i	0	0	0	0	0	0			
New Hampshire Rhode Island Vermont Middle Atlantic New Jersey New York		0 0		0	0	0	0	0	0	0			
Rhode Island Vermont Middle Atlantic New Jersey New York		0		0	0	0	0	0	0	0			
Vermont Middle Atlantic New Jersey New York		0		0	0	0	0	0	0	0	- 0		
Middle Atlantic New Jersey New York				0	0	0	0	0	0	0			
New Jersey New York		0		0	0	0	0	0	0	0	(
New York	400	578	18.2%	0	0	0	0	0	0	683	578		
	183	169	8.3%	0	0	0	0	0	0	183	169		
Pennsylvania	0	0		0	0	0	0	0	0	0			
	500	409	22.3%	0	0	0	0	0	0	500	409		
East North Central	4,843	4,041	19.9%	122	111	1,802	1,717	0	0	2,918	2,213		
Illinois	153	171	-10.4%	0	0	0	6	0	0	153	166		
Indiana Michigan	2,633 1,344	1,915	37.5% 2.0%	13 109	9 102	1,235	1,215	0	0	2,620	1,907		
Michigan Ohio	712	1,317 637	11.8%	109	102	1,235	496	0	0	145	141		
Wisconsin	112	03 <i>1</i>	11.070	0	0		190 190	0	0	0	141		
West North Central	34	32	4.6%	0	0		0	0	0	34	32		
lowa	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	34	32	4.6%	0	0	0	0	0	0	34	32		
South Dakota	0	0		0	0	0	0	0	0	0	0		
South Atlantic	431	260	66.1%	0	0	0	0	0	0	431	260		
Delaware	398	235	69.1%	0	0	0	0	0	0	398	235		
District of Columbia	0	0		0	0	0	0	0	0	0	0		
Florida	4	4	4.6%	0	0	-	0	0	0	4	4		
Georgia	0	0		0	0	<u> </u>	0	0	0	0	0		
Maryland North Carolina	0	0		0	0	0	0	0	0	0	0		
South Carolina	0	0		0	0	0	0	0	0	0			
Virginia	0	0		0	0	0	0	0	0	0	0		
West Virginia	29	20	44.3%	0	0	0	0	0	0	29	20		
East South Central	22	32	-29.0%	0	0	<u> </u>	0	0	0	22	32		
Alabama	11	19	-42.3%	0	0	0	0	0	0	11	19		
Kentucky	0	0		0	0	0	0	0	0	0	0		
Mississippi	0	0		0	0	0	0	0	0	0	0		
Tennessee	11	12	-8.2%	0	0	0	0	0	0	11	12		
West South Central	3,973	3,880	2.4%	0	0	1,210	1,071	0	0	2,762	2,808		
Arkansas	0	0		0	0	0	0	0	0	0	0		
Louisiana	1,829	1,786	2.4%	0	0	0	0	0	0	1,829	1,786		
Oklahoma	0	0		0	0		0	0	0	0	C		
Texas	2,144	2,094	2.4%	0	0	·	1,071	0	0	934	1,023		
Mountain	320	335	-4.5%	0	0		7	0	0	306	328		
Arizona Colorado	0	0		0	0	0	0	0	0	0			
Colorado Idaho	0	0		0	0		0	0	0	0			
Montana	14	6	115.5%	0	0	14	6	0	0	0			
Nevada	0	1	-100.0%	0	0	0	1	0	0	0			
New Mexico	0	0		0	0	0	0	0	0	0			
Utah	14	43	-68.0%	0	0	<u> </u>	0	0	0	14	43		
Wyoming	293	285	2.6%	0	0		0	0	0	293	285		
Pacific Contiguous	1,467	1,555	-5.7%	0	0	293	337	0	0	1,173	1,218		
California	1,173	1,218	-3.7%	0	0		0	0	0	1,173	1,218		
Oregon	0	0		0	0	0	0	0	0	0			
Washington	293	337	-13.0%	0	0		337	0	0	0	C		
Pacific Noncontiguous	42	44	-5.0%	0	0		0	0	0	42	44		
Alaska	0	0		0	0		0	0	0	0	C		
Hawaii U.S. Total	42 11,815	44 10,757	-5.0% 9.8%	0 122	0 111		0 3,133	0	0	8,373	7,513		

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.

Table 1.9.A. Utility Scale Facility Net Generation from Nuclear Energy by State, by Sector, October 2017 and 2016 (Thousand Megawatthours)

by State, by Sector, Oct	tober 2017 ar	All Sectors	ousand weg	jawattnours)	Electric Po			Commerc	ial Sector	Industri	al Sector	
				Electric	Utilities	Independent Power Producers						
	Generation	Generation at Utility Scale Facilities			Utility Scale		nt Utility Scale	Generation a			t Utility Scale lities	
Census Division	October	October	Percentage		October	October			October			
and State	2017	2016	Change		2016				2016	2017	2016	
New England	2,394	2,960	-19.1%		0	2,394 975	The state of the s		0	0	0	
Connecticut Maine	975	1,542	-36.8%	0	0	9/5	1,542	0	0		0	
Massachusetts	490	490	0.0%	ū	0	490	490	0	0	·	0	
New Hampshire	929	928	0.0%		0	929		0	0		0	
Rhode Island	929	928	0.176	0	0	929	928	0	0	·	0	
Vermont	0	0		0	0	0	0	0	0	·	0	
Middle Atlantic	13,048	12,589	3.7%		0	13,048	12,589	0	0	_	0	
New Jersey	2,533	2,385	6.2%		0	2,533	The state of the s		0	·	0	
New York	3,982	3,828	4.0%		0	3,982			0	·	0	
Pennsylvania	6,534	6,377	2.5%		0	6,534		0	0		0	
East North Central	12,500	12,545	-0.4%		1,704			0	0	0	0	
Illinois	8,032	7,758	3.5%		0	8,032		0	0	_	0	
Indiana	0	0		0	0	0	0	0	0	0	0	
Michigan	2,333	2,299	1.5%	1,732	1,704	601	595	0	0	0	0	
Ohio	1,612	1,596	1.1%	· ·	0	1,612			0	0	0	
Wisconsin	523	892	-41.4%	0	0	523			0	0	0	
West North Central	3,104	2,209	40.5%	2,722	2,189	382	21	0	0	0	0	
Iowa	382	21	NM	0	0	382	21	0	0	0	0	
Kansas	907	-5	NM		-5	0	0	0	0	0	0	
Minnesota	1,061	1,046	1.4%	1,061	1,046	0	0	0	0	0	0	
Missouri	156		-82.8%		906	0	0	0	0	0	0	
Nebraska	599	242	147.2%	599	242	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	
South Atlantic	16,858	15,943	5.7%	15,541	14,638	1,317	1,305	0	0	Ů	0	
Delaware	0	0		0	0	0	0	0	0		0	
District of Columbia	0	0		0	0	0		0	0		0	
Florida	2,069	1,704	21.5%	·	1,704	0	0	0	0		0	
Georgia	2,939	3,068	-4.2%		3,068		0	0	0		0	
Maryland North Carolina	1,317	1,305	0.9% 0.4%		0	1,317	1,305	0	0	Ŭ	0	
South Carolina	3,243 4,816	3,231 4,611	4.4%		3,231 4,611	0	0	0	0		0	
Virginia	2,474	2,024	22.2%	·	2,024	0		0	0	·	0	
West Virginia	2,474	2,024	22.270	2,474	2,024	0		0	0		0	
East South Central	7,371	5,384	36.9%	7,371	5,384	0		0	0	·	0	
Alabama	3,454	2,287	51.0%		2,287	0	0	0	0	Ů	0	
Kentucky	0, 10 1	0		0, 10 1	0	0	0	0	0		0	
Mississippi	844	-14	NM	844	-14	0	0	0	0	·	0	
Tennessee	3,073	3,111	-1.2%		3,111	0	0	0	0		0	
West South Central	6,015	4,461	34.8%	·	1,459	3,047	3,002	0	0	0	0	
Arkansas	1,378	78	NM		78	0	0	0	0	0	0	
Louisiana	1,589	1,381	15.1%		1,381	0	0	0	0	0	0	
Oklahoma	0	0		0	0	0	0	0	0	0	0	
Texas	3,047	3,002	1.5%	0	0	3,047	3,002	0	0	0	0	
Mountain	2,163	2,196	-1.5%	2,163	2,196	0	0	0	0	0	0	
Arizona	2,163	2,196	-1.5%	2,163	2,196	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	
Wyoming	0	0		0	0	0	0	0	0	0	0	
Pacific Contiguous	2,542		3.9%		2,446		<u> </u>				0	
California	1,684	1,605	4.9%	-	1,605		·	Ŭ	0		0	
Oregon	0	·		0	0	0	_	0	0		0	
Washington	858		2.0%		841	0	· · ·	0	0		0	
Pacific Noncontiguous	0	0		0	0	0		0	0		0	
Alaska	0	0		0	0	0	Ŭ	0	0		0	
Hawaii	0	0		0	0 040	0 057	Ü	0	0		0	
U.S. Total	65,995	60,733	8.7%	35,038	30,016	30,957	30,717	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.

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

to y to the total y	r-to-Date through October 2017 and All Sectors			2016 (1110u				Commoroi	al Castar	Industrial Sector	
		All Sectors			Electric Po	wer Sector Indeper	ndent	Commercia	al Sector	industriai	Sector
				Electric	Utilities	Power Pro					
	Generation	at Utility Scale	e Facilities	Generation at	-		Utility Scale	Generation at	-	Generation at Facilit	
Census Division	October	October	Percentage		October		October	October	October	October	October
and State	2017 YTD	2016 YTD	Change -3.4%	2017 YTD	2016 YTD		2016 YTD	2017 YTD	2016 YTD		2016 YTD
New England Connecticut	26,083 13,872	27,001 13,519	2.6%	0	0	26,083 13,872	27,001 13,519	0	0	0	0
Maine	13,072	13,519	2.0%	0	0	13,672	13,319	0	0	0	0
Massachusetts	4,053	4,551	-10.9%	0	0	4,053	4,551	0	0		0
New Hampshire	8,158	8,930	-8.6%	0	0	8,158	8,930	0	0		0
Rhode Island	0,100	0,000		0	0	0,100	0,000	0	0	-	0
Vermont	0	0		0	0	0	0	0	0	0	0
Middle Atlantic	131,616	127,418	3.3%	0	0	131,616	127,418	0	0	0	0
New Jersey	28,238	24,338	16.0%	0	0	28,238	24,338	0	0	0	0
New York	34,819	34,577	0.7%	0	0	34,819	34,577	0	0	0	0
Pennsylvania	68,558	68,503	0.1%	0	0	68,558	68,503	0	0	0	0
East North Central	129,738	130,895	-0.9%	22,191	21,495	107,547	109,400	0	0	0	0
Illinois	80,269	81,543	-1.6%	0	0	80,269	81,543	0	0	0	0
Indiana	0	0		0	0	0	0	0	0	0	0
Michigan	27,088	27,354	-1.0%	22,191	21,495		5,859	0	0		0
Ohio	14,485	13,612	6.4%	0	0	14,485	13,612	0	0		0
Wisconsin	7,896	8,386	-5.8%	0	0	7,896	8,386		0		0
West North Central	38,515	38,440	0.2%	34,194	34,614	4,321	3,825		0	-	0
lowa	4,321	3,825	12.9%	0	0	4,321	3,825	0	0		0
Kansas	8,852	7,088	24.9%	8,852	7,088	0	0	0	0	-	0
Minnesota	11,612	11,551	0.5%	11,612	11,551	0	0	0	0		0
Missouri	7,987	7,623	4.8%	7,987	7,623		0	0	0		0
Nebraska North Dokoto	5,744	8,353	-31.2%		8,353	-	0	0	0		0
North Dakota South Dakota	0	0		0	0	0	0	0	0		0
South Atlantic	169,533	171,246	-1.0%	157,065	159,061	12,468	12,185	0	0	ŭ,	0
Delaware	109,555	171,240	-1.0%	157,005	159,061	12,400	12,100	0	0		0
District of Columbia	0	0		0	0	0	0	0	0		0
Florida	23,958	24,171	-0.9%	23,958	24,171	0	0	0	0		0
Georgia	28,104	28,419	-1.1%	28,104	28,419	0	0	0	0		0
Maryland	12,468	12,185	2.3%	0	0	12,468	12,185	0	0	0	0
North Carolina	34,711	35,458	-2.1%	34,711	35,458		0	0	0	0	0
South Carolina	45,092	46,454	-2.9%	45,092	46,454	0	0	0	0	0	0
Virginia	25,200	24,559	2.6%	25,200	24,559	0	0	0	0	0	0
West Virginia	0	0		0	0	0	0	0	0	0	0
East South Central	68,177	62,722	8.7%	68,177	62,722	0	0	0	0	0	0
Alabama	35,421	33,011	7.3%	35,421	33,011	0	0	0	0	0	0
Kentucky	0	0		0	0	0	0	0	0	0	0
Mississippi	6,562	5,924	10.8%	6,562	5,924	0	0	0	0	0	0
Tennessee	26,194	23,788	10.1%	26,194	23,788		0	0	0		0
West South Central	53,702	60,652	-11.5%	22,204	25,678	-	34,974	0	0		0
Arkansas	9,964	11,663	-14.6%	9,964	11,663		0	0	0		0
Louisiana	12,240	14,015	-12.7%	12,240	14,015	0	0	0	0		0
Oklahoma	0	0 0 0 0 7 4		0	0	0	0	0	0	-	0
Texas	31,498	34,974	-9.9%	00.700	00.704	31,498	34,974	0	0		0
Mountain	26,722	26,734	0.0%	26,722	26,734	0	0	0	0		0
Arizona	26,722	26,734	0.0%	26,722	26,734	0	0	0	0		0
Colorado	0	0		0	0	0	0		0		0
Idaho Montana	0	0		0	0	0	0	0	0		0
Nevada	0	0		0	0	U	0	0	0		0
New Mexico	0	0		0	0	0	0	0	0		0
Utah	0	0		0	0	0	0	0	0		0
Wyoming	0	0		0	0	ٽ ا	0		0		0
Pacific Contiguous	21,011	23,746	-11.5%		23,746		0		0		0
California	14,591	15,592	-6.4%	14,591	15,592		0	0	0		n
Oregon	14,001	0	J. 7/0	0	0,002	0	0	0	0		0
Washington	6,420	8,154	-21.3%		8,154		0	0	0		0
Pacific Noncontiguous	0	0,101		0,120	0,101	0	0	0	0		0
Alaska	0	0		0	0	0	0	0	0		0
Hawaii	0	0		0	0	0	0	0	0		0
U.S. Total	665,097	668,853	-0.6%	351,565	354,050	313,532	314,803	0	0		n

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

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

y State, by Sector, October 2017 and 2016 (Thousand Me All Sectors				awatthours		wer Sector		Commercial Sector Industrial Sector				
П				Flooris	Here	Indepe						
					Utilities	Power Pr						
	Generation	at Utility Scale	e Facilities		t Utility Scale	Generation at Facil	-	Generation at Facil	-		t Utility Scale lities	
Census Division	October	October	Percentage	October	October	October	October	October	October	October	October	
and State New England	2017 487	2016 259	Change 88.0%	2017 61	2016 16		2016 226		2016		2016	
Connecticut	15	11	42.4%	NM	10	14	10		0		0	
Maine	244	183	33.8%	0	0	218	165		0	,	17	
Massachusetts	56	24	131.2%	NM	5	45	19		0		0	
New Hampshire	87	35	150.4%	22	8	65	26	0	0	0	0	
Rhode Island	0	0	-100.0%	0	0	0	0	0	0	0	0	
Vermont	84	7	NM	28	2	57	4	0	0		0	
Middle Atlantic	2,441	2,191	11.4%	1,963	1,803	475	383	0	0		4	
New Jersey New York	NM 2,260	2,079	NM 8.7%	1,960	1,800	NM 297	275	0	0		0	
Pennsylvania	179	111	61.9%	1,900	1,000	177	108	0	0		0	
East North Central	323	448	-27.9%	275	389	33	41	0	0		18	
Illinois	9	10	-9.3%	3		6	6	0	0		0	
Indiana	35	38	-9.3%	35	38	0	0	0	0	0	0	
Michigan	85	96	-10.6%	78		NM	7	0	0	NM	2	
Ohio	40	48	-15.8%	26		14	17	0	0		0	
Wisconsin	153	255	-40.1%	134		NM	11	0	0			
West North Central	649	756	-14.2%	621	716	15	26		0		14	
Iowa Kansas	47	59 2	-19.2% 38.4%	47 0	58 0	3	2	0	0	ľ	0	
Minnesota	70	133	-47.1%	45		NM	23	0	0		14	
Missouri	93	55	67.6%	93		0	0	0	0		0	
Nebraska	83	55	52.5%			0	0	0	0		0	
North Dakota	109	122	-10.7%	109	122	0	0	0	0	0	0	
South Dakota	244	331	-26.4%	244	331	0	0	0	0	0	0	
South Atlantic	978	924	5.9%	848	787	88	106	1	1	42	30	
Delaware	0	0		0	0	0	0	0	0		0	
District of Columbia Florida	0	0 11	25.9%	0 14		0	0		0		0	
Georgia	14 202	187	7.9%	200	11 186	NM	0		0		1	
Maryland	49	63	-22.0%	0	0	49	63	0	0			
North Carolina	315	297	5.9%	311	294	NM	3	1	1	NM	0	
South Carolina	160	106	51.8%	157	103	NM	2	0	0	0	0	
Virginia	107	147	-27.0%	102	139	5	7	0	0	0	1	
West Virginia	131	113	15.6%	64		27	30	0	0	40	28	
East South Central	1,475	851	73.3%	1,474	850	NM	1	0	0		0	
Alabama	614	232	165.1%	614		0	0		0		0	
Kentucky Mississippi	343	207	66.0%	342 0	206	NM	0	0	0		0	
Mississippi Tennessee	517	413	25.4%	517	413	0	0	0	0	<u> </u>	0	
West South Central	664	568	16.9%	560	474	103	94	NM	0		0	
Arkansas	270	241	12.0%	264	238	6	3		0		0	
Louisiana	94	90	4.6%	0	0	94	90	0	0	0	0	
Oklahoma	201	211	-4.7%	201	211	0	0	_	0	0	0	
Texas	99	26	285.5%	95		3	1	NM	0	0	0	
Mountain	1,875	1,808	3.7%	1,801	1,753	72	53		1	0	0	
Arizona	456	445	2.5%	456		0	0	· ·	0	0	0	
Colorado Idaho	98 505	123 438	-20.5% 15.3%	84 459		NM 46	13 28		0	0	0	
Montana	559	613	-8.9%	551	604	NM	28		0		0	
Nevada	144	115	26.2%	140		NM	3	0	0		0	
New Mexico	NM	8	NM	NM	8	0	0	0	0	<u> </u>	0	
Utah	44	44	0.3%	43	43	0	1	0	0	0	0	
Wyoming	55	22	151.4%			1	0		0	0	0	
Pacific Contiguous	8,214	9,339	-12.0%	8,059	-				1	0	0	
California	2,037	1,718	18.6%	-	-	114			1	0	0	
Oregon	1,962	2,430			-	NM	19		0		0	
Washington	4,215	5,191	-18.8%	4,190	· ·	25	29		0		0	
Pacific Noncontiguous Alaska	103 95	195 183	-47.4% -48.2%			4	7	NM NM	18 18		0	
Hawaii	95	183				υ /	7	0	0		4	
U.S. Total	17,208					1,345	· ·			<u> </u>		

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.

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

by State, by Sector, Yea	or, Year-to-Date through October 2017 and All Sectors			2016 (Thous	and Megaw Electric Po			Commerc	ial Sector	Industri	al Sector
		7 0001010				Indep	endent		<u> </u>		
				Electric	Utilities	Power P	roducers				
	Generation	at Utility Scal	e Facilities	Generation at Facil			t Utility Scale	Generation a			t Utility Scale lities
Census Division	October 2017	October 2016	Percentage	October 2017							
and State New England	YTD 5,790	YTD 5,265	Change 10.0%	YTD 772	YTD 691	YTD 4,699			YTD 3	YTD 315	
Connecticut	223	191	17.0%	20	14				0	313	2/0
Maine	2,769	2,580	7.3%		0	2,459	ļ		0	310	277
Massachusetts	696	576		146	114	541	458		3	5	1
New Hampshire	1,086	968	12.2%	253	234	833	734	0	0	0	C
Rhode Island	2	2	7.0%		0	2	2	0	0	0	C
Vermont	1,014	948	6.9%	352	328	662	620		0	0	~
Middle Atlantic	26,335	24,370	8.1%	20,550	19,255	5,722	5,063	5	4	58	47
New Jersey New York	NM 24,009	22,355	NM 7.4%	20,469	19,199	NM 3,478	3,105	0	0	58	47
Pennsylvania	2,303	2,007	14.7%		57	2,221	1,950		0	0	7/
East North Central	4,753	4,544	4.6%	4,149	3,968	437	408		1	165	167
Illinois	108	112	-3.2%	34	43	73			1	0	C
Indiana	389	351	10.6%	389	351	0	0	0	0	0	0
Michigan	1,375	1,380	-0.4%	1,258	1,264	94			0	24	23
Ohio	461	406	13.5%	296	260	165		0	0		C
Wisconsin	2,419	2,295	5.4%	2,173	2,049	105		0	0	141	144
West North Central	10,030	9,466		9,673	9,146	222	212	0	0		
lowa Kansas	776 25	793 26	-2.1% -4.3%	770 0	786 0	6 25	26	0	0	0	
Minnesota	1,068	995	7.4%		708	190			0		~
Missouri	1,186	1,199	-1.1%	1,186	1,199		0		0		
Nebraska	1,358	741	83.3%		741	0	0	0	0	0	C
North Dakota	1,747	1,646	6.1%	1,747	1,646	0	0	0	0	0	C
South Dakota	3,870	4,066	-4.8%	3,870	4,066		0	0	0	0	C
South Atlantic	13,791	13,263	4.0%	11,098	11,167	2,214	1,629	10		470	453
Delaware	0	0		0	0	0	0	0	0	0	0
District of Columbia Florida	164	158	4.0%	0 164	158	0	0	0	0	0	
Georgia	2,689	2,994	-10.2%	2,670	2,974	7	7	0	0		
Maryland	1,732	1,194	45.0%	0	0	1,732	1,194	0	0		C
North Carolina	4,011	4,125	-2.8%	3,957	4,071	39		9	13	NM	C
South Carolina	2,333	2,066	12.9%	2,289	2,016	43	48	1	2	0	C
Virginia	1,392	1,365	1.9%	1,328	1,291	63			0		~
West Virginia	1,471	1,362	8.0%	690	658		1	0	0	451	431
East South Central	17,865	15,188	17.6%	17,857	15,180	NM	8	0	0	0	0
Alabama	7,758 3,686	6,317	22.8% 24.7%	7,758 3,677	6,317	0 NM	0	0	0	0	0
Kentucky Mississippi	3,000	2,956	24.1 %	3,077	2,948	INIVI	0	0	0		
Tennessee	6,421	5,914	8.6%	6,421	5,914	0	0	0	0		0
West South Central	8,107	8,051	0.7%	7,014	6,996		1,055	NM	0	0	C
Arkansas	3,334	3,327	0.2%	3,291	3,286			0	0	0	C
Louisiana	1,017	984	3.4%	0	0	1,017	984	0	0	0	C
Oklahoma	2,400	2,487	-3.5%	2,400	2,487	0	0	0	0	0	C
Texas	1,356	1,253	8.2%	1,323	1,224	27	30		0	0	C
Mountain	28,131	26,958	4.4%	26,971	25,838	1,147	1,109	13	11	0	
Arizona Colorado	5,996 1,754	6,106 1,752	-1.8% 0.1%	5,996 1,517	6,106 1,555	223	0 187	13	0 11		
Idaho	8,137	8,097	0.1%	7,400	7,337	738	1		0		
Montana	9,023	7,806	15.6%	8,898	7,696				0		
Nevada	1,417	1,517	-6.6%	1,372	1,482				0	0	0
New Mexico	215	124	72.6%	215	124	0	0	0	0	0	C
Utah	701	638	9.8%	693	630	8	9	0	0	0	C
Wyoming	889	916	-3.0%	881	907	8	9	0	0	0	
Pacific Contiguous	141,320				115,931						
California	39,047	24,985		36,855	23,548						
Oregon Washington	31,054 71,219	28,432 64,545			28,204 64,179		1		0		
Pacific Noncontiguous	1,577	1,410		1,372	1,217	14	<u> </u>				
Alaska	1,524	1,339			1,203		0				0
Hawaii	54	71			14				0		30
U.S. Total	257,699				209,389				179		

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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 1.11.A. Utility Scale Facility Net Generation from Renewable Sources Excluding Hydroelectric by State, by Sector, October 2017 and 2016 (Thousand Megawatthours)

		All Sectors		awatthours)	Electric Po	wer Sector		Commerc	ial Sector	Industrial	Sector
				Flootnia	letitet o o		endent				
	Generation	at Utility Scal	e Facilities	Electric I Generation at Facili	Utility Scale			Generation at		Generation at l	
Census Division	October	October	Percentage	October	October	October	October	October	October	October	October
and State	2017	2016	Change	2017	2016	2017	2016		2016	2017	2016
New England	1,032	820	25.9%	85	73	849	659			80	72
Connecticut	76		16.5%	0	0	76			0	0	70
Maine	444	321	38.2%	0	<u>0</u>	356 196		9 5	9	79	72
Massachusetts	209 194	172 175	21.3% 10.5%	30	31	196		5	3	0	0
New Hampshire Rhode Island	29	173	57.5%	0	0	28			3	0	0
Vermont	80	67	19.2%	48	35	32	32	0	0	0	0
Middle Atlantic	1,376		15.3%	9	6	1,229	1,075	65		73	63
New Jersey	195	153	27.8%	9	6	155	· ·	30	25	NM	00
New York	622	531	17.2%	0	0	584	495	21	20	17	16
Pennsylvania	559	509	9.7%	0	0	491	459		4	54	47
East North Central	3,027	2,477	22.2%	383	285	2,490	2,039	18	18		135
Illinois	1,162	992	17.1%	3	3	1,159		NM	0	0	0
Indiana	573	513	11.8%	34	25	532	481	2	2	6	5
Michigan	751	590	27.4%	202	162	484	355	10	13	-	60
Ohio	212	159	33.1%	NM	2	182	131	1	1	26	25
Wisconsin	330	224	47.4%	142	94	133		4	3	50	45
West North Central	7,526	5,830	29.1%	2,469	1,966	4,990	3,782	15	13	52	70
Iowa	2,149	1,818	18.2%	1,388	1,160	755	648	3	4	3	6
Kansas	1,816	1,401	29.6%	195	75	1,620	1,326	NM	0	0	0
Minnesota	1,343	1,085	23.8%	299	273	991	745	5	4	48	63
Missouri	204	115	77.8%	3	4	196	107	5	3	0	0
Nebraska	532		54.2%	24	25		318	1	2	0	0
North Dakota	1,164	731	59.2%	460	342	704		0	0	NM	0
South Dakota	319	334	-4.8%	100	88	218		0	0	0	0
South Atlantic	2,732	1,960	39.4%	290	133	1,518	965		34	893	827
Delaware	11	11	6.4%	NM	1	9	8	NM	1	NM	1
District of Columbia	5	4	20.6%	0	0	5	4	0	0	0	0
Florida	482	368	31.0%	57	16	255		4	4	165	145
Georgia	588	477	23.1%	23	17	224	153	NM	1	340	307
Maryland North Carolina	125	115 406	8.0%	NM	1	116 633		12	9	6 122	11 112
South Carolina	803 209	175	97.8% 19.7%	36 37	15 23	43	269 21	0	0	130	130
Virginia	362	274	32.3%	135	60	86		Ĭ	18	130	121
West Virginia	148	130	13.7%	0	00	148			0	130	121
East South Central	544	520	4.6%	12	10	78			0	453	455
Alabama	271	271	-0.2%	4	0	37	35		0	231	236
Kentucky	37	35	7.0%	9	10	0	1	0	0	28	24
Mississippi	147	133	10.8%	0	0	15	1	0	0	132	131
Tennessee	89	81	9.7%	0	0	25	17	NM	0	63	63
West South Central	9,344	8,121	15.1%	167	199	8,734	7,459	9	8	434	455
Arkansas	128	112	14.9%	NM	0	12	10	0	0	116	101
Louisiana	223	254	-12.1%	0	0	7	8	0	0	216	246
Oklahoma	2,527	2,096	20.5%	143	172	2,354	1,892	0	0	30	32
Texas	6,466	5,660	14.3%	24	26	6,362	5,549	8	8	72	76
Mountain	4,064	3,336	21.8%	363	333	3,673	2,960	12	11	16	31
Arizona	492	370	33.0%	58	40	432	328	NM	2	0	0
Colorado	1,015	880	15.3%	29	9	984			2	0	0
Idaho	329	221	49.0%	NM	1	313	190	1	1	14	29
Montana	223	152	47.1%	23	16	198		0	0	2	2
Nevada	687	593	15.7%	3	4	677	585	6	5	0	0
New Mexico	587	426	37.6%	22	33	564		NM	0	0	0
Utah	285	265	7.7%	22	22	262	241	1	1	0	0
Wyoming	447	429	4.2%	205	207	242		0			0
Pacific Contiguous	6,328	5,328	18.8%	734	638				86	217	199
California	4,611	4,015	14.9%	160	178	4,318			82	61	39
Oregon	768		45.1%	106	66	615		3	2	44	40
Washington	949		21.1%	469	394	367	269		1	112	120
Pacific Noncontiguous Alaska	138		-16.6%	17	18			21	24	NM	7
AIASKA	20	24	-13.0%	11	13	6		J 4	4	NM	0
Hawaii	117	141	-17.2%	7	6	94	109	17	20	0	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.

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

by State, by Sector, Tea	by Sector, Year-to-Date through October 2017 and All Sectors			2016 (Thous	and Megaw Electric Po			Commerc	ial Sector	Industri	Industrial Sector		
						Indep	endent						
				Electric	Utilities	Power P	roducers						
	Generation	at Utility Scal	e Facilities	Generation at Facil	ities	Faci	lities		lities	Faci	t Utility Scale		
Census Division and State	October 2017 YTD	October 2016 YTD	_	October 2017									
New England	9,919	8,644	Change 14.8%	YTD 720	YTD 728	8,098	ļ		YTD 157	YTD 931	YTD 868		
Connecticut	762	746	2.2%	3	2	759	· ·		0		000		
Maine	4,246	3,587	18.4%	0	0	3,238	ļ	ļ	75	930	867		
Massachusetts	2,047	1,697	20.7%	64	61	1,935	1,590	47	45	1	1		
New Hampshire	1,834	1,728	6.1%	238	254	1,559	1,445	37	29	0	C		
Rhode Island	305	197	55.2%	0	0	299			5	0	C		
Vermont	725	690	5.0%	415	411	308		<u> </u>	2	0	0		
Middle Atlantic	12,131	11,255 1,562	7.8%	85	73 73	-			539 266		†		
New Jersey New York	1,834 5,369	4,995	17.4% 7.5%	85 0	0	5,008		290 196	182		<u>~</u>		
Pennsylvania	4,929	4,698	4.9%	ŭ,	0	4,252	4,120	ļ	91	544			
East North Central	24,584	22,846	7.6%	3,122	2,794	19,921	18,466	ļ	185		ļ		
Illinois	9,455	8,793	7.5%	29	30	9,423	8,760	NM	4	0	C		
Indiana	4,370	4,438	-1.5%	343	265	, , , , , , , , , , , , , , , , , , ,	4,092		17	60	ļ		
Michigan	6,239	5,626	10.9%	1,598	1,480	3,989			123		!		
Ohio	1,941	1,605	21.0%	21	19	· · · · · · · · · · · · · · · · · · ·			11	244			
West North Central	2,579	2,384	8.2%	1,131	1,000	896			30				
West North Central lowa	60,006 16,866	50,148 15,805	19.7% 6.7%	19,352 10,872	17,176 9,909	39,926 5,920	32,254 5,808		147 42	584 36			
Kansas	15,259	11,717	30.2%	1,444	710	13,814	11,007		0		ł		
Minnesota	10,959	9,248	18.5%	2,421	2,445		<u> </u>		44		519		
Missouri	1,607	1,044	53.9%	34	35	1,523	<u> </u>	48	45		3		
Nebraska	4,191	3,017	38.9%	209	222	3,967	2,778	15	16	0	C		
North Dakota	8,652	6,358	36.1%	3,596	3,068	5,053	3,285	0	0	4	5		
South Dakota	2,472	2,959	-16.4%	776	785				0	0	C		
South Atlantic	26,611	21,057	26.4%	2,864	1,907	14,396	<u> </u>		421	9,040	· ·		
Delaware District of Columbia	112 38	100 44	11.4% -13.4%	0	6	86			5	13	13		
Florida	4,737	4,013	18.1%	605	213	38 2,412	2,096		42	1,679	1,661		
Georgia	5,934	4,383	35.4%	242	75	· · · · · · · · · · · · · · · · · · ·	1,135		5				
Maryland	1,112	1,033	7.6%	9	8	990			19				
North Carolina	7,481	4,986	50.0%	335	188	5,913	3,602	123	162	1,111	1,035		
South Carolina	2,327	1,996	16.6%	367	338	442			0	-,			
Virginia	3,567	3,428	4.1%	1,299	1,079		883		188	1,266	1,278		
West Virginia	1,304	1,075	21.3%	0	0	1,304		1	0	0	0		
East South Central	5,601	5,309	5.5%	113	85			ļ	3	4,809	ļ		
Alabama Kentucky	2,960 384	2,777 395	6.6% -2.8%	23 90	0 85	378 6	231		0	2,559 288			
Mississippi	1,311	1,276	2.7%	0	0.5		<u> </u>	 	0	-			
Tennessee	947	861	9.9%	- J	0	222	165	5	3	720			
West South Central	82,750	69,967	18.3%	1,460	1,410	76,855	64,059	68	72	4,367	4,426		
Arkansas	1,254	1,140	10.1%	NM	1	116	108	5	4	1,131	1,026		
Louisiana	2,332	2,400	-2.8%	0	0	68		0	0	2,265	1		
Oklahoma -	20,342	16,815	21.0%	1,240	1,168	18,878	<u> </u>	0	0		ļ		
Texas	58,821	49,613	18.6%	218	241	57,794			69				
Mountain Arizona	36,014 4,944	31,019 3,906	16.1% 26.6%	3,076 539	2,832 438	32,535 4,385			112 21	282	322		
Colorado	8,783	3,906 8,181	7.4%	261	438 85		8,079		14	2	3		
Idaho	2,898	2,563	13.1%	9	9	2,619					300		
Montana	1,748	1,709	2.3%	ŭ,	183	1,550			0		<u> </u>		
Nevada	6,500	5,722	13.6%	36	44	6,403	<u> </u>		53				
New Mexico	4,635	3,539	31.0%	220	196	4,412	3,341	NM	2	0	0		
Utah	2,980	1,955	52.5%	220	212	2,751	1,729	8	14	0	C		
Wyoming	3,527	3,446	2.4%	1,609	1,664	1,918		0	0	0	0		
Pacific Contiguous	61,792				7,143				862				
California	47,122	43,041	9.5%	-	1,911	43,867			822 27				
Oregon Washington	6,821 7,848	7,236 8,416	-5.7% -6.7%		1,211 4,022	5,332 2,960			13				
Pacific Noncontiguous	1,287	1,291	-0.1%	169	160				207				
Alaska	1,287	-	-5.9%		91	47							
Hawaii	1,120	1,115			69					0	55		
U.S. Total	320,696		14.4%		34,307	256,197				24,201			

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Negative generation denotes that electric power consumed for plant use exceeds gross generation.

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

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

by otate, by occior, oc	y Sector, October 2017 and 2016 (Thousand Meg All Sectors			Electric Power Sector			Commerci	ial Sector	Industrial Sector		
		П		Electric	Utilities	Indepe Power Pr					
	Generation	at Utility Scal	e Facilities		t Utility Scale lities	Generation at Facil		Generation at Facil	-	Generation at Facil	
Census Division	October	October	Percentage	October	October	October	October	October	October	October	October
and State New England	2017 -25	2016 -38				2017 -25	2016 -38		2016	2017	2016
Connecticut	0	0	-18.0%	0		0	0	0	0	0	0
Maine	0	0		0		0	0	0	0	0	0
Massachusetts	-25	-38	-34.2%	0	0	-25	-38	0	0	0	0
New Hampshire	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	-100	-103	-2.8%	-50	-51	-50	-52	0	0	0	0
New Jersey	-6	-12	-50.4%			0	0	0	0	0	0
New York	-44	-39	13.4%	-44	-39		0		0	0	0
Pennsylvania	-50	-52	-3.4%			90	-52		0	,	0
East North Central	-48	-71	-33.4%			0	0		0		0
Illinois	0	0		0		<u> </u>	0	<u> </u>	0		0
Indiana	0	0		0		ٽ ا	0	<u> </u>	0	<u> </u>	0
Michigan	-48	-71 0	-33.4%	-48		0	0		0	0	0
Ohio Wisconsin	0	0		0		0	0		0	<u> </u>	0
Wisconsin West North Central	-9	11	-187.6%	-9		0	0	0	0		0
lowa	-9	11	-107.0%	-9		_	0	0	0		0
Kansas	0	0		0			0	Ů	0	<u> </u>	0
Minnesota	0	0		0		1	0	<u> </u>	0		0
Missouri	-9	11	-187.6%	-9		0	0	0	0	0	0
Nebraska	0	0		0			0	<u> </u>	0	0	0
North Dakota	0	0		0			0	<u> </u>	0		0
South Dakota	0	0		0			0		0		0
South Atlantic	-264	-270	-2.0%	-264	-270	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	-85	-138	-38.2%	-85	-138	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
South Carolina	-84	-54	54.8%	-84		0	0	0	0		0
Virginia	-95	-78	22.5%	-95			0	0	0		0
West Virginia	0	0		0		ŭ	0		0		0
East South Central	-58	-74	-20.7%	-58		0	0		0		0
Alabama	0	0		0		<u> </u>	0	.	0		0
Kentucky Mississippi	0	0		0		1	0	<u> </u>	0	<u> </u>	0
Tennessee	-58	-74	-20.7%	-58	_	0	0		0		0
West South Central	-10	-74 -9	9.4%	-10	<u> </u>		0		0		0
Arkansas	-10	1	-66.6%	-10		0	0		0		0
Louisiana	0	0		0			0		0		<u> </u>
Oklahoma	-10	-10	4.7%	-10			0	<u> </u>	0		0
Texas	0	0		0		0	0	.	0		0
Mountain	-38	-20	91.9%	-38	_		0		0	0	0
Arizona	-9	-2	284.7%	-9			0		0	0	0
Colorado	-29	-17	67.0%	-29			0		0	0	0
Idaho	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
Pacific Contiguous	89	13					0		0		0
California	90	12	667.9%				0	-	0	_	0
Oregon	0	0		0			0		0		0
Washington	0	2	-115.0%				0		0		0
Pacific Noncontiguous	0	0		0			0		0		0
Alaska	0	0		0			0		0		0
Hawaii	0	0		0			0		0		0
U.S. Total	-463	-561	-17.4%	-388	-471	-75	-90	0	0	0	C

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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.

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

by State, by Sector, Yea	ar-to-Date thro	ough Octobe All Sectors	er 2017 and	2016 (Thous I	and Megaw Electric Po			Commerc	ial Sector	Industri	al Sector
		All Octions			LICCUICIO		endent	Commerc	iai occioi	illuustii	ai occioi
				Electric	Utilities	Power P	roducers				
		at Utility Scal	e Facilities	Facil		Faci	lities	Generation a	lities	Faci	lities
Census Division		October 2016						October 2017			
and State New England	-358	YTD -416	Change -14.1%		YTD 0	-358	ļ		YTD	YTD	YTD
Connecticut	-336	2	-221.3%	0	0			0	0	0	0
Maine	0	0		0	0		0	0	0		
Massachusetts	-355	-418	-14.9%	0	0		-418	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	-997	-1,033	-3.4%	-491	-573	-506	-460	0	0	0	0
New Jersey	-133	-176	-24.3%	-133	-176	0	0	0	0	0	0
New York	-358	-397	-9.8%	-358	-397	0	0	0	0	0	0
Pennsylvania	-506	-460	9.9%		0	-506	-460	0	0	0	0
East North Central	-563	-646	-13.0%	-563	-646	0	0	0	0	0	0
Illinois	0	0		0	0	0	0	0	0		
Indiana	0	0		0	0	0	0	0	0	0	
Michigan	-563	-646	-13.0%	-563	-646	0	0	0	0	0	
Ohio	0	0		0	0	0	0	0	0		· ·
Wisconsin	0	0	47.00/	105	0	0	0	0	0	0	
West North Central	105	200	-47.3%	105	200	0	0	0	0	0	
Iowa Kansas	0	0		0	0	0	0	0	0		
Minnesota	0	0		0	0		<u> </u>	U	0		
Missouri	105	200	-47.3%	105	200	0	0	0	0		
Nebraska	103	0	-47.576	0	0	0	0	0	0	0	· ·
North Dakota	0			0	0	0	0	0			<u> </u>
South Dakota	0	0		0	0	0	0		0		
South Atlantic	-3,040	-2,625	15.8%	-3,040	-2,625	0	0	0	0	_	0
Delaware	0	0		0	0	0	0	0	0	O	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	-1,074	-716	50.0%	-1,074	-716	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	-878	-856	2.5%	-878	-856	0	0	0	0		
Virginia	-1,089	-1,054	3.3%	-1,089	-1,054	0			0		
West Virginia	0	0		0	0	0	0	0	0		
East South Central	-603	-616	-2.1%	-603	-616	0	0	0	0	0	
Alabama	0	0		0	0	0	0	0	0		· ·
Kentucky	0	0		0	0	.	0	0	0	0	
Mississippi Tannassaa	-603	-616	-2.1%	-603	-616	0	0	0	0		
Tennessee West South Central	-603	-616 -35	139.9%	-603	-616 -35	0	0	0	0	0	
Arkansas	20		-48.1%	-os 20	-35	0	0	U	0		
Louisiana	0	0	- + U.1 /0	0	0	0	0	0	0		
Oklahoma	-103	-73	40.9%	-103	-73	0	0	0	0	0	
Texas	0	0		0	0	0	0	0	0		
Mountain	-291	-176	65.8%	-291	-176	0	0	0	0	-	
Arizona	-13	76		-13	76	0	0	0	0	_	0
Colorado	-278	-251	10.7%	-278	-251	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	C	0
Nevada	0	0		0	0	0	0	0	0	O	0
New Mexico	0	0		0	0	0	0	0	0	O	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	469		NM				0				
California	465		NM		23		0	0	0		0
Oregon	0	0		0	0			0	0		
Washington	4	-1	-357.7%		-1	0	0	0	0		
Pacific Noncontiguous	0	0		0	0		,		0		
Alaska	0	0		0	0	0	0	0	0		_
Hawaii	0	0		0	0	0	0	0	0		
U.S. Total	-5,361	-5,326	0.6%	-4,497	-4,450	-863	-876	0	0	0	C

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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, October 2017 and 2016 (Thousand Megawatthours)

by State, by Sector, Octo	ober 2017 ar	All Sectors	ousand Meg	jawattnours)	Electric Po	wer Sector		Commerc	ial Sector	Industria	al Sector
				Electric l		Indepe	endent roducers				
				Generation at	Utility Scale	Generation a	t Utility Scale		-		
Census Division	Generation October	at Utility Scal		Facili October	ties October	Pacı October	lities October	Facil October	october		lities October
and State	2017	2016			2016		2016		2016		2016
New England	135		-7.4%		0	119			8	8	7
Connecticut	45		-3.7%		0	45	46	0	0	0	0
Maine	25		2.5%		0	9	9	8	8	8	7
Massachusetts	61	71	-13.5%		0	61	71	0	0	0	0
New Hampshire	4	4	-0.6%		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
Middle Atlantic	195 49		2.2% -6.9%		0	150 32			30 12		6
New Jersey New York	78		-3.5%		0	59	35 62		19		0
Pennsylvania	67	57	18.8%		0	59			0		0
East North Central	70		-9.2%		-5	8	19		14	Ţ.	49
Illinois	23		-34.5%		-5	-2			0	24	
Indiana	22	22	-0.2%		0	0	0	1	1	21	21
Michigan	21	22	-5.2%		0	10	8	10	12		2
Ohio	0	-5	-109.2%		-6	0	-1	0	0	1	1
Wisconsin	4	3	6.8%		1	0	0	0	0	NM	2
West North Central	36		-16.8%		20	12	14	3	3		6
Iowa	0	1	-100.0%		0	0	0	0	0	0	1
Kansas	0	0	NM	0	0	0	0	0	0	0	0
Minnesota	32	37	-15.6%	13	15	12	14	3	3	4	5
Missouri	0	0	-100.0%	0	0	0	0	0	0	0	0
Nebraska	0	0		0	0	0	0	0	0	0	0
North Dakota	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	345	363	-5.0%	0	0	166	183	10	16	169	165
Delaware	0	0		0	0	0	0	0	0	0	0
District of Columbia	0	G		0	0	0	0	0	0		0
Florida	232	229	1.2%		0	107	100		0		129
Georgia	12		123.7%		0	0	0	0	0		5
Maryland	31	27	15.0%		0	31	27		0	0	0
North Carolina South Carolina	57	61 3	-6.5% -13.8%		0	28		0	0	28	27
Virginia	10		-13.6% -73.5%		0	0	22	O	16	Ŭ	3
West Virginia	10	-1	-136.8%		0	0	-1	10	0	0	0
East South Central	8	6	21.7%		4	0	0	0	0	1	2
Alabama	0	_	21.770	0	0	0	0	0	0		0
Kentucky	7	4	49.2%		4	0	0	0	0	0	0
Mississippi	0	1	-100.0%		0	0	0	0	0	0	1
Tennessee	1	1	6.1%		0	0	0	0	0	1	1
West South Central	88	129	-32.0%		0	11	9	0	0	77	120
Arkansas	0	1	-85.5%	0	0	0	0	0	0	0	1
Louisiana	32	61	-46.9%	0	0	0	0	0	0	32	61
Oklahoma	3	1	112.6%		0	2	0	0	0	1	1
Texas	52				0	8	8	0	0	44	
Mountain	55		-10.8%		6	32	26		0	20	29
Arizona	0	ŭ		0	0	0	0	0	0	0	0
Colorado	5		18.4%		0	1	1	0	0	4	3
Idaho	8	5	45.6%		0	0	0	0	0		5
Montana	30		20.7%		0	30	25		0	0	0
Nevada	3	2	85.9%		2	0	0	Ŭ	0	0	0
New Mexico	0	· ·	-371.8% -87.2%		0	0	0	0	0		0
Utah	3		-87.2%		5	0	0	0	0	6	15
Wyoming Pacific Contiguous	6 59		23.1% -21.2%		-	00	26	0	0	·	5
California	49				0	12			0		49
Oregon	49	3			0		3		0		49
Washington	6				0	6		_	0		0
Pacific Noncontiguous	31	30			11			J	19		_
Alaska	0		-32.3%		0	0	•	0	0		0
Hawaii	31	30			11	0		16	19	-	0
U.S. Total	1,021		-9.0%		36	•	ū				ū
	1,021	1,121	5.070	71	00	010	002	00	00	012	100

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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.

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

by State, by Sector, Year-to-Date through October 2017 and 2016 (Thousand Megawatthours)

by State, by Sector, Yea		All Sectors	0. 2 011 and	2010 (11104)		wer Sector		Commerci	al Sector	Industrial	Sector
		All Sectors			LIECTIC FO	Indepe	ndent	Commerci	ai Sector	iliuustilai	Sector
				Electric l	Jtilities	Power Pr	oducers				
		at Utility Scale		Generation at Facili	ties	Facil	ities	Generation at Facili	ities	Facilit	ies
Census Division and State	October 2017 YTD	October 2016 YTD	Percentage Change	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD
New England	1,512	1,549	-2.4%	0	0	1,329	1,379	73	72	110	98
Connecticut	448	484	-7.5%	0	0	448	484	0	0	0	0
Maine	329	311	5.8%	0	0	146	141	73	72	110	98
Massachusetts	695	713	-2.6%	0	0	695	713	0	0	0	0
New Hampshire	41	41	-1.1%	0	0	41	41	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	1,929	1,926	0.2%	0	0	1,497	1,542	378	328	55	56
New Jersey	476	501	-5.2%	0	0	301	327	119	118	55	56
New York	744	743	0.1%	0	0	563	574	180	169	0	0
Pennsylvania	710	682	4.1%	0	0	632	641	78	41	0	0
East North Central	725	939	-22.8%	11	-19		219		135	518	604
Illinois Indiana	211 254	357 324	-41.0% -21.6%	0	0	-15 0	113	0 16	0 17	226 239	244 307
Michigan	214	257	-21.6%	0	11	90	111	111	118	13	16
Ohio	-1	-40	-98.3%	-3	-45	-5	-5	0	0	7	10
Wisconsin	46	41	13.1%	14	15		-9	0	0	33	26
West North Central	374	395	-5.3%	176	196	124	116	28	28	45	56
lowa	2	12	-79.6%	0	0	0	0	0	0	2	12
Kansas	4	0	NM	0	0	0	0	0	0	4	0
Minnesota	330	338	-2.2%	139	150	124	116	28	28	39	44
Missouri	2	8	-71.6%	2	8	0	0	0	0	0	0
Nebraska	0	0		0	0	0	0	0	0	0	0
North Dakota	35	37	-5.8%	35	37	0	0	0	0	0	0
South Dakota	0	0		0	0	0	0	0	0	0	0
South Atlantic	3,554	3,971	-10.5%	0	0	1,760	2,007	107	171	1,687	1,794
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	2,555	2,626	-2.7%	0	0	1,228	1,214	0	0	1,327	1,412
Georgia	86	87	-1.8%	0	0	0	0	0	0	86	87
Maryland	266	269	-1.4%	0	0	266	269	0	0	0	0
North Carolina	478	586	-18.4%	0	0	234	325	0	0	244	261
South Carolina	36 134	37 376	-3.0% -64.4%	0	0	27	206	0 107	0 171	31	34
Virginia West Virginia	134	-11	-101.2%	0	0	0	-11	107	0	0	0
East South Central	53	63	-101.2%	32	42	0	-11	0	0	21	21
Alabama	0	00	13.470	0	0	0	0	0	0	0	0
Kentucky	32	42	-22.1%	32	42	0	0	0	0	0	0
Mississippi	2	4	-55.3%	0	0	0	0	0	0	2	4
Tennessee	19	17	10.6%	0	0	0	0	0	0	19	17
West South Central	1,010	1,300	-22.3%	0	0	93	100	0	0	917	1,200
Arkansas	4	4	-7.3%	0	0	0	0	0	0	4	4
Louisiana	516	611	-15.6%	0	0	0	0	0	0	516	611
Oklahoma	37	24	50.2%	0	0	36	18	0	0	1	6
Texas	453	660	-31.4%	0	0	57	82	0	0	396	579
Mountain	547	618	-11.5%	26	44	289	290	0	0	232	284
Arizona	0	0		0	0	0	0	0	0	0	0
Colorado	47	45	6.1%	0	0	13	10		0	35	35
Idaho	55	54	2.0%	0	0	0	0	0	0	55	54
Montana Novada	277	276	0.3%	0	0	277	276	0	0	0	0
Nevada New Mexico	26	18 0	48.9% -313.0%	26 0	18	0	0	0	0	0	0
Utah	109	170	-313.0%	0	27	0	4	0	0	108	140
Wyoming	33	54	-38.7%	0	0	0	0	0	0	33	54
Pacific Contiguous	788	616		-4	-4	ŭ,	232		0		387
California	709	532	33.4%	-3	-3		148		0	556	387
Oregon	32	34	-5.1%	0	0	33	34	0	0	0	007
Washington	47	50	-6.5%	0	0	47	51	0	0	0	0
Pacific Noncontiguous	303	267	13.3%	146	92	2	11	154	165	0	0
Alaska	-2	-2	18.8%	-2	-2	0	0	0	0	0	0
Hawaii	305	269	13.3%	149	94	2	11	154	165	0	0
U.S. Total	10,795	11,644	-7.3%	388	350	5,400	5,895	866	898	4,141	4,500

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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.

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

by State, by Sector, October 2017 and 2016 (Thousand Megawatthours)

		All Sectors		jawatthours)		wer Sector		Commerc	ial Sector	Industria	I Sector
				Electric	l Itilitias	•	endent roducers				
	Generation	at Utility Scal	e Facilities	Generation a		Generation a		Generation at		Generation at	-
Census Division	October	October	Percentage						October		October
and State New England	2017 327	2016 227	Change 43.9%	2017	2016 19		2016 206		2016	2017	2016
Connecticut	NM	1	NM			NM		0	0	0	C
Maine	218	144	51.6%	0	0	218	144	0	0	0	C
Massachusetts	23	20	14.8%	6	5	15	13	2	2	0	О
New Hampshire	43	35	23.0%	0	0	43	35	0	0	0	C
Rhode Island	15	3	391.8%			14		1	1	0	0
Vermont	28	25	11.5%	17	14		11	0	0	0	0
Middle Atlantic	759	666	13.9%	0	0	759		0	0	0	0
New Jersey	NM	2	NM		0	NM		0	0	0	0
New York	413	327	26.5%		0	413			0	0	0
Pennsylvania	344	338	1.8%		0	344			0	0	0
East North Central	2,470	2,034	21.5%		241	2,175		NM	1	7	5
Illinois Indiana	1,118 506	960 460	16.4% 9.9%	NM 0	1	1,116 506		NM 0	0	0	
Michigan Michigan	506	392	33.1%		161	329		0	0	0	
Ohio	142	98	44.9%	NM	101	135			0	NM	
Wisconsin	182	122	48.9%		78				0	1 1	1
West North Central	7,241	5,612	29.0%	2,422	1,919		3,691	NM	3	0	
Iowa	2,131	1,796	18.6%	· ·	· ·	1		0	0	0	
Kansas	1,811	1,396	29.7%	,	· ·			NM	0	0	
Minnesota	1,109	920	20.5%	264					3	0	
Missouri	187	100	87.1%				100		0	0	C
Nebraska	522	336	55.7%						0	0	C
North Dakota	1,163	731	59.2%		342	704	389	0	0	0	C
South Dakota	318	334	-4.8%	100	88	218	247	0	0	0	C
South Atlantic	239	181	32.3%	0	0	238	180	0	0	0	C
Delaware	0	0	-21.1%	0	0	0	0	0	0	0	C
District of Columbia	0	0		0	0	0	0	0	0	0	О
Florida	0	0		0	0	0	0	0	0	0	O
Georgia	0	0		0	0	0	0	_	0	0	0
Maryland	52	50	4.6%	0	0	52			0	0	0
North Carolina	38	0		0					0	0	0
South Carolina	0	0		0	0	Ŭ	0		0		0
Virginia	0	0		0	0	ŭ	0		0	0	0
West Virginia	148	130	13.7%	0	0	148			0	0	
East South Central	NM	3	NM		0	NM		_	0	0	
Alabama Kentucky	0	0		0	0	·	0		0	Ŭ	
Mississippi	0	0		0	0	·	0		0	0	
Tennessee	NM	3	NM		0	NM		0	0	0	
West South Central	8,628	7,513	14.8%	166	198		7,311	5	5	0	
Arkansas	0	0		0	0	0, .57	0	0	0	0	C
Louisiana	0	0		0	0	0	0	0	0	0	<u>C</u>
Oklahoma	2,495	2,062	21.0%	142	172	2,353	1,890	0	0	0	C
Texas	6,133	5,451	12.5%	24				5	5	0	C
Mountain	2,466	2,041	20.8%	257	233	2,209	1,807	NM	0	0	C
Arizona	47	51	-8.2%	0	0	47	51	0	0	0	C
Colorado	918	789	16.4%	29	9			0	0	0	0
Idaho	250	167	50.3%	0	0	200		0	0	0	0
Montana	218	150	45.3%	23	16				0	0	0
Nevada	30	42	-28.3%	0	0	30		0	0	0	0
New Mexico	486	324	49.8%	0	0	100			0	0	0
Utah	69	89	-22.5%	0	0	69			0	0	0
Wyoming Pacific Captions	447	429	4.2%	205	207	242		0	0	0	0
Pacific Contiguous	2,580								0		0
California	1,160	935	24.1% 50.3%						0		
Oregon Washington	638 782	425 606	29.0%						0		
Pacific Noncontiguous	75	92	-18.2%						0	0	
Alaska	17	19	-18.2% -15.2%				7	0	0	ū	
Hawaii	59	73	-19.0%				73	_	0		
U.S. Total	24,789	20,335							12		6

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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.

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

by State, by Sector, Yea	ear-to-Date through October 2017 and 2 All Sectors			1 2016 (1110us	Electric Po	wer Sector		Commerci	al Sector	Industrial Sector	
				Electric U	Itilities	Indepe Power Pr					
				Generation at	Utility Scale	Generation at	Utility Scale	Generation at		Generation at	
Census Division	Generation October	at Utility Scal		Facilit October	October	Facili October	ities October	Facili October	ties October	Facili October	ties October
and State	2017 YTD	2016 YTD	Change	2017 YTD	2016 YTD		2016 YTD	2017 YTD	2016 YTD		2016 YTD
New England	2,673	2,068	29.3%	183	202	2,465	1,843	23	22	1	1
Connecticut	NM	10	NM	0	0	NM	10	0	0	0	0
Maine	1,790	1,278	40.0%	0	0	1,790	1,278	0	0	0	0
Massachusetts	181	173	4.3%	46	48	116	108		16		1
New Hampshire	344	349	-1.5%	0	0	344	349	0	0	0	0
Rhode Island	121	13	866.0%	0	0	115	7	6	5	0	0
Vermont	227	244	-7.3%	137	154	90	91	0	0	0	0
Middle Atlantic New Jersey	6,069	5,695 16	6.6% 2.1%	0	0	6,068 16	5,694 16	0	0	0	1
New York	3,291	3,031	8.6%	0	0	3,290	3,029	0	0	1	1
Pennsylvania	2,762	2,649	4.3%	0	0	2,762	2,649	ŭ	0	0	0
East North Central	19,174	17,918	7.0%	2,301	2,237	16,818	15,629		6	47	45
Illinois	8,994	8,363	7.5%	10	10	8,981	8,350		4	0	0
Indiana	3,701	3,885	-4.7%	0	0	3,700	3,884	1	1	0	0
Michigan	4,029	3,557	13.3%	1,528	1,473	2,501	2,084	0	0	0	0
Ohio	1,233	945	30.4%	NM	8	1,181	896	3	2	41	39
Wisconsin	1,217	1,168	4.2%	755	746	456	416	0	0	6	6
West North Central	57,210	48,098	18.9%	18,877	16,700	38,306	31,373	27	25	0	0
Iowa	16,702	15,600	7.1%	10,847	9,892	5,852	5,705	3	3	0	0
Kansas	15,209	11,667	30.4%	1,444	710	13,763	10,957	NM	0	0	0
Minnesota	8,647	7,699	12.3%	2,070	2,095	6,555	5,581	22	22	0	0
Missouri	1,438	896	60.5%	0	0	1,438	896		0	0	0
Nebraska	4,096	2,925	40.0%	145	150	,	2,775		0		0
North Dakota	8,648	6,353	36.1%	3,596	3,068	5,053	3,285	0	0	0	0
South Dakota	2,470	2,958	-16.5%	776	785	1,694	2,173	0	0	0	0
South Atlantic	2,116	1,475	43.5%	0	0	2,112	1,471	4	4	0	0
Delaware District of Columbia	4	0	0.2%	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	414	397	4.4%	0	0	414	397	0	0	0	0
North Carolina	394	0		0	0	394	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	1,304	1,075	21.3%	0	0	1,304	1,075	0	0	0	0
East South Central	28	31	-9.7%	0	0	28	31	0	0	0	0
Alabama	0	0		0	0	0	0	0	0	0	0
Kentucky	0	0		0	0	0	0	0	0	0	0
Mississippi	0	0		0	0	0	0	0	0	0	0
Tennessee	28	31	-9.7%	0	0	28	31	0	0	0	0
West South Central	75,791	64,154	18.1%	1,449	1,385	74,308	62,729	34	40	0	0
Arkansas	0	0		0	0	0	0	0	0	0	0
Louisiana	0	0	04.704	1 226	0	40,000	45.040	0	0	0	0
Oklahoma Texas	20,101 55,690	16,512 47,642	21.7% 16.9%	1,236 213	1,163 222	18,866 55,442	15,349 47,380	34	0 40	0	0
Mountain	20,277	19,122	6.0%	2,048	1,933	18,218	17,183	NM	3	3	0
Arizona	508	19,122	13.4%	2,040	1,933 N	508	448		0	0	0
Colorado	7,819	7,619	2.6%	259	85	7,552	7,530	NM	1	3	3
Idaho	2,005	2,045	-1.9%	0	0	2,005	2,045	0	0	0	<u> </u>
Montana	1,714	1,692	1.3%	180	183	1,534	1,509	0	0	0	0
Nevada	309	285	8.3%	0	0	309	285	0	0	0	0
New Mexico	3,620	2,924	23.8%	0	0	3,617	2,922	NM	2	0	0
Utah	775	662	17.0%	0	0	775	662	0	0	0	0
Wyoming	3,527	3,446	2.4%	1,609	1,664	1,918	1,781	0	0	0	0
Pacific Contiguous	23,762	25,207	-5.7%	4,943	5,414	18,810	19,783	5	6	5	5
California	11,997	12,216	-1.8%	678	640	11,310	11,565		6	5	5
Oregon	5,603	6,229	-10.1%	965	1,150	· ·	5,079		0	0	C
Washington	6,163	6,763	-8.9%	3,300	3,624	2,863	3,139		0	0	C
Pacific Noncontiguous	670	673	-0.5%	85	91	584	583		0		0
Alaska	132	141	-6.3%	85	91	47	50		0	0	C
Hawaii	538	532	1.0%	0	0		532		0	0	С
U.S. Total	207,769	184,441	12.6%	29,886	27,961	177,718	156,319	109	106	56	55

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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.

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

by State, by Sector, October 2017 and 2016 (Thousand Megawatthours)

		All Sectors			Electric Po			Commerc	ial Sector	Industria	Sector
				Electric U	Itilities	-	endent roducers				
	Generation	at Utility Scale	e Facilities	Generation at	Utility Scale	Generation a			t Utility Scale	Generation at	-
Census Division	October	October	Percentage		October	October		October		October	Octobe
and State	2017	2016	Change		2016	2017	2016	2017	2016	2017	2016
New England	588	528	11.3%	56	51	438		15	13	79	72
Connecticut	70	62	12.1%	0	0	70		0	0	0	(
Maine	225	177	26.8%	0	0	137	97	9	9	79	72
Massachusetts	90	98	-8.2%	0	0	88		2	2	0	(
New Hampshire	151	141	7.5%	30	31	117		5	3	0	(
Rhode Island	13	14	-11.0%	0	0	13		0	0	0	(
Vermont	40	37	10.4%	26	20	14			ŭ	0	(
Middle Atlantic	478	442	8.0%	0	0	359		48		70	62
New Jersey	81	83	-2.4%	0	0	67	70		14	_	(
New York	191	193	-1.5%	0	0	153		21	20	17	16
Pennsylvania	206	166	24.3%	0	0	140				53	46
East North Central	497	411	20.8%	74	38	276		17	17	130	130
Illinois	40	28	43.7%	1	7	38	26	0	0	0	
Indiana Michigan	35 220	31 197	11.8% 12.0%	23	21	155	124	10	13	b 	60
Michigan Ohio	57	55	4.6%	NM	0	37			13	55 19	2
Wisconsin	145	101	4.6%	49	15	42			3	49	4!
West North Central	206	212	-3.1%	49	47	98				52	70
lowa	17	22	-22.8%	NM	9	10		10	3	32	70
Kansas	5	5	-9.8%	0	0	5	5	0	0	5	
Minnesota	164	164	-0.1%	34	34	80	65	2	2	48	63
Missouri	12	12	0.0%	NM	4	4	5	5	3	0	(
Nebraska	7	9	-13.2%	6	7	0	0	1	2	0	
North Dakota	NM	0	NM		0	0	0	0	0	NM	
South Dakota	0	0		0	0	0	0	0		0	(
South Atlantic	1,640	1,372	19.5%	161	90	568	432	18	23	893	827
Delaware	5	5	5.7%	0	0	4	4	0	0	NM	1
District of Columbia	5	4	20.6%	0	0	5	4	0	0	0	(
Florida	414	355	16.8%	7	7	239	199	4	3	165	145
Georgia	409	362	13.0%	0	0	70	55	0	0	340	307
Maryland	46	47	-1.1%	0	0	39	35	1	1	6	1
North Carolina	234	152	53.7%	0	0	112	40	NM	1	122	112
South Carolina	197	174	13.1%	37	23	31	21	0	0	130	130
Virginia	329	273	20.3%	117	60	70	75	12	18	130	12 ⁻
West Virginia	0	0		0	0	0	0	0	0	0	(
East South Central	490	497	-1.4%	7	8	30	34	0	0		455
Alabama	253	261	-3.1%	0	0	22	24	0	0	231	236
Kentucky	36	33	7.8%	7	8	0	1	0	0	28	24
Mississippi	132	133	-0.2%	0	0	NM	1	0	0	132	13′
Tennessee	69	71	-1.8%	0	0	7	7	0	0	63	63
West South Central	512	526	-2.7%	0	0	75	68		3		455
Arkansas	126	109	15.4%	0	0	9	7	0	0	116	101
Louisiana	223	254	-12.1%	0	0	7	8	0	0	216	246
Oklahoma	31	34	-7.9% 4.7%	0	0	NM 57	1 1	0	0	30	32
Texas Mountain	132	130 88	1.7%	0 NM	0	57 54	51 54	3	3	72 16	76 3′
Mountain	72 19	17	-18.0% 14.0%	NIVI 0	0	54 19		0	0	16	3
Arizona Colorado	19	17	-17.3%	0	0	19		Ŭ	0	0	(
Idaho	27	43	-17.3%	NM	1	11	12	1	4	14	29
Montana	2/	2	-36.1% 4.0%	0	0	0	0	0	0	14	
Nevada	5	4	10.0%	0	0	5	4	0	•	2	
New Mexico	1	1	6.0%	0	0	1	4	0	0	0	
Utah	6	7	-12.8%	0	0	5	5	1	1	0	
Wyoming	0	0	12.070	0	0	0	0	0	0	0	
Pacific Contiguous	751	753	-0.3%	-	70)	409	ū	ū	213	198
California	494	492	0.4%		21	366					3
Oregon	89	83	8.1%		5	37			2	44	4(
Washington	167	178	-6.0%		45	11				112	120
Pacific Noncontiguous	24	38	-36.4%		2	0		21	24		12
asino i toriochtigadas	27	50				J	J	۷ ا	4	TAIVI	
Alaska	4	4	-2 7%	ام	0	0	Λ	4	4	NIM	
Alaska Hawaii	20	34	-2.7% -40.5%		0 2	0	0	4 17	4 20		

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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.

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

by State, by Sector, Year-to-Date through October 2017 and 2016 (Thousand Megawatthours)

	l to bate time	All Sectors	ei zuit allu	2016 (Thous		watthours) wer Sector		Commerci	ial Sactor	Industrial	Sector
		All Sectors			Electric Po	Indepe	ndent	Commerci	iai Sector	industriai	Sector
				Electric U	Jtilities	Power Pr					
	Generation	at Utility Scal	e Facilities	Generation at Facili	•	Generation at		Generation at		Generation at Facili	-
Census Division	October	October	•	October	October	October	October	October	October		October
and State New England	2017 YTD 6,187	2016 YTD 5,971	Change 3.6%	2017 YTD 468	2016 YTD 509	2017 YTD 4,647	2016 YTD 4,464	2017 YTD 141	2016 YTD 131	2017 YTD 930	2016 YTD 867
Connecticut	701	715	-1.9%	-100	0	701	715	0	0	0	007
Maine	2,447	2,308	6.0%	0	0	1,439	1,366	78	75	930	867
Massachusetts	998	1,002	-0.4%	0	0	973	978	24	24		(
New Hampshire	1,490	1,379	8.1%	238	254	1,215	1,096	37	29		(
Rhode Island	167	171	-2.6%	0	0	167	171	0	0		(
Vermont	384	395	-3.0%	230	255	152	139	2	2	0	(
Middle Atlantic	4,748	4,646	2.2%	0	0	3,593	3,597	456	405	699	644
New Jersey	773	816	-5.2%	0	0	633	677	140	139	0	C
New York	1,890	1,847	2.3%	0	0	1,536	1,502	191	179	163	165
Pennsylvania	2,085	1,984	5.1%	0	0	1,424	1,418	125	86	535	480
East North Central	4,835	4,629	4.4%	631	514	2,721	2,584	185	177	1,298	1,355
Illinois	412	388	6.3%	17	18	395	370	0	0		C
Indiana	352	361	-2.6%	234	239	42	42	16	17		63
Michigan	2,139	2,062	3.7%	0	0	1,487	1,361	115	123		578
Ohio	593	603	-1.7%	3	3	381	382	7	7		211
Wisconsin	1,338	1,214	10.2%	376	254	416	428	46	30		503
West North Central	2,087	2,010	3.8%	462	473		846	115	120		571
lowa	157	205	-23.3%	18	18		103	34	39	-	45
Kansas Minnosoto	47	49	-2.7%	0	0	47	49	0	0	· ·	0
Minnesota	1,680	1,542	8.9%	347	349		653	19	22		519
Missouri	119	120 89	-0.9%	32 64	33 73		41	46	43 16		3
Nebraska North Dakota	79	5	-10.8% -22.2%	04	0		0	15 0	0	0	5
South Dakota	0	0	-22.2/0	0	0	0	0	0	0	- 4	0
South Atlantic	16,350	15,585	4.9%	1,600	1,488	5,530	5,237	179	296	9,040	8,565
Delaware	55	56	-2.6%	0	1,400	42	43	0	290	13	13
District of Columbia	38	44	-13.4%	0	0	38	44	0	0		0
Florida	4,082	3,814	7.0%	66	72		2,042	39	39	<u> </u>	1,661
Georgia	4,028	3,756	7.2%	0	0		586	0	3		3,168
Maryland	452	451	0.0%	0	0	345	348	10	13		90
North Carolina	2,175	2,045	6.4%	0	0	1,056	957	9	53	1,111	1,035
South Carolina	2,250	1,992	13.0%	367	338	365	335	0	0	1,518	1,319
Virginia	3,271	3,426	-4.5%	1,167	1,077	716	883	122	188	1,266	1,278
West Virginia	0	0		0	0	0	0	0	0	0	0
East South Central	5,192	5,190	0.1%	74	75	309	310	0	0	4,809	4,805
Alabama	2,786	2,766	0.7%	0	0	227	220	0	0	2,559	2,546
Kentucky	368	385	-4.5%	74	75	6	11	0	0	288	298
Mississippi	1,251	1,276	-2.0%	0	0		9	0	0	-,	1,267
Tennessee	788	763	3.3%	0	0	68	69	0	0	720	693
West South Central	5,098	5,187	-1.7%	0	19		711	32	31	4,367	4,426
Arkansas	1,228	1,118	9.8%	0	0	<u></u>	88	5	4	1,131	1,026
Louisiana	2,332	2,400	-2.8%	0	0		67	0	0	_,,	2,333
Oklahoma	236	298	-20.7%	0	0		12	0	0		286
Texas	1,301	1,371	-5.1%	0	19		543	27	27	747	782
Mountain	874	894	-2.2%	9	9		545	18	23		317
Arizona Colorado	200	176	13.8%	0	0	200	176	0	0	Ť	0
Colorado	138	132	5.1%	0	0		132	0	0		200
Idaho Montana	392	439 17	-10.7% 5.0%	9	9	114	121	10	9		300 17
Montana Nevada	18 50	17 46	5.9% 9.0%	0	0	50	46	0	0	18	17
New Mexico	15	15	9.0%	0	0	15	15	0	0	1	(
Utah	61	70	-12.3%	0	0	l	56	ű	14	<u> </u>	(
Wyoming	0	0	-12.0/0	0	0		0	0	0		(
Pacific Contiguous	7,461	7,469	-0.1%	ŭ	634			ű	750		2,076
California	4,917	4,985	-1.4%	111	185		3,575		711	533	515
Oregon	860	832	3.4%	51	52		331	27	27		422
Washington	1,685	1,652	2.0%	450	397	98	103		13		1,139
Pacific Noncontiguous	241	337	-28.5%	46	32		43		207		56
Alaska	34	36	-4.3%	0	0	l	0	34	35		(
Hawaii	207	301	-31.3%	46	32	0	43	160	171	0	55
U.S. Total	53,073	51,918		3,904	3,752		22,346		2,139	24,098	23,682

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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.

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

by State, by Sector, October 2017 and 2016 (Thousand Megawatthours)

by State, by Sector, Oct	ctober 2017 and 2016 (Thousand Mega All Sectors		awatthours		ower Sector		Commerc	ial Sector	Industria	al Sector	
						Indepe		Commerc	iai occioi	maustrie	ar occioi
				Electric	Utilities	Power Pi	roducers				
		at Utility Scal		Faci	lities	Generation a	lities	Facil	ities	Faci	lities
Census Division and State	October 2017	October 2016	_						October 2016		October 2016
New England	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
Vermont	0	0		0		0		0	0		0
Middle Atlantic	0	0		0		J	·	0	0	·	0
New Jersey	0	0		0	_	0	0	0	0	Ŭ	0
New York	0	0		0		0		0	0		0
Pennsylvania East North Central	0	0		0		•		0	0		0
Illinois	0	0		0		0	0	0	0		0
Indiana	0	0		0		0	0	0	0	·	0
Michigan	0	0		0	_	0		0	0	Ŭ	0
Ohio	0	0		0		0	0	0	0		0
Wisconsin	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		U		0	0	0	0
North Dakota	0	_		0					0		0
South Dakota	0	0		0		Ů		0	0		0
South Atlantic	0	0		0		J		0	0	·	0
Delaware	0	0		0		•		0	0		0
District of Columbia Florida	0	0		0		ŭ		0	0		0
Georgia	0	0		0		_		0	0		0
Maryland	0	0		0				0	0		0
North Carolina	0	0		0				0	0		0
South Carolina	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
Tennessee	0	0		0		Ū		0	0		0
West South Central	0	0		0		Ü		0	0	·	0
Arkansas	0	0		0		, and the second		0	0		0
Louisiana Oklahoma	0	0		0		Ü		0	0	·	0
Texas	0	0		0		_		0	0		0
Mountain	323	330	-2.1%	22	_	•	307	0	0		0
Arizona	0	0		0				0	0	_	0
Colorado	0	0		0				0	0	.	0
Idaho	5	6	-11.2%	0				0	0		0
Montana	0	0		0				0	0	0	0
Nevada	278	280	-0.7%	0	0	278	280	0	0	0	0
New Mexico	1	1	-49.9%	0	_	•	1	0	0	0	0
Utah	39	43	-9.0%	22		17	21	0	0	0	0
Wyoming	0	0		0		-		0	0	0	0
Pacific Contiguous	918								0		0
California	901	979							0		0
Oregon	17	18							0		0
Washington	0	0		0					0		0
Pacific Noncontiguous	21	27	-23.3%					0	0		0
Alaska Hawaii	21	0 27	-23.3%	0		J			0		0
U.S. Total	1,261	1,353							0		0
U.U. TUlai	1,201	1,353	-0.8%	80	95	1,181	1,258	U	U	0	U

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

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

	All Sectors		2016 (1110us	Electric Po			Commercia	al Sector	Industrial	Sector	
П				Flootrio	L: :L:	Indeper					
		Ц		Electric U		Power Pro					
		at Utility Scale		Generation at I Facilit	ies	Generation at Facilit	ties	Facili	ties	Generation at Facilit	ies
Census Division and State	October 2017 YTD	October 2016 YTD			October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD		October 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 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	3,217	3,197	0.6%	220	212	2,997	2,986	Ŭ	0	0	0
Arizona	3,21 <i>1</i>	3,197	0.0%	0	0	2,997	2,900	0	0	0	0
Colorado	0	0		0	0	0	0	0	0	0	0
Idaho	56	59	-4.7%	0	0	56	59	ı	0	0	0
Montana	٥٥	09	-4.1 /0	0	0	0	09	0	0	0	0
Nevada	2,768	2,732	1.3%	0	0	2,768	2,732	0	0	0	0
New Mexico	11	12	-9.6%	0	0	11	12	0	0	0	<u> </u>
Utah	382	395	-3.1%	220	212	162	183	0	0	0	0
Wyoming	0	0	-5.170	0	0	0	0	, j	0	<u> </u>	0
Pacific Contiguous	9,823	9,605	2.3%	650	680	•	8,925	ا ا	0		0
California	9,664	9,462	2.1%	649	677	9,015	8,785		0	0	0
Oregon	159	143		2	3	158	140		0	0	0
Washington	0	0		0	0	0	0	0	0	0	0
g	<u> </u>		1.5%	0	0	<u> </u>	206		0		0
Pacific Noncontiquous	2091	ZUNI	1.3%								
Pacific Noncontiguous Alaska	209	206 0	1.5%		0	0	0		0	0	
Pacific Noncontiguous Alaska Hawaii			1.5%	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. 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.

Table 1.17.A. Net Generation from Solar Photovoltaic

by State, by Sector, October 2017 and 2016 (Thousand Megawatthours)

				All Sectors					Electric Po	wer Sector Independ	dont			Commercial	Sector					Industria	al Sector			Residential Se	ector
								Electric	Utilities	Power Pro															
		I Scale Facilitie	es	Facili	ities	Estimated S Genera	ation	Facil	ities	Generation at U	es	Estimated G From Utility a Scale Fa	and Small cilities	Generation at Ut	s	Estimated S Gener	ration	Estimated From Utility Scale F	y and Small acilities	Generation a	lities	Estimated Si Genera	ntion	Estimated Small Generation	n
Census Division and State	October 2017	October 2016	Percentage Change	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016		October 2016	October 2017			October 2016	October 2017	October 2016	October 2017	Octob 20
New England	285	195	46.2%	117		169	131		2010	109	61	NM	73	NM	1	95		7	2010	6 0	0	7	6	67	20
Connecticut	37	27	33.1%	6	2	31	25	0	0	5	2	12	10	0	0	12	10	2	,	1 0	0	2	1	18	
Maine	NM	2	NM	NM	0	3	2	0	0	NM	0	1	1	0	0	1	1	0	(0 0	0	0	0	2	
Massachusetts	212	147	44.1%	96	55	115	92	NM	1	94	53	NM	58	NM	1	75	57	5	ļ	5 0	0	5	5	35	
New Hampshire	7	4	56.9%	0	0	7	4	0	0	0	0	2	1	0	0	2	1	0	(0 0	0	0	0	4	
Rhode Island	NM	4	NM	NM	1	5	2	0	0	NM	1	2	1	0	0	2	1	0	(0 0	0	0	0	2	
Vermont	387	280	85.4% 38.4%	139	5	248	195	5	1	111	5	128	103	17	12	111	91	NM NM		0 0 3 NM	0	NM 14	12	123	
Middle Atlantic New Jersey	241	174	38.4%	112	67	129			6	86	50	83	70	16	11	67	59	NM		7 NM	-	8	6	54	
New York	109	78	40.3%	19	11	91			0	18	11	NM	23	NM	0	33	23	1	,	1 0	0	1	1	56	
Pennsylvania	37	28	32.7%	9	6	28		0	0	7	5	NM	9	NM	0	10	9	NM	į	5 NM	1	4	4	13	
East North Central	89	52	71.5%	60	33	28	19	21	6	39	26	NM	12	NM	0	17	12	2	NN	M 0	0	1	NM	9	
Illinois	9	7	29.3%	4	4	5	3	0	0	4	4	3	2	0	0	3	2	NM	ΝN	M 0	0	NM	NM	2	
Indiana	36	23	58.5%	33	21	3	1	11	4	22	17	1	1	0	0	1	1	0	NN		0	0	NM	1	
Michigan	15	5	213.8%	9	1	6	4	9	1	0	0	4	2	0	0	4	2	0	NN	M 0	0	0	NM	2	
Ohio	22	14	52.9%	12	6	10	8	NM	1	10	5	NM	7	NM	0	7	6	1		1 0	0	0	0	2	
Wisconsin West North Central	NM 109	3	NM 309.4%	NM 79	0	30	3	0 NM	0	NM 77	0	15	1	0	0	1	12	1	NN.	0	0	1	NM 0	2	
lowa	NM	5	309.4% NM	NM	0	7	5	NM	0	0	0	15	12	0	0	15	12	0	(0	0	0	0	2	
Kansas	NM	1	NM	NM	0	1	1	()	0	NM	0	0	0	0	0	0	0	0	(0 0	0	0	0	1	
Minnesota	75	4	NM	70	1	4	3	NM	0	70	1	2	1	0	0	2	1	0	(0 0	0	0	0	2	
Missouri	22	17	31.0%	6	3	16	13	0	0	5	3	8	7	0	0	8	7	0	(0 0	0	0	0	8	
Nebraska	NM	1	NM	NM	1	0	0	0	0	NM	1	0	NM	0	0	0	NM	0	ΝN	M 0	0	0	NM	0	
North Dakota	0	0	13.2%	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	NM	0	0	0	0	0	0	0	0	(0 0	0	0	0	0	
South Atlantic	1,002	512	95.7%	852	404	150	108	128	41	711	353		49	13	10	47	39	21	16	6 0	0	21	16	82	
Delaware District of Columbia	13	11	21.5% 53.3%	6	5	7	6	NM	1	5	4	NM	2	NM	0	2	2	0	(0 0	0	0	0	5	
Florida	92	28	231.0%	66	10	25	17	50	7	17	3	NM	7	NM	0	3 8	7	1		0 0	0	1	0	17	
Georgia	NM	130	NM	178	115	NM	NM	0	17	155	98	NM	NM		0	NM	NM	NM	NN	M 0	0	NM	NM	NM	<u> </u>
Maryland	84	64	32.2%	26	19	58	45	NM	1	25	17	NM	15	NM	1	16	14	2	;	3 0	0	2	3	40	
North Carolina	547	267	104.4%	530	254	16	14	36	15	483	229	22	18	12	9	10	9	1	(0 0	0	1	0	6	
South Carolina	25	5	441.5%	12	0	13	4	0	0	12	0	3	1	0	0	3	1	1	NN		0	1	NM	8	
Virginia	39	4	846.9%	34	1	6	3	17	0	16	0	2	1	0	0	2	1	0	NN	M 0	0	0	NM	3	
West Virginia	1	0	42.0%	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	(0 0	0	0	0	0	
East South Central	61	29	111.6% NM	50	19	11 NM	10	5	2	45 15	17	NM	7	NM	0	/	7	0	(0 0	0	0	0	NM	
Alabama Kentucky	NM 4	3	11.7%	10	2	INIVI	2	4	0	15	11	1	1	0	0	1	1	0	(0 0	0	0	0	INIVI 1	
Mississippi	15	1	NM	15	0	1	1	0	0	15	0	1	0	0	0	1	0	NM	(0 0	0	NM	0	0	
Tennessee	23	14	69.6%	16	7	7	7	0	0	16	7	NM	5	NM	0	5	5	NM		0 0	0	NM	0	2	
West South Central	284	133	113.5%	204	81	80	52	NM	1	203	80	20	12	0	0	20	12	0	(0 0	0	0	0	60	
Arkansas	4	3	3.5%	3	3	1	1	NM	0	2	3	0	0	0	0	0	0	0	(0 0	0	0	0	1	
Louisiana	17	16	6.7%	0	0	17	16	0	0	0	0	1	1	0	0	1	1	0	(0 0	0	0	0	16	
Oklahoma 	1	1	22.6%	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	(0 0	0	0	0	0	
Texas	262	113	132.6%	201	78	61	35	NM	0	200	78	19	12	0	0	19	11	0	(0 0	0	0	0	43	
Mountain Arizona	1,384 501	1,047 383	32.2% 30.8%	1,112 354	814 251	272 147				1,019 294	728 209		80	10 NM	9	75 38	71 37	15	17	-	0	15	17	182	1
Arizona Colorado	128	115	11.3%	84	76	44	38	NM	40 0	82	7/1	NM	19	NM	2	17	16	11	12	0 0	0	0	14 0	26	
Idaho	48	6	644.6%	46	5	2	1	()	0	46	5	0	0	0	0	0	0	0	(0 0	0	0	0	1	
Montana	5	1	401.9%	3	0	1	1	0	0	3	0	0	0	0	0	0	0	0	(0 0	0	0	0	1	
Nevada	388	286	35.6%	355	255	33	31	3	4	346	247	13	13	6	5	7	8	2	2	2 0	0	2	2	24	
New Mexico	117	113	3.0%	99	100	18	14	22	33	77	66	6	5	0	0	6	5	0	(0 0	0	0	0	12	
Utah	199	142	39.5%	172	127	27	16	0	0	172	127	6	4	0	0	6	4	1	,	1 0	0	1	1	21	
Wyoming	0	0	40.3%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(0 0	0	0	0	0	<u> </u>
Pacific Contiguous	2,799	2,150	30.2%	1,858	,	941			40	1,791	1,378		165	12	10	220		159			1	155	122	566	4
California	2,753	2,128	29.4%	1,834 23		919			40	1,768 23	1,375	224	159	12	10	212	149	157	122	4	1	154	121	553	4:
Oregon Washington	3/	15	148.2% 30.9%	23	4	14	11	INIVI	1	23	4	1	5	٥	0	1	5	NM	,	0 0	0	NM	1	7	
Pacific Noncontiguous	95	71	34.5%	18	8	78	63	3	4	14	4	29	23	0	0	29	23	U		0 0	0	0	0	49	
Alaska	0	0	53.6%	0	0	0	00	0	0	0	0	0	0	0	0	0	0	0	(0 0	0	0	0	0	
Hawaii	95	71	34.5%	18	8	78	63	3	4	14	4	29	23	0	0	29	23	0	,	0 0	0	0	0	49	
J.S. Total	6,496	4,495	44.5%	4,490	2,942	2,006	1,552	312	179	4,119	2,719		536	53	42	636		220	176	6 6	2	214	174	1,156	8

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 October 2017 and 2016 (Thousand Megawatthours)

				All Sectors					Electric Po	wer Sector Indepen	dent			Commercia	ai Sector					Industri	al Sector			Residential	Sector
								Electric	Utilities	Power Pro															
	Smal	neration From U	s	Facili	ities	Estimated S Genera	ation	Facil	ities	Generation at U	ies	Estimated G From Utility Scale Fa	and Small	Generation at Facility	ties	Gene	Small Scale ration	From Utility Scale F	Generation y and Small acilities	Fac	t Utility Scale	Estimated S Gener	ation	Estimated Sm Generat	tion
Census Division and State	October 2017 YTD	October 2016 YTD	Percentage Change	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD		October 2017 YTD			October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD
New England	3,044	2,169	40.4%	1,060	605	1,984	1,563	69	18	985	583	1,108	863	6	5	1,102		88	3 72	2 0	0	88	72	794	633
Connecticut	411	303	35.9%	51	21	361	282	3	2	48	19	136	114	0	0	136	114	19	14	4 0	0	19	14	206	154
Maine	45	26	73.1%	9	0	36	26	0	0	9	0	13	9	0	0	13	9	0) (0 0	0	0	0	23	17
Massachusetts	2,233	1,638	36.3% 73.3%	869	522	1,364	1,116	18	13	845	504	879	692	6	5	873		63	57	7 0	0	63	5/	428	372
New Hampshire Rhode Island	64	39	64.8%	17	13	47	45 26	0	0	17	13	23 23	14	0	0	23		<u>5</u>			0	5	0	24	1
Vermont	214	119	80.5%	115	50	99	68	48	3	66	48	36	21	0	0	36		2	2 (0 0	0	2	0	62	4
Middle Atlantic	4,171	3,167	31.7%	1,314	913	2,857	2,254	85	73	1,047	694		1,237	163	134	1,294		174	151	1 18	12	156	139	1,407	1,012
New Jersey	2,525	1,952	29.4%	1,044	730	1,481	1,221	85	73	800	526	935	844	150	127	786		99	79	9 9	5	90	74	606	430
New York	1,243	896	38.7%	188	117	1,054	779	0	0	182	115	390	283	6	3	385		12	2 12	2 0	0	12	12	657	486
Pennsylvania	403	319	26.1%	82	66	321	254	0	0	65	54	131	110	7	5	124		63	61		7	54	53	143	96
East North Central	897	526	70.5%	576	300	322	227	191	43	381	252		145	NM	2	199		19	12	2 1	2	18	10	105	73
Illinois	100	75	33.1%	49	42	51	33	109	2	47	40 165	33	21	0	0	33	21	0		0 0	0	0	0	18	
Indiana Michigan	345 146	207 57	66.7% 154.9%	317	792	28 76	15 50	70	2/	209	165	13 48	70	0	0	13	28	1	1	1 0	0	1	1	14	
Ohio	233	154	51.8%	115	56	118	97	10	7	101	45	91	77	NM	2	80	75	7	, ,	6 1	2	6	4	28	1/
Wisconsin	73	33	120.3%	24	2	49	31	0	0	24	2	17	12	0	0	17	12	10		4 0	0	10	4	21	1,
West North Central	1,040	283	267.9%	710	40	330	243	14	3	694	35	172	132	1	1	170		8	3 6	6 0	0	8	6	152	10
Iowa	85	53	62.1%	7	0	79	53	7	0	0	0	49	32	0	0	49	32	3	3	2 0	0	3	2	27	18
Kansas	18	9	95.7%	3	2	15	7	0	0	3	2	5	2	0	0	5	2	0) (0 0	0	0	0	10	Ę
Minnesota	684	40	NM	632	7	52	33	5	0	627	7	22	15	0	0	22	15	4	1	2 0	0	4	2	27	16
Missouri	229	174	31.1%	50	27	179	147	3	2	46	24	95	82	1	1	93	80	1	1	1 0	0	1	1	85	66
Nebraska Nesth Balanta	21	5	278.3%	16	3	5	2	0	0	16	3	2	1	0	0	2	1	0) (0 0	0	0	0	3	
North Dakota South Dakota	0	0	13.1% 227.9%	NM	0	0	0	0	0	NM	0	0	0	0	0	0	0	0		0 0	0	0	0	0	
South Atlantic	9,712	5,019	93.5%	8,131	3,929	1,581	1,090	1,249	352	6,754	3,457	634	520	128	121	506	399	210	178	8 0	0	210	178	865	511
Delaware	134	99	35.9%	53	40	81	59	7	6	44	33	26	22	NM	1	25		5	5 3	3 0	0	5	3	52	3,
District of Columbia	45	27	69.5%	0	0	45	27	0	0	0	0	25	12	0	0	25	12	0) (0 0	0	0	0	20	1/
Florida	888	303	193.3%	641	130	246	173	525	73	114	54	84	74	3	3	81	71	7	, .	5 0	0	7	5	158	97
Georgia	2,100	796	163.8%	1,906	627	194	169	242	75	1,660	549		26	NM	2	26	24	155	134	4 0	0	155	134	14	11
Maryland	902	635	42.1%	246	185	656	450	9	8	231	171	190	157	6	6	184		29	30	0 0	0	29	30	443	269
North Carolina	5,088	3,085	64.9%	4,911	2,941	177	144	335	188	4,463	2,645	227	205	114	109			6	5 4	4 0	0	6	4	58	44
South Carolina	195 353	32	505.4% 837.1%	77 296	4	119	29 35	132	0	77 165	4	30 21	12	0	0	30		8	3 7	0 0	0	8	1	81	19
Virginia West Virginia	7	5	38.6%	290	0	56	55	132	0	105	0	21	13	0	0	21	13	0			0	0	0	5	
East South Central	496	194	155.2%	381	89	115	106	39	10	337	76	86	78	5	3	80	75	1	1	1 0	0	1	1	34	30
Alabama	182	18	910.8%	175	11	7	7	23	0	151	11	5	5	0	0	5	5	0		0 0	0	0	0	2	
Kentucky	38	28	38.5%	16	10	23	18	16	10	0	0	14	12	0	0	14	12	0) (0 0	0	0	0	9	
Mississippi	69	5	NM	60	0	9	5	0	0	60	0	6	4	0	0	6	4	0) (0 0	0	0	0	3	7
Tennessee	208	143	44.8%	131	68	76	76	0	0	126	65	61	58	5	3	56		1	1	1 0	0	1	1	20	20
West South Central	2,662	1,132	135.2%	1,861	626	800	505	11	6	1,849	619	203	130	2	2	202	129	0		0 0	0	0	0	599	377
Arkansas	35	28	27.7%	26	21	9	6	NM	1	24	20	3	3	0	0	3	3	0) (0 0	0	0	0	173	
Louisiana Oklahoma	180	164	9.7% 18.3%	0	0	180	164	0	0	0	0	/	6	0	0	7	6	0) (0	0	0	0	1/3	159
Texas	2,436	932	161.5%	1,831	600	606	331	4	ە 0	1,825	599	191	121	2	2	190	120	<u> </u>) (0 0	0	0	0	416	21'
Mountain	13,561	9,373	44.7%	10,824	6,982	2,738	2,391	798	678	9,929	6,215	832	846	95	86			154	177	7 2	2	151	175	1,849	1,457
Arizona	5,094	4,081	24.8%	3,566	2,695	1,528	1,386	539		3,007	2,236		430	19	21	.		120			0	120	147	1,008	831
Colorado	1,284	832	54.3%	825	430	459	402	NM	0	807	417	199	181	16	13	183	168	2	2	2 0	0	2	2	274	232
Idaho	458	29	NM	444	20	14	9	0	0	444	20	4	3	0	0	4	3	0) (0 0	0	0	0	10	f
Montana	30	10	203.6%	16	0	13	10	0	0	16	0	4	3	0	0	4	3	0	(0 0	0	0	0	10	
Nevada	3,521	2,746	28.2%	3,221	2,421	300	325	36	44	3,123	2,322		137	59	53	28		23	3 22	2 2	2	21	20	251	221
New Mexico	1,162	720	61.3%	990	588	171	132	220	196	770 1 761	392		54	0	0	64	54	1	,	1 0	0	1	1	107	77
Utah Wyoming	2,009	953	110.8% 34.8%	1,761	828	248	125	0	0	1,761	828	54	3/	0	0	54	37) (0	0	/	б	18/	
Pacific Contiguous	28,104	21,552	30.4%	18,565	14,195	9,538	7,358	481	415	17,944	13,667	2,235	1,648	116	106	2,120	1,542	1,580	1,219	9 25	7	1,555	1,211	5,863	4,604
California	27,630	21,296	29.7%	18,365	14,162	9,265	7,336	475		17,750	13,640	,	,	116	106		· ·	1,566			7	1,541	1,199	5,695	4,471
Oregon	365	172	112.0%	200		166	140	6	5	194	27	73	65	0	0	73		14			0	14	1,133	79	6′
Washington	108	84	29.5%	0	1	108	83	0	1	0	0	18	12	0	0	18	12	0) (0 0	0	0	0	90	7'
Pacific Noncontiguous	994	728	36.5%	167	76	826	652	37	38	130	38	306	239	0	0	306		2	2	2 0	0	2	2	518	41′
Alaska	2	1	51.6%	0	0	2	1	0	0	0	0	1	0	0	0	1	0	0) (0 0	0	0	0	1	
Hawaii	992	727	36.5%	167	76	824	651	37	38	130	38	305	238	0	0	305		2	2	2 0	0	2	2	517	411
U.S. Total	64,681	44,143	46.5%	43,589	27,755	21,092	16,388	2,974		40,050 ng individual cells	25,636	7,234	5,838	518	460	6,716	5,378	2,237	1,818	8 47	24	2,190	1,794	12,186	9,217

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 1.18.A. Utility Scale Facility Net Generation from Solar Thermal by State, by Sector, October 2017 and 2016 (Thousand Megawatthours)

by State, by Sector, Octo	ober 2017 and 2016 (Thousand Meg All Sectors		awatthours)	Electric Po	wer Sector		Commerc	ial Sector	Industri	al Sector	
						Indepe	endent				
				Electric	Utilities	Power P	roducers				
		at Utility Scal		Facil	ities	Faci	lities		lities	Faci	lities
Census Division and State	October 2017	October 2016	_		October 2016	October 2017	October 2016	October 2017	October 2016		
New England	2017	2010	Change	0	2010	2017	2010	2017	2010	2017	2010
Connecticut	0	0		0	0	0	0	0	0	0	0
Maine	0	0		0	0	0	0	0	0	, and the second	
Massachusetts	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		C
Vermont	0	0		0	0	0	0	0	0	0	C
Middle Atlantic	0	0		0	0	0	0	0	0	0	C
New Jersey	0	0		0	0	0	0	0	0	0	C
New York	0	0		0	0	0	0	0	0	0	C
Pennsylvania	0	0		0	0	0	0	0	0	0	0
East North Central	0	0		0	0	0	0	0	0	0	C
Illinois	0	0		0	0	0	0	0	0	0	C
Indiana	0	0		0	0	0	0	0	0	0	0
Michigan	0	0		0	0	0	0	0	0	0	0
Ohio	0	0		0	0	0	0	0	0	0	0
Wisconsin	0	0		0	0	0	0	0	0	0	0
West North Central	0	0		0	0	0	0	0	0	0	0
Iowa	0	0		0	0	0	0	0	0	0	0
Kansas	0	0		0	0	0	0	0	0	0	0
Minnesota	0	0		0	0	0	0	0	0	0	0
Missouri	0	0		0	0	0	0	0	0	0	0
Nebraska	0	0		0	0	0	0	0	0	0	0
North Dakota	0	0		0	0	0	0	0	0	0	0
South Dakota	0	0		0	0	0	0	0	0	0	0
South Atlantic	1	3	-65.7%	1	3	0	0	0	0	0	0
Delaware	0	0		0	0	0	0	0	0	0	0
District of Columbia	0	0		0	0	0		0	·	•	, ,
Florida	1	3	-65.7%	1	3	0		0	0	0	_
Georgia	0	0		0	0	0		0	0	0	
Maryland	0			0	0	0		0	0	•	
North Carolina	0	0		0	0	0		0	0		·
South Carolina	0	0		0	0	0		0	·		, ,
Virginia	0	0		0	0	0	0	0	0	0	·
West Virginia East South Central	0	0		0	0	0	0	0	0	0	
Alabama	0	0		0	0	0		0	0	•	·
Kentucky	0	0		0	0	0	0	0	, and the second		
Mississippi	0	0		0	0	0		0	0	0	
Tennessee	0	0		0	0	0	0	0	0	0	·
West South Central	0	ū		0	0	0	0	0	0		
Arkansas	0	0		0	0	0		0	0	0	_
Louisiana	0	0		0	0	0	0	0	0	0	0
Oklahoma	0	0		0	0	0	0	0	0	0	0
Texas	0	0		0	0	0	0	0	0	0	0
Mountain	91	63	45.6%	0	0	91	63	0	0	0	0
Arizona	72	51	42.7%	0	0	72	51	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	19	12	57.5%	0	0	19	12	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	C
Wyoming	0	0		0	0	0	ŭ	J	0	0	
Pacific Contiguous	222				0						
California	222	183	21.1%	0	0	222	183			_	
Oregon	0			0	0	0			<u> </u>		
Washington	0			0	0	0		·	•		
Pacific Noncontiguous	0			0	0		•	Ů	0		
Alaska	0			0	0	0		0	0		
Hawaii	0		26.3%	0	3		•	J			
U.S. Total	314			1	^	040	0.40	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.

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

by State, by Sector, Year-to-Date through October 2017 and 2016 (Thousand Megawatthours)

	l Date time		er 2017 and	2016 (1110u	Isand Mega			Commorei	al Castar	la di satrial	Cootor
	+	All Sectors			Electric Po	wer Sector Indeper	ndent	Commerci	ai Sector	Industrial	Sector
				Electric	Utilities	Power Pro					
	Generation	at Utility Scale	e Facilities	Generation at	t Utility Scale	Generation at Facili	-	Generation at	-	Generation at Facilit	
Census Division and State	October 2017 YTD	October 2016 YTD			October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD		October 2016 YTD
New England	2017 110	2016 110	Change	2017 110	2010 11D	2017 110	2010 110	2017 110	2010 110		2010 110
Connecticut	0	0		0	0	0	0	0	0	٦	0
Maine	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
Michigan	0	0		0	0	0	0	0	0		0
Ohio	0	0		0	0	0	0	0	0		0
Wisconsin	0	0		0	0	0	0	0	0		0
West North Central	0	0		0	0	0	0	0	0	_	0
lowa	0	0		0	0	0	0	0	0	_	0
Kansas	0	0		0	0	0	0	0	0		0
Minnesota Missouri	0	0		0	0	0	0	0	0		0
Missouri Nebraska	0			0	0	0	0	0	0		0
North Dakota	0	0		0	0	0	0	0	0		0
South Dakota	0	0		0	0	0	0	0	0		0
South Atlantic	14	68	-79.1%	14	68	0	0	0	0	_	0
Delaware	0	0	-79.170	0	00	0	0	0	0	-	0
District of Columbia	0	0		0	0	0	0	0	0		0
Florida	14	68	-79.1%	14	68	0	0	0	0		0
Georgia	0	0		0	0	0	0	0	0		0
Maryland	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
West South Central	0	0		0	0	-	0	0	0	-	0
Arkansas	0	0		0	0	-	0	0	0	_	0
Louisiana	0	0		0	0		0	0	0		0
Oklahoma	0	0		0	0	0	0	0	0		0
Texas	0	0		0	0	0	0	0	0		0
Mountain	822	824	-0.3%	0	0		824	0	0		0
Arizona	669	587	14.1%	0	0		587	0	0		0
Colorado	0	0		0	0		0	0	0		0
Idaho	0	0		0	0		0	0	0	_	0
Montana Nevada	152	237	-35.8%	0	0	_	237	0	0		0
New Mexico	152	0	-33.6%	0	0		0	0	0		0
Utah	0	0		0	0		0	0	0		0
Wyoming		0		0	0		0		0		0
Pacific Contiguous	2,180	2,216	-1.7%	_			2,216		0		0
California	2,180	2,216	-1.7%		0	2,180	2,216		0		0
Oregon	2,100	0		0	0	2,100	2,210		0		0
Washington	0	0		0	0	0	0	0	0		0
Pacific Noncontiguous	0	0		0	0		0		0		0
Alaska	0	0		0	0		0	0	0		0
Hawaii	0	0		0	0		0	0	0		0
U.S. Total	3,016	3,109	-3.0%				3,041	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.

Table 2.1.A. Coal: Consumption for Electricity Generation,

		Electric Powe		Commoraioll	In du otrio
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industria Secto
Annual Totals	Total (all sectors)	Licoti lo Otinico	1 Ower 1 reducers	00001	00010
2007	1,046,795	764,765	276,581	361	5,089
2008	1,042,335	760,326	276,565	369	5,07
2009	934,683	695,615	234,077	317	4,67
2010	979,684	721,431	249,814	314	8,12
2011	934,938	689,316	239,541	347	5,73
2012	825,734	615,467	205,295	307	4,66
2013	860,729	638,327	217,219	513	4,67
2014	853,634	624,235	224,568	202	4,62
2015	739,594	539,506	195,927	163	3,99
2016	677,371	496,192	178,047	111	3,02
Year 2015	077,071	400,102	170,047		0,02
January	71,384	50,757	20,271	18	33
February	67,136	47,845	18,954	19	31
March	58,367	42,202	15,797	17	35
April	48,543	36,037	12,193	12	30
May	57,153	42,814	14,005	10	32
June	68,982	50,592	18,017	14	35
July	76,570	56,202	19,977	14	35
	73,810	54,023	19,408	12	36
August	· · · · · · · · · · · · · · · · · · ·		·	10	36
Sept	64,823	46,706	17,746		
October	53,659	39,023	14,309	11	31
November	48,943	35,427	13,209	12	29
December	50,224	37,878	12,041	14	29
Year 2016	04.000	45.005	40.040	40	٥٦
January	61,983	45,395	16,319	12	25
February	50,516	37,538	12,717	13	24
March	39,864	30,983	8,616	13	25
April	39,065	28,614	10,238	7	20
May	45,032	33,712	11,064	6	24
June	63,186	46,191	16,721	7	26
July	74,132	53,946	19,894	7	28
August	73,798	53,681	19,827	8	28
Sept	62,335	44,665	17,407	8	25
October	54,537	39,319	14,974	8	23
November	48,076	35,090	12,758	10	21
December	64,847	47,058	17,512	12	26
Year 2017					
January	63,391	46,761	16,354	12	26
February	47,879	35,522	12,112	10	23
March	48,699	35,716	12,738	9	23
April	44,210	31,495	12,507	5	20
May	50,710	37,277	13,209	6	21
June	58,886	43,798	14,855	7	22
July	69,807	52,067	17,495	8	23
August	65,877	49,106	16,528	8	23
Sept	54,700	39,430	15,035	8	22
October	50,172	36,285	13,644	7	23
Year to Date				•	
2015	640,427	466,201	170,677	137	3,41
2016	564,448	414,045	147,777	89	2,53
2017	554,330	407,457	144,476	79	2,31
Rolling 12 Months Ending i	l l	, 1	·		,-
2016	663,615	487,351	173,026	115	3,12
2017	667,253	489,604	174,747	101	2,80

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,

		Electric Power			
Period	Total (all aceters)	Electric I Hilities	Independent Power Producers	Commercial Sector	Industria
Annual Totals	Total (all sectors)	Electric Utilities	Power Producers	Sector	Secto
2007	22,810	0	3,795	1,566	17,44
2008	22,168	0	3,689	1,652	16,82
2009	20,507	0	3,935	1,481	15,09
2010	21,727	0	3,808	1,406	16,51
2010	21,532	0	3,628	1,321	16,58
2011	19,333	0	2,790	1,143	15,40
2012	18,350	0	2,416	843	15,40
2013	18,107	978	1,821	861	14,44
2014	16,632	1,032	1,980	635	12,98
2016	16,586	2,979	1,336	572	11,70
/ear 2015	10,300	2,919	1,330	372	11,70
January	1,649	99	197	79	1,27
February	1,505	96	166	78	1,16
March	1,494	94	178	67	
	1,494	76	144	43	1,15
April		76 75	165	43	1,00
May June	1,335 1,327	75 87	172	40	1,05 1,02
	· · · · · · · · · · · · · · · · · · ·				
July	1,451	86	187	50	1,12
August	1,345	71	176	45	1,05
Sept	1,301	75	155	40	1,03
October	1,245	81	145	41	9.
November	1,321	99	145	47	1,03
December	1,363	95	151	58	1,0
'ear 2016	4 004	0001	400	201	
January	1,624	288	133	63	1,14
February	1,503	277	130	62	1,03
March	1,433	232	117	61	1,02
April	1,215	204	103	39	8
May	1,264	215	90	31	9:
June	1,353	241	97	39	9.
July	1,472	278	118	39	1,03
August	1,434	270	112	42	1,0
Sept	1,257	216	97	41	90
October	1,260	224	105	42	88
November	1,256	233	99	50	8.
December	1,515	301	136	63	1,0
/ear 2017					
January	1,503	290	137	54	1,02
February	1,227	208	124	44	8
March	1,357	225	146	49	9:
April	1,216	212	103	35	8
May	1,221	206	101	34	8
June	1,208	219	82	39	8
July	1,223	264	104	45	8
August	1,244	264	110	40	8
Sept	1,152	216	94	39	8
October	1,274	225	101	36	9
ear to Date					
2015	13,948	838	1,684	529	10,8
2016	13,816	2,445	1,102	459	9,8
2017	12,625	2,328	1,101	416	8,7
Rolling 12 Months Ending in	n October				
2016	16,499	2,639	1,398	564	11,8
2017	15,395	2,862	1,336	530	10,6

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-October 2017 (Thousand Tons)

		Electric Powe			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industria Secto
Annual Totals	Total (all sectors)	Licetric Othitics	1 Ower 1 Todacers	Occion	00010
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	20,069
2013	879,078	638,327	219,635	1,356	19,76
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	000,000	100,112	110,000	000	11,72
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	1,500
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	1,38
July	78,021	56,288	20,164	64	1,50
August	75,156	54,094	19,584	58	1,420
Sept	66,124	46,780	17,901	51	1,39
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	01,007	07,070	12,102		1,000
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	1,32
August	75,232	53,951	19,938	49	1,292
Sept	63,592	44,881	17,504	50	1,15
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	00,002	47,000	17,040	70	1,200
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	1,09
July	71,029	52,330	17,598	53	1,04
August	67,121	49,370	16,638	49	1,069
Sept	55,852	39,646	15,129	47	1,030
October	51,446	36,510	13,744	43	1,14
Year to Date	٥١,٠٠٥	30,510	10,177	70	1,17
2015	654,375	467,039	172,361	667	14,309
2016	578,264	416,491	148,878	548	12,34
2017	566,955	409,786	145,578	496	11,096
Rolling 12 Months Ending i	·	709,700	143,370	490	11,090
Rolling 12 Months Ending II 2016	680,115	489,989	174,424	679	15,023
2016	682,648	492,467	174,424	631	13,469
2017	002,048	492,407	170,082	631	13,46

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.

Table 2.2.A. Petroleum Liquids: Consumption for Electricity Generation,

		Electric Powe			
Period	Total (all costors)	Electric I Hilities	Independent Power Producers	Commercial	Industri
	Total (all sectors)	Electric Utilities	Power Producers	Sector	Sect
Annual Totals 2007	82,433	56,910	22,793	250	2,48
2007	53,846	38,995	13,152	160	1,5
2009	43,562	31,847	9,880	184	
2010	40,103	30,806	8,278	164	1,69
2010		20,844	·	133	7
2011	27,326	·	5,633 4,110		7
2012	22,604 23,231	17,521 16,827	· ·	272 328	5
2013			5,494	451	7
2014	31,531	19,652	10,689		6
	28,925	18,562	9,473	249	
2016	22,405	16,137	5,624	108	5
/ear 2015	0.000	0.004	4.405	001	
January	3,293	2,061	1,135	33	
February	8,589	3,547	4,845	93	1
March	1,785	1,243	472	18	
April	1,522	1,232	222	14	
May	1,697	1,251	376	15	
June	1,745	1,380	296	14	
July	1,995	1,480	453	16	
August	1,801	1,398	344	17	
Sept	1,656	1,230	378	7	
October	1,541	1,215	273	7	
November	1,720	1,348	324	7	
December	1,581	1,177	354	8	
Year 2016					
January	2,472	1,727	685	12	
February	2,230	1,474	698	12	
March	1,495	1,096	355	4	
April	1,421	1,055	320	8	
May	1,662	1,212	386	8	
June	1,693	1,275	364	7	
July	2,287	1,711	514	11	
August	2,231	1,644	537	10	
Sept	1,620	1,128	441	7	
October	1,629	1,156	423	7	
November	1,672	1,249	372	11	
December	1,995	1,410	530	12	
Year 2017					
January	1,978	1,459	453	20	
February	1,570	1,157	362	13	
March	1,673	1,342	278	16	
April	1,519	1,188	285	11	
May	1,751	1,304	394	16	
June	1,739	1,290	397	14	
July	1,853	1,296	505	17	
August	1,724	1,276	392	20	
Sept	1,724	1,254	417	15	
October	1,731	1,331	346	15	
ear to Date	I.		1	l	
2015	25,625	16,037	8,795	234	į
2016	18,739	13,478	4,723	85	
2017	17,262	12,895	3,829	156	
Rolling 12 Months Ending in			-,	7-1	
2016	22,039	16,002	5,401	101	Ļ
2017	20,928	15,555	4,730	179	

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.

 $\label{total constraints} \mbox{Totals may not equal sum of components because of independent rounding}.$

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.

Table 2.2.B. Petroleum Liquids: Consumption for Useful Thermal Output,

by Sector, 2007-Octob	,	Electric Power			
	-		Independent	Commercial	Industria
Period	Total (all sectors)	Electric Utilities	Power Producers	Sector	Secto
Annual Totals	40.400	ما	4 202	444	44.74
2007	13,462	0	1,303	441	11,71
2008	7,533	0	1,311	461	5,76
2009	8,128	0	1,301	293	6,53
2010	4,866	0	1,086	212	3,56
2011	3,826	0	1,004	168	2,65
2012	3,097	0	992	122	1,98
2013	3,456	0	1,050	498	1,90
2014	3,099	64	1,170	216	1,65
2015 2016	3,142	62	1,155	282	1,64
<u> </u>	2,277	68	245	245	1,71
Year 2015	204	7	00	40	47
January	324	7	99	43	179
February	595	46	175	116	25
March	261	1	89	25	14
April	239	0	80	17	14:
May	232	0	82	18	13:
June	218	1	79	14	123
July	231	1	102	15	11:
August	203	1	88	16	98
Sept	199	1	90	2	100
October	225	1	98	3	124
November	203	1	85	7	110
December	210	1	90	5	114
Year 2016		Т			
January	231	12	24	43	153
February	316	17	39	27	233
March	178	3	28	7	140
April	174	3	16	17	13
May	198	3	18	14	16:
June	181	6	13	14	14
July	185	2	12	28	14
August	153	3	15	18	11
Sept	143	3	14	9	11
October	174	3	18	9	14
November	167	4	14	35	11:
December	178	9	33	26	110
Year 2017		· · · · · · · · · · · · · · · · · · ·		T T T T T T T T T T T T T T T T T T T	
January	207	12	39	39	11
February	136	8	19	29	8
March	138	4	10	30	9
April	137	3	11	16	10
May	160	3	14	20	12
June	148	5	15	15	11
July	125	3	14	17	9
August	138	3	12	19	10
Sept	120	4	14	15	8
October	145	4	18	17	10
Year to Date					
2015	2,729	60	980	270	1,41
2016	1,933	55	197	184	1,49
2017	1,453	50	165	216	1,02
Rolling 12 Months Ending in					
2016	2,345	57	372	196	1,72
2017	1,798	63	213	277	1,24

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.

 $\label{total constraints} \mbox{Totals may not equal sum of components because of independent rounding}.$

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.

Table 2.2.C. Petroleum Liquids: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2007-October 2017 (Thousand Barrels)

		Electric Powe	Independent	Commercial	Industria
Period	Total (all sectors)	Electric Utilities	Power Producers	Sector	Secto
Annual Totals	rotar (an ocotoro)	Licoti lo otilitico	1 Ower 1 roddoers	Ocolor	Ocoto
2007	95,895	56,910	24,097	691	14,19
2008	61,379	38,995	14,463	621	7,30
2009	51,690	31,847	11,181	477	8,18
2010	44,968	30,806	9,364	376	4,42
2011	31,152	20,844	6,637	301	3,37
2012	25,702	17,521	5,102	394	2,68
2013	26,687	16,827	6,544	826	2,49
2014	34,630	19,716	11,859	667	2,38
2015	32,067	18,624	10,629	531	2,28
2016	24,682	16,205	5,869	352	2,25
Year 2015					
January	3,617	2,069	1,234	76	23
February	9,184	3,593	5,020	209	36
March	2,046	1,244	560	43	19
April	1,761	1,233	301	31	19
May	1,930	1,251	458	34	18
June	1,963	1,381	375	28	17
July	2,226	1,481	555	32	15
August	2,004	1,399	432	33	14
Sept	1,856	1,230	468	10	14
October	1,766	1,216	371	9	17
November	1,923	1,349	409	14	15
December	1,791	1,178	444	13	15
Year 2016	a ====	4 =001	- l	1	
January	2,702	1,739	709	55	20
February	2,546	1,491	737	38	27
March	1,673	1,099	383	12	18
April	1,594	1,058	337	24	17
May	1,860	1,216	403	22 21	21 19
June July	1,875 2,472	1,281 1,713	377 527	38	19
-	2,472	1,647	552	28	15
August Sept	1,763	1,131	455	16	16
October	1,803	1,159	441	16	18
November	1,838	1,254	386	46	15
December	2,173	1,419	563	37	15
Year 2017	2,170	1,410	303		10
January	2,185	1,471	492	59	16
February	1,705	1,164	381	41	11
March	1,811	1,346	288	46	13
April	1,657	1,190	296	26	14
May	1,911	1,307	408	35	16
June	1,886	1,295	412	29	15
July	1,978	1,299	519	34	12
August	1,862	1,279	404	39	14
Sept	1,844	1,258	431	30	12
October	1,876	1,335	364	31	14
Year to Date	,	,			
2015	28,354	16,097	9,775	504	1,97
2016	20,671	13,532	4,920	270	1,94
2017	18,715	12,945	3,995	373	1,40
Rolling 12 Months Ending in		· L	· 1	_	· ·
2016	24,385	16,060	5,774	297	2,25
2017	22,726	15,618	4,944	456	1,70

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.

 $\label{total constraints} \mbox{Totals may not equal sum of components because of independent rounding}.$

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.

Table 2.3.A. Petroleum Coke: Consumption for Electricity Generation,

		Electric Powe			
B	-	P1 (1 11/11/21	Independent	Commercial	Industria
Period	Total (all sectors)	Electric Utilities	Power Producers	Sector	Secto
Annual Totals 2007	6.026	2 000	2.745	2	E1
2007	6,036 5,417	2,808 2,296	2,715 2,704	2	51 41
2009	4,821	2,761	1,724		33
2010	4,994	3,325	1,354	2	31
2010	5,012	3,449	1,277		28
2012	3,675	2,105	756	<u>' </u>	81
2012	4,852	3,409	779	1	66
2013	4,412	3,440	599	2	37
2014	4,044	3,120	669	2	25
2016	4,253	3,427	591	2	23
Year 2015	4,200	5,421	331		20
January	402	312	56	0	3
February	413	332	56	0	2
March	275	195	60	0	2
April	300	213	59	0	2
May	339	260	59	0	2
June	306	233	55	0	1
July	409	333	59	0	
August	388	311	58	0	<u>'</u> 1
Sept	376	294	61	0	2
October	300	227	57	0	1
November	260	178	62	0	2
December	276	232	26	0	1
Year 2016	210	202	20	<u> </u>	· ·
January	342	302	16	0	2
February	330	271	39	0	1
March	362	283	63	0	<u>'</u> 1
April	382	325	43	0	
May	370	296	52	0	2
June	380	308	52	0	2
July	400	324	56	0	2
August	419	337	61	0	2
Sept	376	311	49	0	1
October	250	171	61	0	 1
November	307	239	46	0	2
December	336	260	55	0	2
Year 2017	300	200		<u> </u>	
January	355	301	40	0	1
February	263	217	33	0	 1
March	272	214	39	0	 1
April	153	110	29	0	 1
May	320	264	38	0	 1
June	341	282	40	0	1
July	333	271	39	0	
August	283	226	39	0	1
Sept	261	209	36	0	
October	222	171	36	0	
Year to Date		•••	50	<u> </u>	'
2015	3,508	2,710	581	2	21
2016	3,611	2,927	491	1	19
2017	2,804	2,266	369	2	16
Rolling 12 Months Ending in		2,200	000		10
2016	4,147	3,337	579	2	23
2017	3,446	2,765	470	3	20

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.

 $\label{total constraints} \mbox{Totals may not equal sum of components because of independent rounding}.$

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.

Table 2.3.B. Petroleum Coke: Consumption for Useful Thermal Output,

		Electric Powe			
Dowland	Total (all apatava)		Independent Power Broducers	Commercial	Industrial
Period	Total (all sectors)	Electric Utilities	Power Producers	Sector	Secto
Annual Totals 2007	1,262	0	162	11	1,090
2007	897	0	119	9	769
2009	1,007	0	126	8	873
2010	1,059	0	98	11	950
2010	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	1,000	<u> </u>	110	<u>~</u>	
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		<u> </u>		'I	
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	7′
Sept	74	1	9	2	62
October	83	1	9	1	72
Year to Date	1			I	
2015	952	6	90	13	844
2016	904	5	93	7	799
2017	781	8	97	12	664
Rolling 12 Months Ending in		٦	Ž. I	1	30
2016	1,096	8	113	10	965
2017	976	9	117	14	836

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

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.

 $\label{total constraints} \mbox{Totals may not equal sum of components because of independent rounding}.$

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.

Table 2.3.C. Petroleum Coke: Consumption for Electricity Generation and Useful Thermal Output,

		Electric Power			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industria Sector
Annual Totals	Total (all sectors)	Electric Othlities	Power Producers	Sector	Secto
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	2,04
2014	5,695	3,443	689	18	1,54
2015	5,188	3,128	779	18	1,26
2016	5,352	3,433	705	10	1,20
/ear 2015	0,002	3, 183	. •••	. •	.,0
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	109
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	11
December	362	232	36	2	9:
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	11:
June	480	308	60	0	11.
July	502	325	65	1	11
August	520	337	71	0	11:
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	7!
February	326	218	42	1	6
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	9
August	368	228	48	2	9
Sept	335	211	45	2	7
October	305	172	45	2	8
Year to Date			-1	I	
2015	4,461	2,716	670	15	1,05
2016	4,515	2,932	584	8	99
2017	3,585	2,274	465	14	83
Rolling 12 Months Ending in		_,			30
2016	5,243	3,345	692	12	1,19
2017	4,422	2,774	587	16	1,04

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.

 $\label{total constraints} \mbox{Totals may not equal sum of components because of independent rounding}.$

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.

Table 2.4.A. Natural Gas: Consumption for Electricity Generation,

by Sector, 2007-October 2017 (Million Cubic Feet)

		Electric Power Sector Independent		Commercial	Industria
Period	Total (all sectors)	Electric Utilities	Power Producers	Sector	Secto
Annual Totals	Total (all bootors)	Liouti io Guintioo	1 0 1 0 1 1 0 0 0 0 1 0	000.01	
2007	7,089,342	2,736,418	3,765,194	34,087	553,64
2008	6,895,843	2,730,134	3,612,197	33,403	520,10
2009	7,121,069	2,911,279	3,655,712	34,279	519,79
2010	7,680,185	3,290,993	3,794,423	39,462	555,30
2011	7,883,865	3,446,087	3,819,107	47,170	571,50
2012	9,484,710	4,101,927	4,686,260	63,116	633,40
2013	8,596,299	3,970,447	3,917,131	66,570	642,15
2014	8,544,387	3,895,008	3,954,032	71,957	623,39
2015	10,016,576	4,745,255	4,576,683	70,092	624,54
2016	10,170,110	5,018,894	4,571,375	46,304	533,53
Year 2015	-, -, -	-,,	,- ,	-7	
January	745,235	347,151	338,575	5,254	54,25
February	676,139	331,550	293,466	4,643	46,48
March	736,500	348,019	335,606	5,168	47,70
April	692,199	329,693	312,160	4,864	45,48
May	765,715	361,501	350,073	5,514	48,62
June	922,461	447,079	416,030	6,221	53,13
July	1,084,120	510,084	509,399	7,336	57,30
August	1,064,683	496,826	503,679	7,235	56,94
Sept	930,090	432,653	437,222	6,696	53,51
October	824,878	380,830	386,725	5,943	51,38
November	767,336	366,510	342,625	5,470	52,73
December	807,219	393,358	351,123	5,748	56,99
Year 2016	007,210	000,000	001,120	0,7 40	00,00
January	786,040	390,246	347,970	3,499	44,32
February	702,082	352,877	304,311	3,344	41,55
March	758,344	377,953	333,147	3,493	43,75
April	734,600	362,063	327,542	3,278	41,71
May	819,345	407,178	365,297	3,620	43,25
June	985,722	497,616	439,024	4,109	44,97
July	1,157,589	569,028	535,036	5,188	48,33
August	1,168,337	564,916	549,161	5,384	48,87
Sept	932,041	451,574	431,159	4,223	45,08
October	760,610	368,087	345,831	3,675	43,01
November	679,004	333,973	298,069	2,944	44,01
December	686,396	343,384	294,829	3,547	44,63
Year 2017	000,000	040,004	204,020	0,041	77,00
January	664,173	330,006	283,390	3,856	46,92
February	571,073	281,778	244,837	3,448	41,01
March	738,794	366,258	325,245	3,831	43,45
April	642,696	327,657	269,357	3,161	42,52
May	725,983	376,050	303,709	3,446	42,77
June	873,003	438,895	386,270	3,774	44,06
July	1,101,510	557,516	493,179	4,173	46,64
•	1,082,389	541,590	492,095	4,169	44,5
August		·	· ·	· ·	
Sept October	883,227 797,995	443,720	394,688 353,498	3,898 3,719	40,92 41,36
	797,990	399,415	ააა,490	3,7 19	41,30
ear to Date	0.440.000	2 005 207	2 002 026	58,874	E14.00
2015	8,442,020	3,985,387	3,882,936	· ·	514,82
2016 2017	8,804,710	4,341,538	3,978,477	39,813	444,88
	8,080,844	4,062,885	3,546,269	37,474	434,2
Rolling 12 Months Ending in		E 404 40E	4.070.005	E4 000	FF 4 04
2016	10,379,265	5,101,405	4,672,225	51,032	554,60
2017	9,446,244	4,740,242	4,139,167	43,965	522,87

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 2.4.B. Natural Gas: Consumption for Useful Thermal Output,

by Sector, 2007-October 2017 (Million Cubic Feet)

		Electric Power Sector Independent		Commercial	Industrial
Period	Total (all sectors)	Electric Utilities	Power Producers	Sector	Secto
Annual Totals	rotar (an obotoro)			000101	
2007	872,579	0	339,796	35,987	496,79
2008	793,537	0	326,048	32,813	434,67
2009	816,787	0	305,542	41,275	469,97
2010	821,775	0	301,769	46,324	473,68
2011	839,681	0	308,669	39,856	491,15
2012	886,103	0	322,607	47,883	515,61
2013	882,385	0	303,177	51,057	528,15
2014	865,146	4,926	292,016	46,635	521,56
2015	935,098	8,060	283,372	46,287	597,37
2016	1,151,866	38,096	356,905	80,943	675,92
Year 2015	1,101,000	00,000	000,000	00,010	0.0,02
January	79,075	582	25,015	4,250	49,22
February	73,005	615	22,712	3,906	45,77
March	80,319	512	24,594	4,013	51,20
April	73,041	598	21,826	3,220	47,39
May	72,919	629	22,283	3,475	46,53
June	74,850	589	22,777	3,582	47,90
July	82,339	727	25,332	4,138	52,14
August	83,543	935	25,150	3,973	53,48
Sept	78,210	731	24,437	4,076	48,96
October	78,745	688	23,297	3,788	50,97
November	77,684	713	22,566	3,845	50,56
December	·		· ·	· ·	
<u>_</u>	81,369	743	23,382	4,021	53,22
/ear 2016	400.044	2.424	22 204	7.400	FO 14
January	102,014	3,434	32,304	7,160	59,11
February	92,405	3,264	29,348	6,354	53,43
March	95,161	3,002	30,664	6,298	55,19
April	88,634	2,286	27,002	6,104	53,24
May	92,471	2,888	29,069	6,096	54,41
June	96,618	3,649	30,019	6,907	56,04
July	102,867	3,805	32,099	8,142	58,82
August	105,025	3,723	33,436	8,377	59,48
Sept	95,330	2,973	29,581	6,850	55,92
October	92,360	2,740	27,138	6,125	56,35
November	90,321	2,812	27,191	5,773	54,54
December	98,660	3,520	29,054	6,758	59,32
Year 2017	1			l	
January	101,598	3,789	30,607	7,624	59,57
February	91,951	3,216	26,550	6,512	55,67
March	98,597	3,353	29,331	6,529	59,38
April	90,082	3,046	26,033	5,443	55,56
May	90,628	2,954	26,119	5,558	55,99
June	93,512	3,423	27,809	6,090	56,19
July	99,963	4,078	29,271	6,544	60,0
August	97,633	3,905	29,164	6,394	58,1
Sept	93,655	3,643	26,806	5,997	57,2
October	95,155	3,585	27,351	6,130	58,0
ear to Date			_		
2015	776,046	6,604	237,424	38,421	493,5
2016	962,885	31,764	300,659	68,412	562,0
2017	952,774	34,992	279,040	62,819	575,92
Rolling 12 Months Ending in	October				
2016	1,121,937	33,220	346,607	76,277	665,83
2017	1,141,755	41,324	335,286	75,350	689,79

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.

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.

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

		Electric Power Sector Independent		Commercial	Industria
Period	Total (all sectors)	Electric Utilities	Power Producers	Sector	Secto
Annual Totals	Total (all Sectors)	Liectric Othities	1 Ower 1 Toducers	Jector	Jecto
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	1,170,30
2014	9,409,532	3,899,934	4,246,048	118,591	1,144,95
2015	10,951,674	4,753,315	4,860,055	116,380	1,221,92
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	92,88
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	102,35
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	101,010
July	1,260,455	572,833	567,135	13,330	107,158
August	1,273,362	568,640	582,596	13,761	108,36
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	98,77
June	966,516	442,318	414,079	9,864	100,25
July	1,201,473	561,593	522,450	10,716	106,71
August	1,180,022	545,494	521,259	10,562	102,70
Sept	976,882	447,362	421,494	9,895	98,13
October	893,150	403,000	380,849	9,849	99,452
Year to Date					
2015	9,218,066	3,991,992	4,120,359	97,296	1,008,420
2016	9,767,594	4,373,301	4,279,136	108,225	1,006,932
2017	9,033,618	4,097,877	3,825,309	100,294	1,010,138
Rolling 12 Months Ending in					
2016	11,501,202	5,134,625	5,018,832	127,309	1,220,436
2017	10,587,999	4,781,566	4,474,452	119,315	1,212,666

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.

Table 2.5.A. Landfill Gas: Consumption for Electricity Generation,

by Sector, 2007-October 2017 (Million Cubic Feet)

		Electric Powe		O a managaria l	
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industria Secto
Annual Totals	Total (all Sectors)	Liectric Othities	Fower Floudcers	360101	36010
2007	166,774	17,442	144,104	4,598	63
2008	195,777	20,465	169,547	5,235	53
2009	206,792	19,583	180,689	5,931	58
2010	218,331	19,975	192,428	5,535	39
2011	232,795	22,086	180,856	29,469	38
2012	256,376	25,193	201,965	26,672	2,54
2013	271,967	27,259	211,942	28,143	4,62
2014	285,982	25,819	228,447	27,038	4,67
2015	282,530	25,257	227,381	25,250	4,64
2016	273,557	24,280	224,993	20,445	3,83
/ear 2015	210,001	24,200	224,000	20,440	0,00
January	22,341	2,166	17,669	2,131	37
February	19,907	1,894	15,857	1,843	31
March	22,993	2,187	18,282	2,152	37
April	23,039	2,153	18,422	2,132	38
May	23,827	2,103	19,235	2,078	37
June	23,305	2,070	18,720	2,146	37
July	25,727	2,000	20,794	· ·	41
		· ·	· · · · · · · · · · · · · · · · · · ·	2,293	
August	24,507	2,120	19,753	2,227	40
Sept	23,326	2,004	18,828	2,108	38
October	23,435	2,081	18,967	1,989	39
November	24,602	2,123	20,052	2,020	40
December	25,520	2,165	20,803	2,115	43
/ear 2016	20.040	0.000	40.000	4.005	0.5
January	22,612	2,036	18,360	1,865	35
February	21,859	2,088	17,744	1,705	32
March	23,337	2,187	19,021	1,786	34
April	22,556	2,080	18,805	1,340	33
May	23,744	2,120	19,554	1,717	35
June	22,668	1,896	18,683	1,768	32
July	23,052	1,950	19,047	1,734	32
August	23,038	2,011	18,978	1,726	32
Sept	21,757	2,010	17,792	1,678	27
October	20,377	1,922	16,583	1,610	26
November	24,047	1,941	20,036	1,762	30
December	24,510	2,041	20,392	1,753	32
/ear 2017					
January	23,584	2,207	19,369	1,643	36
February	21,206	2,062	17,335	1,459	35
March	23,155	2,249	18,845	1,669	39
April	21,385	2,091	17,433	1,515	34
May	21,918	2,234	17,938	1,460	28
June	21,971	1,949	18,174	1,533	3.
July	22,779	1,989	18,962	1,569	2
August	22,967	2,092	18,999	1,583	29
Sept	21,801	2,001	17,978	1,544	27
October	21,577	2,029	17,840	1,398	30
ear to Date					
2015	232,407	20,969	186,526	21,115	3,79
2016	225,000	20,298	184,565	16,929	3,20
2017	222,343	20,903	182,872	15,373	3,19
Rolling 12 Months Ending in	October		•	<u> </u>	
2016	275,123	24,586	225,420	21,064	4,05
2017	270,900	24,885	223,299	18,889	3,82

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.

Table 2.5.B. Landfill Gas: Consumption for Useful Thermal Output,

by Sector, 2007-October 2017 (Million Cubic Feet)

		Electric Power	Electric Power Sector		In du otrio
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industria Secto
Annual Totals	Total (all Sectors)	Liectric Othities	rower rioducers	Sector	Jecit
2007	1,988	0	386	1,102	50
2008	1,025	0	454	433	13
2009	793	0	545	176	7
2010	1,623	0	1,195	370	5
2011	3,195	0	2,753	351	9
2012	3,189	0	2,788	340	6
2013	831	0	261	423	14
2014	1,710	176	525	674	33
2015	1,522	2	644	515	36
2016	4,163	3	2,339	1,034	78
Year 2015	.,		_,	.,	
January	105	0	34	42	2
February	102	0	40	37	2
March	131	0	54	47	3
April	128	0	50	47	3
May	125	0	49	45	3
June	119	0	42	46	3
July	151	0	72	47	3
August	123	0	60	31	3
Sept	132	0	54	47	3
October	111	0	45	36	3
November	143	0	68	45	3
December	152	0	76	45	3
Year 2016	L				
January	352	0	202	84	6
February	340	0	189	86	6
March	358	0	196	86	7
April	355	0	201	88	6
May	356	0	194	90	7
June	344	0	193	85	6
July	335	0	181	87	6
August	332	0	181	82	6
Sept	327	0	187	81	5
October	301	0	157	87	5
November	378	0	227	86	6
December	387	0	230	91	6
Year 2017					
January	445	0	278	94	7
February	432	0	269	92	7
March	476	1	306	92	7
April	408	0	221	107	8
May	291	0	133	85	7
June	370	1	185	89	g
July	358	1	204	85	6
August	401	1	208	98	g
Sept	354	1	175	98	8
October	389	1	243	93	5
Year to Date					
2015	1,227	2	500	426	30
2016	3,398	2	1,882	857	65
2017	3,925	6	2,222	933	76
Rolling 12 Months Ending in	October				
2016	3,693	3	2,026	946	71
2017	4,690	6	2,679	1,110	89

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,

		Electric Powe			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industria Secto
Innual Totals	, ,				
2007	168,762	17,442	144,490	5,699	1,13
2008	196,802	20,465	170,001	5,668	66
2009	207,585	19,583	181,234	6,106	66
2010	219,954	19,975	193,623	5,905	45
2011	235,990	22,086	183,609	29,820	47
2012	259,564	25,193	204,753	27,012	2,60
2013	272,798	27,259	212,203	28,566	4,77
2014	287,692	25,995	228,971	27,713	5,01
2015	284,052	25,259	228,024	25,765	5,00
2016	277,720	24,283	227,332	21,479	4,62
	211,120	24,203	221,332	21,473	4,02
Year 2015 January	22,445	2,166	17,702	2,173	40
February	20,009	1,894	15,897	1,881	33
March	· ·	,	,	·	40
	23,125	2,187	18,336	2,199 2,125	41
April	23,167	2,153	18,473	·	
May	23,952	2,070	19,283	2,193	40
June	23,424	2,066	18,763	2,192	40
July	25,877	2,228	20,865	2,340	44
August	24,630	2,120	19,813	2,258	43
Sept	23,458	2,004	18,881	2,155	41
October	23,546	2,081	19,012	2,025	42
November	24,746	2,124	20,120	2,064	43
December	25,672	2,165	20,878	2,160	46
Year 2016	00.004	0.000	40.500	4.040	44:
January	22,964	2,036	18,562	1,949	41
February	22,200	2,088	17,933	1,791	38
March	23,694	2,187	19,217	1,873	41
April	22,911	2,081	19,005	1,428	39
May	24,100	2,120	19,748	1,807	42
June	23,012	1,896	18,876	1,853	38
July	23,387	1,950	19,229	1,822	38
August	23,370	2,011	19,159	1,808	39
Sept	22,084	2,010	17,978	1,759	33
October	20,678	1,922	16,740	1,697	31
November	24,425	1,941	20,263	1,848	37
December	24,897	2,042	20,622	1,845	38
Year 2017					
January	24,029	2,207	19,647	1,738	438
February	21,637	2,062	17,604	1,551	42
March	23,631	2,250	19,152	1,761	46
April	21,793	2,091	17,654	1,621	42
May	22,210	2,235	18,071	1,546	35
June	22,342	1,950	18,359	1,622	41
July	23,137	1,990	19,166	1,653	32
August	23,369	2,093	19,207	1,681	38
Sept	22,155	2,001	18,153	1,643	35
October	21,966	2,030	18,083	1,491	36
Year to Date	· [· L		
2015	233,634	20,970	187,026	21,541	4,09
2016	228,398	20,300	186,447	17,786	3,86
2017	226,269	20,908	185,094	16,306	3,96
Rolling 12 Months Ending in		-,	.,	, · · · · I	-,,,,
2016	278,816	24,589	227,446	22,010	4,77
	· ·	·	<u> </u>		

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.

225,979

4,722

19,999

24,891

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.

2017

275,590

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.

Table 2.6.A. Biogenic Municipal Solid Waste: Consumption for Electricity Generation,

		Electric Powe	r Sector Independent	Commercial	Industria
Period	Total (all sectors)	Electric Utilities	Power Producers	Sector	Sector
nnual Totals	Total (all Sectors)	Liectric Othities	1 Ower 1 Toducers	Jector	36010
2007	19,576	553	17,116	1,785	122
2008	19,805	509	17,487	1,809	122
2009	19,669	465	17,048	2,155	
2010	19,437	402	16,802	2,233	
2011	16,972	388	14,625	1,955	
2012	16,968	418	14,235	2,304	
2013	17,007	456	14,057	2,485	
2014	16,706	444	13,809	2,447	
2015	16,631	452	13,797	2,375	
2016	16,994	464	13,953	2,566	1
ear 2015	10,001	101	10,000	2,000	<u> </u>
January	1,335	31	1,114	190	
February	1,212	24	1,020	168	
March	1,310	28	1,088	194	
April	1,315	41	1,077	196	<u>'</u>
May	1,380	45	1,136	199	
June	1,417	44	1,168	205	
July	1,540	46	1,274	219	
August	1,491	43	1,239	208	
Sept	1,388	43	1,139	206	
October	1,383	38	1,157	187	
November	1,389	34	1,153	202	_
December	1,471	36	1,733	202	
	1,471	30	1,232	202	
ear 2016	1,398	24	1 161	202	
January	1,283	34	1,161	202	
February	·	27	1,081	174	
March	1,344	41	1,091	211 219	
April	1,413	40	1,153		
May	1,463	44	1,205	214	
June	1,468	40	1,202	225	
July	1,486	37	1,212	236	
August	1,509	42	1,233	233	
Sept	1,397	43	1,142	210	
October	1,378	37	1,127	213	
November	1,379	39	1,127	212	
December	1,476	38	1,220	218	
ear 2017	4 440	0.5	4.470	400	
January	1,412	35	1,179	198	
February	1,223	19	1,020	185	
March	1,308	36	1,075	197	
April	1,270	35	1,033	201	
May	1,386	36	1,130	219	
June	1,399	38	1,160	199	
July	1,416	41	1,156	218	
August	1,428	47	1,166	215	
Sept	1,299	41	1,057	200	
October	1,296	33	1,051	210	
ear to Date					
2015	13,771	382	11,412	1,971	
2016	14,139	386	11,606	2,137	1
2017	13,437	361	11,027	2,042	
olling 12 Months Ending in					
2016	16,999	456	13,990	2,541	12
2017	16,292	438	13,374	2,471	8

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 2.6.B. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output,

		Electric Power Sector		Commercial	Industria
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industria Secto
Annual Totals	Total (all Sectors)	Electric Offlittes	Fower Floudcers	Sector	Secil
2007	2,219	0	768	1,136	31
2008	2,328	0	806	1,514	31
2009	2,426	0	823	1,466	13
2010	2,287	0	819	1,316	15
2011	2,044	0	742	1,148	15
2012	1,986	0	522	1,273	19
2013	1,865	0	517	1,160	18
2013	1,955	0	650	1,104	20
2015	1,986	0	655	1,127	20
2016	2,232	0	885	1,134	
	2,232	υĮ	000	1,134	21
Year 2015	100	٥١	67	0.5	
January	180	0	67	95	·
February	147	0	48	83	
March	172	0	59	96	
April	162	0	53	92	
May	164	0	49	99	
June	154	0	47	90	
July	170	0	55	99	1
August	164	0	55	91	
Sept	162	0	49	95	1
October	169	0	57	94	
November	166	0	56	96	1
December	174	0	61	96	1
Year 2016					
January	191	0	80	92	1
February	189	0	87	88	1
March	219	0	96	104	1
April	181	0	65	98	
May	182	0	70	96	
June	172	0	73	81	,
July	186	0	74	96	
August	191	0	71	96	2
Sept	176	0	64	95	•
October	179	0	65	95	•
November	180	0	68	94	•
December	185	0	71	98	•
Year 2017					
January	191	0	72	99	2
February	160	0	64	84	•
March	176	0	75	82	•
April	161	0	69	74	
May	171	0	69	84	,
June	172	0	68	88	•
July	173	0	72	84	,
August	183	0	77	84	
Sept	143	0	63	63	
October	143	0	59	66	
Year to Date	<u> </u>		,		
2015	1,646	0	539	935	1
2016	1,867	0	746	941	18
2017	1,672	0	687	809	17
Rolling 12 Months Ending in	· · · · · · · · · · · · · · · · · · ·	- 1			
2016	2,207	0	863	1,133	21
	-,	-		,	

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 2.6.C. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and

Useful Thermal Output, by Sector, 2007-October 2017 (Thousand Tons)

		Electric Power Sector		0	Industria
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industria Secto
Innual Totals	Total (all sectors)	Electric Offlities	Power Producers	Sector	36010
2007	21,796	553	17,885	2,921	43
2008	22,134	509	18,294	3,323	
2009	22,095	465	17,872	3,622	13
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	19
2014	18,661	444	14,459	3,551	20
2015	18,617	452	14,452	3,502	21:
2016	19,226	464	14,838	3,700	224
/ear 2015	. 5,==5		,		
January	1,515	31	1,181	284	19
February	1,359	24	1,068	250	10
March	1,482	28	1,147	290	18
April	1,477	41	1,130	289	1
May	1,544	45	1,185	298	1
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	1
December	1,645	36	1,293	298	18
/ear 2016	1,040		1,200	200	
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	1
June	1,640	40	1,275	305	1
July	1,673	37	1,286	332	1
August	1,700	42	1,304	330	2
Sept	1,573	43	1,206	305	19
October	1,557	37	1,192	308	2
November	1,559	39	1,195	306	18
December	1,661	38	1,291	316	10
Year 2017	1,001	30	1,231	310	
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	1,138	287	1
July	1,589	41	1,228	302	18
	1,612	47	1,243	299	23
August Sept	1,441	41	1,120	262	18
October	1,439	33	1,110	276	1:
L	1,438	၁၁	1,110	210	1
Year to Date 2015	15 116	382	11,951	2 006	178
2015	15,416 16,006	382	·	2,906	
2016			12,352	3,079	190 183
	15,109	361	11,714	2,851	18.
Rolling 12 Months Ending in		450	44.050	2 674	000
2016	19,206	456	14,853	3,674	222

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.

 $\label{totals} \begin{picture}(20,20) \put(0,0){\line(1,0){100}} \put(0,0$

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.

Table 2.7.A. Wood / Wood Waste Biomass: Consumption for Electricity Generation,

by Sector, 2007-October 2017 (Billion Btus)

		Electric Power Sector Independent		Commercial	Industrial
Period	Total (all sectors)	Electric Utilities	Power Producers	Sector	Sector
Annual Totals	Total (all scotors)	Licetife offices	1 Ower 1 roducers	Oction	0000
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
L.	339,903	41,030	149,510	473	100,933
Year 2015	36,170	4,203	15,139	53	16,775
January	33,328	3,574	14,696	51	15,007
February		· ·	· · · · · · · · · · · · · · · · · · ·		
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	1				
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	13,73
Year to Date	,	,	,		
2015	338,909	36,685	142,992	449	158,784
2016	298,840	34,388	124,105	411	139,936
2017	315,566	36,444	137,824	376	140,922
Rolling 12 Months Ending in		30,	,	3. 4	
2016	366,581	41,622	152,500	466	171,992
2010	330,001	11,022	163,235	438	169,944

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 2.7.B. Wood / Wood Waste Biomass: Consumption for Useful Thermal Output,

by Sector, 2007-October 2017 (Billion Btus)

		Electric Powe	Independent	Commercial	Industria
Period	Total (all sectors)	Electric Utilities	Power Producers	Sector	Secto
Annual Totals	rotar (an obstoro)	Liouti io Guintioo	1 0 11 1 10 11 10 11 10 11	000.01	
2007	982,486	0	21,435	1,756	959,29
2008	923,889	0	18,075	1,123	904,69
2009	816,285	0	19,587	1,135	795,56
2010	876,041	0	18,357	1,064	856,62
2011	893,314	0	16,577	1,022	875,71
2012	883,158	0	19,251	949	862,95
2013	919,631	0	20,342	950	898,33
2014	946,344	8,835	22,262	3,766	911,48
2015	943,962	9,351	19,200	3,714	911,69
2016	969,841	10,950	22,905	4,520	931,46
	909,041	10,930	22,900	4,320	931,40
Year 2015	84,431	912	1,877	388	81,25
January	75,501	897	1,754	371	
February	·		· ·		72,47
March	77,437	822 538	1,688	320	74,60 74,90
April	77,369		1,622	300	· · · · · · · · · · · · · · · · · · ·
May	79,154	742	936	146	77,32
June	77,486	796	1,477	273	74,94
July	80,499	768	1,635	384	77,71
August	81,262	782	1,727	295	78,45
Sept	77,136	694	1,765	327	74,35
October	75,247	739	1,386	273	72,84
November	77,481	741	1,513	295	74,93
December	80,959	919	1,819	342	77,88
Year 2016					
January	84,483	1,087	2,270	460	80,66
February	79,157	1,150	2,299	415	75,29
March	79,225	1,084	1,926	288	75,92
April	74,954	732	1,780	353	72,08
May	78,419	949	1,753	280	75,43
June	79,180	707	1,832	415	76,22
July	80,796	943	1,826	384	77,64
August	81,164	931	1,794	442	77,99
Sept	75,314	513	1,918	395	72,48
October	76,347	508	1,450	347	74,04
November	80,391	1,132	1,898	340	77,02
December	100,410	1,214	2,159	401	96,63
Year 2017					
January	85,579	1,076	2,005	525	81,97
February	79,087	985	1,792	430	75,88
March	81,473	1,068	2,428	299	77,67
April	77,440	879	2,063	295	74,20
May	78,631	888	2,209	301	75,23
June	80,934	1,051	2,297	322	77,20
July	83,942	1,105	2,079	355	80,40
August	85,888	1,140	2,000	365	82,3
Sept	77,354	979	1,940	233	74,20
October	79,934	933	2,085	402	76,5
ear to Date	,		,		
2015	785,522	7,691	15,868	3,078	758,8
2016	789,040	8,604	18,848	3,779	757,8
2017	810,261	10,103	20,898	3,526	775,7
Rolling 12 Months Ending in	· ·	. 5, 100	20,000	0,020	
2016	947,479	10,264	22,180	4,415	910,62
2017	991,063	12,449	24,955	4,267	949,3

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.

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,

October 2017 and October 2016 (Thousand Tons)

Census Division					Electric Po	wer Sector Independe	nt Power		I		
and State		All Sectors		Electric		Produ	cers	Commercia		Industrial	
	October 2017	October	Percentage	October 2017	October	October 2017	October	October 2017	October 2016	October 2017	October 2016
New England	2017	2016 34	Change -94.0%	2017	2016	2017	2016 33	2017	2016	NM	2016
Connecticut	0	0		0	0	0	0	0	0	0	0
Maine	2	1	6.9%	0	0	1	1	0	0	NM	0
Massachusetts	0	32	-100.0%	0	0	0	32	0	0	0	0
New Hampshire	1	0	379.0%	1	0	0	0	0	0	0	0
Rhode Island	0	0		0	0	0	0	0	0	0	0
Vermont	0	0		0	0	0	0	0	0	0	0
Middle Atlantic	1,450	1,709	-15.0%	0	0	1,439	1,692	0	0	12	16
New Jersey	38	40	-4.7%	0	0	38	40	0	0	0	0
New York	6	33	-81.0%	0	0	0	25	0	0	6	8
Pennsylvania	1,406	1,635	-14.0%	0	0	1,401	1,627	0	0	5	8
East North Central	10,941	10,781	1.5%	6,915	6,502	3,965	4,227	2	1	59	51
Illinois	2,714	2,782	-2.4%	112	68	2,557	2,678	NM	1	45	35
Indiana Michigan	2,929 1,667	2,721 1,661	7.6% 0.3%	2,798 1,647	2,674 1,636	130 18	46 22	0	0	0	0
Michigan Ohio	1,667	2,092	-12.0%	587	612	1,260	1,480	0	0	0	3
Wisconsin	1,847	1,525	-12.0% 17.0%	1,770	1,512	1,200	1,400	0	0	13	13
West North Central	8,476	8,754	-3.2%	8,374	8,657	0	0	2	3	100	94
Iowa	770	1,217	-37.0%	726	1,173	0	0	1	1	43	42
Kansas	800	1,077	-26.0%	800	1,077	0	0	0	0	0	n
Minnesota	1,064	1,075	-1.0%	1,042	1,055	0	0	0	ol	22	20
Missouri	3,006	2,375	27.0%	3,006	2,373	0	0	0	2	0	0
Nebraska	947	1,179	-20.0%	915	1,151	0	0	0	0	32	28
North Dakota	1,842	1,815	1.5%	1,838	1,811	0	0	0	0	3	3
South Dakota	47	16	195.0%	47	16	0	0	0	0	0	0
South Atlantic	6,597	7,384	-11.0%	5,869	6,375	709	986	1	1	19	22
Delaware	4	0		0	0	4	0	0	0	0	0
District of Columbia	0	0		0	0	0	0	0	0	0	0
Florida	1,546	1,598	-3.3%	1,531	1,581	13	15	0	0	2	2
Georgia	1,308	1,399	-6.5%	1,305	1,396	0	0	0	0	3	3
Maryland	257	456	-44.0%	0	0	255	455	0	0	1	1
North Carolina	807	1,053	-23.0%	800	1,045	NM	0	0	0	3	3
South Carolina Virginia	432 209	428 451	1.0% -54.0%	432 186	426 411	15	31	0	0	8	2
West Virginia	2,034	1,999	1.8%	1,615	1,517	419	482	0	0	0	0
East South Central	4,593	5,353	-14.0%	4,425	5,158	155	184	0	0	12	11
Alabama	1,246	1,580	-21.0%	1,245	1,580	0	0	0	0	1	0
Kentucky	2,095	2,465	-15.0%	2,095	2,465	0	0	0	0	0	0
Mississippi	298	310	-3.7%	143	126	155	184	0	0	0	0
Tennessee	954	998	-4.4%	943	987	0	0	0	0	11	11
West South Central	9,906	11,732	-16.0%	3,947	5,406	5,946	6,308	0	0	12	17
Arkansas	1,019	1,346	-24.0%	836	1,103	182	243	0	0	1	1
Louisiana	540	540	0.1%	354	332	186	208	0	0	0	0
Oklahoma	901	1,470	-39.0%	783	1,330	107	124	0	0	11	17
Texas	7,445	8,377	-11.0%	1,974	2,642	5,471	5,734	0	0	0	0
Mountain	7,490	8,144	-8.0%	6,621	7,111	851	1,014	0	0	17	19
Arizona	1,442	1,583	-8.9%	1,442	1,583	0	0	0	0	0	0
Colorado	1,254	1,349	-7.1%	1,254	1,349	0	0	0	0	0	0
Idaho	NM	1	NM	0	0	0	0	0	0	NM	1
Montana	755	915	-17.0%	15	18	740	897	0	0	0	0
Nevada	36	72	-50.0%	702	34	36	38	0	0	0	0
New Mexico Utah	793 1,173	1,131 1,127	-30.0% 4.2%	793 1,138	1,131 1,085	28	32	0	0	7	10
Wyoming	2,036	1,127	3.5%	1,138	1,085	47	32 46	0	0	9	0۱
Pacific Contiguous	615	548	12.0%	1,960	91	497	451	0	0	6	6
California	5	5	-3.2%	0	0	0	0	0	0	5	5
Oregon	112	91	23.0%	112	91	0	0	0	0	0	<u>0</u>
Washington	498	452	10.0%	0	0	497	451	0	0	1	1
Pacific Noncontiguous	103	100	3.5%	NM	19	79	77	3	3	0	0
Alaska	38	35	7.3%	NM	19	14	13	3	3	0	0
Hawaii	66	65	1.4%	0	0	66	65	0	0	0	0
U.S. Total	50,172	54,537	-8.0%	36,285	39,319	13,644	14,974	7	8	236	237

Table 2.8.B. Consumption of Coal for Electricity Generation by State, by Sector,

Year-to-Date through October 2017 and October 2016 (Thousand Tons)

Conque Division					Electric Pov		D				
Census Division and State		All Sectors		Electric	Litilities	Independer		Commoroio	l Soctor	Industrial	Sootor
and State	October	October	Percentage	October	October	Produc October	October	Commercia October	October	Industrial October	October
	2017 YTD	2016 YTD	Change	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD
New England	723	940	-23.0%	78	122	642	815	0	0	3	3
Connecticut	73	73	0.0%	0	0	73	73	0	0	0	0
Maine	12	13	-5.0%	0	0	10	10	0	0	3	3
Massachusetts	559	731	-24.0%	0	0	559	731	0	0	0	0
New Hampshire	78	122	-36.0%	78	122	0	0	0	0	0	0
Rhode Island	0	0		0	0	0	0	0	0	0	0
Vermont	0	0		0	0	0	0	0	0	0	0
Middle Atlantic	19,333	24,064	-20.0%	0	0	19,201	23,880	0	0	132	184
New Jersey	423	477	-11.0%	0	0	423	477	0	0	0	0
New York	254	717	-65.0%	0	0	184	627	0	0	70	90
Pennsylvania	18,656	22,869	-18.0%	0	0	18,595	22,775	0	0	62	94
East North Central	119,691	120,174	-0.4%	73,483	72,362	45,597	47,220	15	20	595	572
Illinois	28,720	30,407	-5.5%	1,808	1,605	26,461	28,418	9	7	443	377
Indiana	29,321	30,053	-2.4%	28,259	28,590	1,056	1,451	6	9	0	3
Michigan	20,463	19,368	5.7%	20,272	19,155	178	184	0	4	14	25
Ohio	24,071	24,310	-1.0%	6,167	7,122	17,903	17,166	0	0	2	22
Wisconsin	17,116	16,036	6.7%	16,979	15,891	0	0	0	0	137	145
West North Central	96,450	94,681	1.9%	95,465	93,720	0	0	24	29	961	933
Iowa	12,187	11,824	3.1%	11,760	11,363	0	0	18	19	408	442
Kansas	10,425	12,127	-14.0%	10,425	12,127	0	0	0	0	0	
Minnesota	10,937	10,880	0.5%	10,718	10,738	0	0	1	1	218	141
Missouri	33,137	30,063	10.0%	33,132	30,054	0	0	4	9	0	0
Nebraska	10,819	11,060	-2.2%	10,513	10,738	0	0	0	0	307	323
North Dakota	17,921	17,683	1.3%	17,892	17,656	0	0	0	0	28	28
South Dakota	1,024	1,043	-1.8%	1,024	1,043	0	0	0	0	0	0
South Atlantic	78,172	88,110	-11.0%	70,044	77,249	7,949	10,590	11	11	169	260
Delaware	136	220	-39.0%	0	0	136	220	0	0	0	0
District of Columbia	0	0		0	0	0	0	0	0	0	0
Florida	14,730	14,941	-1.4%	14,659	14,599	48	314	0	0	23	29
Georgia	14,521	16,644	-13.0%	14,494	16,606	0	0	0	0	27	38
Maryland	3,024	5,151	-41.0%	0	0	3,009	5,136	0	0	15	15
North Carolina	11,620	12,842	-9.5%	11,551	12,735	33	65	9	9	28	33
South Carolina	6,461	7,332	-12.0%	6,457	7,310	0	0	0	0	4	22
Virginia	4,420	6,483	-32.0%	4,172	6,158	175	221	2	2	72	103
West Virginia	23,259	24,495	-5.0%	18,710	19,841	4,549	4,634	0	0	0	20
East South Central	52,226	58,226	-10.0%	50,068	55,507	2,025	2,548	0	0	133	171
Alabama	13,742	14,608	-5.9%	13,731	14,592	0	0	0	0	11	16
Kentucky	23,296	26,778	-13.0%	23,296	26,778	0	0	0	0	0	0
Mississippi	3,248	3,822	-15.0%	1,223	1,274	2,025	2,548	0	0	0	0
Tennessee	11,940	13,018	-8.3%	11,818	12,862	0	0	0	0	122	156
West South Central	107,168	99,583	7.6%	49,668	48,330	57,358	51,074	0	0	143	179
Arkansas	12,640	11,448	10.0%	11,169	9,383	1,464	2,057	0	0	7	8
Louisiana	7,251	7,273	-0.3%	4,370	4,992	2,881	2,280	0	0	0	<u> </u>
Oklahoma	9,493	10,053	-5.6%	8,484	8,873	873	1,008	0	0	136	171
Texas	77,784	70,809	9.9%	25,645	25,081	52,140	45,728	0	0	0	n
Mountain	76,061	74,403	2.2%	67,461	65,638	8,471	8,591	0	0	129	174
Arizona	14,089	13,787	2.2%	14,089	13,787	0,471	0,001	0	0	0	n
Colorado	13,838	13,554	2.1%	13,837	13,547	0	6	0	0	2	2
Idaho	10,000	5	-8.2%	13,037	10,047 ∩	n o	0	0	0	5	5
Montana	7,447	7,606	-2.1%	217	203	7,229	7,401	0	0	2	2
Nevada	998	1,103	-9.5%	535	674	463	429	0	0	0	<u>2</u>
New Mexico	8,966	8,398	6.8%	8,966	8,398	- 1 00	123 N	0	0	0	0
Utah	10,142	9,823	3.2%	9,761	9,408	337	324	0	0	44	91
Wyoming	20,576	20,127	2.2%	20,056	19,622	443	431	0	٥	76	73
Pacific Contiguous	3,546	3,254	9.0%	1,007	905	2,485	2,290	0	0	54	59
California	3,340	52	-7.7%	1,007	903	2,400	2,290	0	0	48	52
Oregon	1,007	905	11.0%	1,007	905	0	0	0	0	0	0
Washington	2,491	2,297	8.5%		903	2,485	2,290	0	0	6	7
Pacific Noncontiguous	961	1,014	-5.2%	183	212	748	769	30	30	0	2
Alaska	332	372	-11.0%	183	212	119	130	30	30	0	0
Hawaii	629	641	-11.0%	0	212	629	639	0	0	0	<u> </u>
	1 023	041	-1.3/0	٧I	기	029	009	પ	이	٧	

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

Census Division					Electric Pov		nt Power				
and State		All Sectors		Electric	Utilities	Independe Produ		Commerci	al Sector	Industria	I Sector
	October	October	Percentage	October	October	October	October	October	October	October	October
	2017	2016	Change	2017	2016	2017	2016	2017	2016	2017	2016
New England	27	133	-80.0%	7	4	17	126	2	2	0	1
Connecticut	10	1	583.0%	NM	0	9	1	NM	0	0	0
Maine	4	8	-47.0%	0	0	3	6	0	0	0	1
Massachusetts	7	120	-94.0%	3	0	NM	118	1	2	0	
New Hampshire Rhode Island	NM	2	328.0% NM	0	2	NM	0	1	0	0	
Vermont	INIVI		65.0%	2	1	INIVI	0	0	0	0	
Middle Atlantic	68	65	5.2%	20	10	41	49	NM	1	5	
New Jersey	3	3	-3.7%	NM	0	3	3	0	0	0	-
New York	36	18	99.0%	20	10	11	5	NM	0	4	
Pennsylvania	30	44	-33.0%	0	0	28	42	0	1	NM	
East North Central	85	62	36.0%	60	33	22	27	1	1	2	1
Illinois	7	7	-4.4%	1	1	5	6	NM	0	0	C
Indiana	23	10	118.0%	21	9	0	0	0	0	2	1
Michigan	23	14	64.0%	22	14	0	0	1	0	NM	C
Ohio	27	28	-2.2%	10	6	17	21	0	1	0	C
Wisconsin	6	3	70.0%	5	3	0	0	0	0	0	C
West North Central	47	39	20.0%	45	35	1	4	0	0	0	C
Iowa	12	13	-8.3%	12	13	NM	0	0	0	0	C
Kansas	9	4	104.0%	9	4	0	0	0	0	0	
Minnesota	8	9	-5.0%	7	4	1	4	NM	0	0	C
Missouri	13	7	77.0%	13	7	NM	0	0	0	0	C
Nebraska	NM	1	NM	NM	1	0	0	0	0	0	C
North Dakota	3	2	27.0%	3	2	0	0	0	0	0	C
South Dakota	NM	3	NM	NM	3	0	0	NM	0	0	C
South Atlantic	293	208	41.0%	203	162	76	35	9	1	5	10
Delaware	4	2	165.0%	0	1	4	1	0	0	0	C
District of Columbia	0	0	-100.0%	0	0	0	0	0	0	0	C
Florida	94	100	-6.0%	92	96	1	2	0	0	NM	2
Georgia	15	11	39.0%	9	7	NM	0	0	0	NM	3
Maryland	16	22	-25.0%	' '	0	15	21	0	0	0	0
North Carolina South Carolina	45 10	25 9	80.0% 10.0%	42 9	24	NM 0	0	0	0	1	0
	95	20	377.0%	37	8	49	10	0	1	NM	
Virginia West Virginia	13	19	-33.0%	13	19	0	0	9	0	O INIVI	
East South Central	41	39	3.6%	37	37	2	0	0	0	NM	2
Alabama	6	4	35.0%	2	3	2	0	0	0	NM	1
Kentucky	13	20	-35.0%	13	20	0	0	0	0	0	
Mississippi	2	4	-54.0%	NM	3	0	0	0	0	0	1
Tennessee	20	11	81.0%	20	11	0	0	0	0	0	C
West South Central	26	14	82.0%	17	8	8	5	0	0	1	C
Arkansas	10	1	612.0%	6	1	3	0	0	0	0	C
Louisiana	NM	2	NM	NM	2	0	0	0	0	0	C
Oklahoma	2	2	23.0%	2	2	0	0	0	0	0	C
Texas	11	9	18.0%	5	4	5	5	0	0	0	0
Mountain	28	28	-0.3%	26	25	2	3	0	0	0	C
Arizona	9	7	30.0%	9	7	0	0	0	0	0	C
Colorado	2	1	63.0%	2	1	0	0	0	0	0	C
Idaho	0	0	-100.0%	0	0	0	0	0	0	0	C
Montana	1	2	-24.0%	NM	0	1	2	0	0	0	C
Nevada	1	1	-28.0%	0	0	1	1	0	0	0	C
New Mexico	5	3	63.0%	5	3	0	0	0	0	0	C
Utah	5	6	-17.0%	5	6	0	1	0	0	0	0
Wyoming Pacific Continuous	4	/	-48.0%	4	7	0	0	0	0	0	C
Pacific Contiguous	14	13	14.0%	9	6	5	3	0	0	1 0	4
California	/	10	-25.0%	6	5	1	1	0	0		3
Oregon Washington	3 4	0	806.0% 82.0%	NM	0	0 4	0 2	0	0	0	
Pacific Noncontiguous	1,102	1,027	7.3%	906	835	172	170	0	0	23	21
Alaska	1,102	1,027	-3.2%	117	121	0	0	0	0	6	- 21
Hawaii	979	900	8.8%	790	714	172	170	0	1	17	15
i iawaii	919	900	6.3%	1,331	1,156	346		15	I	17	43

Table 2.9.B. Consumption of Petroleum Liquids for Electricity Generation by State, by Sector,

Year-to-Date through October 2017 and October 2016 (Thousand Barrels)

Census Division					Electric Po	wer Sector Independe	nt Power				
and State		All Sectors		Electric	Utilities	Produ		Commerci	al Sector	Industria	I Sector
	October	October	Percentage	October	October	October	October	October	October	October	Octobe
	2017 YTD	2016 YTD	Change		2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD
New England	561	891	-37.0%	76	98	446	752	33	34	6	7
Connecticut	154	171	-9.9%	9	9	143	158	NM	2	0	1
Maine	98	208	-53.0%	0	0	88	197	5	5	5	
Massachusetts	235	424	-45.0%	16	25	202	386	15	13	1	C
New Hampshire	46	56	-18.0%	35	42	NM	2	9	13	0	
Rhode Island	19	25	-25.0%	5	15	NM	10	2	1	0	
Vermont	10	7	35.0%	10	7	0	0	0	0	0	
Middle Atlantic	1,146	1,628	-30.0%	392	572	683	993	21	19	49	44
New Jersey	59	99	-40.0%	1	2	58	96	0	1	NM	
New York	683	1,020	-33.0%	391	569	249	409	12	12	31	30
Pennsylvania	404	509	-21.0%	0	2	376	487	9	7	18	14
East North Central	810	885	-8.5%	532	553	259	314	6	5	13	13
Illinois	80	114	-29.0%	13	15	66	98	NM	1	0	C
Indiana	172	170	0.9%	162	161	0	0	0	0	9	9
Michigan	192	215	-11.0%	187	211	0	0	4	2	1	1
Ohio	308	323	-4.5%	113	107	193	212	1	1	2	2
Wisconsin	58	64	-9.4%	57	59	1	4	0	0	1	1
West North Central	463	421	9.9%	448	404	13	13	1	2	1	2
Iowa	128	134	-4.3%	126	132	2	2	0	0	0	(
Kansas	88	45	94.0%	88	45	0	0	0	0	0	(
Minnesota	66	53	23.0%	53	39	NM	11	1	1	1	1
Missouri	93	123	-24.0%	93	123	NM	0	0	0	0	C
Nebraska	14	15	-5.7%	14	15	0	0	0	0	0	(
North Dakota	58	43	35.0%	58	42	0	0	0	0	0	1
South Dakota	16	9	91.0%	16	8	0	0	NM	0	0	(
South Atlantic	2,621	3,560	-26.0%	2,007	2,669	479	800	83	12	52	78
Delaware	52	107	-51.0%	1	15	52	92	0	0	0	(
District of Columbia	0	4	-100.0%	0	0	0	0	0	4	0	(
Florida	846	1,223	-31.0%	821	1,186	10	15	0	0	16	22
Georgia	166	188	-12.0%	122	119	25	41	3	3	16	25
Maryland	211	330	-36.0%	4	3	204	324	1	1	1	2
North Carolina	317	405	-22.0%	290	336	18	62	1	0	7	7
South Carolina	140	184	-24.0%	130	164	2	4	0	0	8	16
Virginia	719	943	-24.0%	471	679	166	253	77	3	5	7
West Virginia	170	176	-3.7%	168	168	2	9	0	0	0	C
East South Central	419	475	-12.0%	399	445	7	12	0	0	13	18
Alabama	57	69	-18.0%	39	43	7	11	0	0	11	14
Kentucky	153	178	-14.0%	153	178	0	0	0	0	0	C
Mississippi	20	30	-32.0%	19	28	0	0	0	0	1	2
Tennessee	189	198	-4.6%	187	196	1	0	0	0	1	2
West South Central	232	238	-2.5%	124	156	102	76	1	2	5	5
Arkansas	72	53	36.0%	30	38	41	13	0	0	2	2
Louisiana	16	27	-41.0%	16	23	0	3	0	0	0	(
Oklahoma	20	29	-29.0%	19	28	0	0	0	0	1	1
Texas	123	129	-4.6%	60	67	61	59	1	2	1	2
Mountain	345	362	-4.9%	309	313	36	40	0	0	0	9
Arizona	86	82	4.9%	86	82	0	0	0	0	0	(
Colorado	17	15	19.0%	17	15	0	0	0	0	0	(
Idaho	0	0	-80.0%	0	0	0	0	0	0	0	(
Montana	28	33	-16.0%	NM	1	27	32	0	0	0	(
Nevada	18	21	-14.0%	12	16	6	5	0	0	0	(
New Mexico	72	85	-15.0%	72	85	0	0	0	0	0	(
Utah	57	46	23.0%	54	44	2	3	0	0	0	(
Wyoming	67	81	-17.0%	67	71	0	0	0	0	0	9
Pacific Contiguous	127	164	-22.0%	78	62	26	29	1	1	22	71
California	80	132	-39.0%	57	53	8	13	0	0	15	65
Oregon	17	6	190.0%	17	6	0	0	0	0	0	(
Washington	30	26	16.0%	4	4	19	16	0	0	7	6
Pacific Noncontiguous	10,537	10,114	4.2%	8,530	8,204	1,777	1,694	10	12	220	204
Alaska	1,340	1,062	26.0%	1,274	1,010	0	0	4	2	61	50
Hawaii	9,198	9,052	1.6%	7,256	7,194	1,777	1,694	6	9	159	154
U.S. Total	17,262	18,739	-7.9%	12,895	13,478	3,829	4,723	156	85	381	453

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

October 2017 and October 2010	(11100001101101	····•/			Electric Po	wer Sector					
Census Division		AU 0 .		F I	11,414	Independe		•			10
and State	October	All Sectors October	Percentage	Electric October		October	ucers October	Commerc October	October	Industria October	
	2017	2016	Change	2017				2017	2016	2017	2016
New England	0	0		0	0	0	0	0	0	0	C
Connecticut	0	0		0	0	0	0	0	0	0	C
Maine	0	0		0	0	0	0	0	0	0	C
Massachusetts	0	0		0	0	0	0	0	0	0	C
New Hampshire	0	0		0	0	0	0	0	0	0	C
Rhode Island Vermont	0	0		0	0	0	0	0	0	0	0
Middle Atlantic	NM	2	 NM	0	0	Ů	0	0	0	NM	2
New Jersey	1 INIVI	1	-3.3%	0	0	0	0	0	0	1 1	1
New York	0	0		0	0	0	0	0	0	. 0	
Pennsylvania	NM	2	NM	0	0	0	0	0	0	NM	2
East North Central	80	76	5.5%	52	26	NM		0	0	7	5
Illinois	0	0		0	0	0	0	0	0	0	C
Indiana	0	0		0	0	0	0	0	0	0	C
Michigan	52	26	102.0%	44	21	0	0	0	0	7	5
Ohio	21	45	-53.0%	0	0	NM	45	0	0	0	C
Wisconsin	7	5	44.0%	7	5			0	0	0	C
West North Central	0	0		0	0	-	ŭ	0	0	0	C
lowa	0	0		0	0	0	0	0	0	0	0
Kansas	0	0		0	0	0	0	0	0	0	
Minnesota Missouri	0	0		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	0	
South Dakota	0	0		0	0	0	0	0	0	0	0
South Atlantic	35	33	7.0%	35	ı	0		0	0	NM	1
Delaware	0	0		0	0	0	0	0	0	0	
District of Columbia	0	0		0	0	0	0	0	0	0	C
Florida	35	32	10.0%	35	32	0	0	0	0	0	C
Georgia	NM	1	NM	0	0	0	0	0	0	NM	1
Maryland	0	0		0	0	0	0	0	0	0	C
North Carolina	0	0		0	0			0	0	0	C
South Carolina	0	0		0	0	·	<u> </u>	0	0	0	C
Virginia	0	0		0	0		0	0	0	0	C
West Virginia	0	0	400.00/	0	0	0		0	0	0	
East South Central Alabama	0	32 0	-100.0%	0	32 0	0	0	0	0	0	
Kentucky	0	32	-100.0%	0	32	0		0	0	0	
Mississippi	0	0	-100.078	0	0	0		0	0	0	
Tennessee	0	0		0	0	0		0	0	0	0
West South Central	90	90	0.2%	84	82	0		0	0	6	8
Arkansas	0	0		0	0	0	0	0	0	0	C
Louisiana	86	86	-0.3%	84	82	0	0	0	0	2	4
Oklahoma	0	0		0	0	0	0	0	0	0	C
Texas	4	4	11.0%	0	0	0	0	0	0	4	4
Mountain	15	16	-4.8%	0	0	15		0	0	0	C
Arizona	0	0		0	0	0	0	0	0	0	C
Colorado	0	0		0	0	0	<u> </u>	0	0	0	C
Idaho	0	0	4.00/	0	0	_	Ÿ.	0	0	0	0
Montana Nevada	15	16 0	-4.8%	0	0	15 0	16 0	0	0	0	0
New Mexico	0	0	 	0	0	0	0	0	0	0	
Utah	0	0		0	0	0	0	0	0	0	
Wyoming	0	0		0	0	, and the same of		0	0	0	0
Pacific Contiguous	0	1	-100.0%	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	C
Washington	0	0		0	0	0	0	0	0	0	C
Pacific Noncontiguous	0	0		0	0	0	0	0	0	0	C
Alaska	0	0		0	0	0	0	0	0	0	C
Hawaii	0	0		0				0	0	0	
U.S. Total	222	250	-11.0%	171	171	36	61	0	0	15	18

Table 2.10.B. Consumption of Petroleum Coke for Electricity Generation by State, by Sector,

Year-to-Date through October 2017 and October 2016 (Thousand Tons)

Conque Division					Electric Po		nt Dawer				
Census Division and State		All Sectors		Electric	Utilities	Independe Produ		Commerc	ial Sector	Industria	l Sector
	October	October	Percentage	October	October	October	October	October	October	October	October
	2017 YTD	2016 YTD	Change	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	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 Middle Atlantic	15	19	-18.0%	0	0	0	0	0	0	15	18
New Jersey	6	5	19.0%	0	0	0	0	0	0	6	5
New York	0	0	19.0%	0	0	0	0	0	0	0	
Pennsylvania	9	14	-32.0%	0	0	0	0	0	0	9	13
East North Central	711	853	-17.0%	417	434	235	360	0	0	59	60
Illinois	711	000	-17.076	717	0	233	0	0	0	0	00
Indiana	0	159	-100.0%	0	159	0	0	0	0	0	0
Michigan	442	297	49.0%	383	244	0	1	0	0	59	52
Ohio	235	360	-35.0%	0	0	235	358	0	0	0	1
Wisconsin	35	38	-7.5%	35	31	0	0	0	0	0	7
West North Central	5	4	31.0%	0	0	0	0	2	1	3	3
Iowa	5	4	31.0%	0	0	0	0	2	1	3	3
Kansas	0	0		0	0	0	0	0	0	0	0
Minnesota	0	0		0	0	0	0	0	0	0	0
Missouri	0	0		0	0	0	0	0	0	0	0
Nebraska	0	0		0	0	0	0	0	0	0	0
North Dakota	0	0		0	0	0	0	0	0	0	0
South Dakota	0	0		0	0	0	0	0	0	0	0
South Atlantic	306	708	-57.0%	286	687	0	0	0	0	20	21
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	687	-58.0%	286	687	0	0	0	0	0	0
Georgia	20	21	-4.6%	0	0	0	0	0	0	20	21
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	378	-56.0%	166	378	0	0	0	0	0	0
Alabama	0	0		0	0	0	0	0	0	0	0
Kentucky	166	378	-56.0%	166	378	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	1,466	1,506	-2.7%	1,396	1,429	0	0	0	0	70	77
Arkansas	0	0		0	0	0	0	0	0	0	0
Louisiana	1,427	1,464	-2.5%	1,396	1,429	0	0	0	0	31	35
Oklahoma	0	0		0	0	0	0	0	0	0	0
Texas	39	43	-8.2%	0	0	0	0	0	0	39 0	43
Mountain	134	131	2.6%	0	0	134	131	0	0	0	0
Arizona Colorado	0	0		0	0	0	0	0	0	0	0
Idaho	0	0		0	0	0	0	0	0	0	0
Montana	134	131	2.6%	0	0	134	131	0	0	0	0
Nevada	134	0	2.070	0	0	0	0	0	0	0	0
New Mexico	0	0		0	0	0	0	0	0	0	<u> </u>
Utah	0	0		0	0	0	0	0	0	0	<u> </u>
Wyoming	0	0		0	0	0	0	0	0	0	0
Pacific Contiguous	0	13	-100.0%	0	0	0	0	0	0	0	13
California	0	13	-100.0%	0	0	0	0	0	0	0	13
Oregon	0	0		0	0	0	0	0	0	0	0
Washington	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
1	۱ ۱	3,611	-22.0%	2,266	2,927	369	491	2		167	192

Table 2.11.A. Consumption of Natural Gas for Electricity Generation by State, by Sector, October 2017 and October 2016 (Million Cubic Feet)

	6 (Million Cubi	,			Electric Po	wer Sector					
Census Division						Independe					
and State	October	All Sectors October	Percentage	Electric October	Utilities October	Produ October	October	Commerc October	October	Industria October	al Sector October
	2017	2016	Change	2017	2016	2017	2016	2017	2016	2017	2016
New England	28,521	26,502	7.6%	NM	159	27,234	25,543	410	377	482	422
Connecticut	9,776	10,036	-2.6%	42	31	9,338	9,627	176	178	220	201
Maine	NM	1,909	NM	0	0	NM	1,764	13	10	146	135
Massachusetts	11,859	9,195	29.0%	NM	127	11,265	8,835	196	161	99	72
New Hampshire	1,688	2,383	-29.0%	54	0	1,614	2,362	3	6	16	15
Rhode Island	NM	2,976	NM	0	0	NM	2,955	22	21	0	0
Vermont	0	2	-91.0%	0	2	0	0	0	0	0	0
Middle Atlantic	96,112	97,039	-1.0%	5,379	6,713	89,262	88,923	524	492	947	911
New Jersey	20,711	26,594	-22.0%	NM	218	20,282	26,137	77	80	163	159
New York	29,161	30,859	-5.5%	5,179	6,487	23,411	23,826	395	366	176	181
Pennsylvania	46,240	39,586	17.0%	10	8	45,569	38,959	52	47	609	571
East North Central	65,338		13.0%	28,160	23,603	34,577	32,276	612	626	1,989	1,282
Illinois	10,362	12,026	-14.0%	NM	879	8,434	10,556	158	177	409	413
Indiana	11,506	11,046	4.2%	9,549	9,580	969	1,109	75	93	912	265
Michigan	17,872	15,647	14.0%	5,956	5,691	11,204	9,288	247	247	466	421
Ohio	15,592	14,215	9.7%	NM	3,303	13,371	10,760	105	84	73	
Wisconsin	10,005	4,853	106.0%	9,250	4,149	599	563	28	25	129	116
West North Central	16,491	11,256	47.0%	14,291	10,274	NM	697	130	93	247	191
Iowa	2,840	1,216	134.0%	2,617	1,098	0	0	46	34	176	84
Kansas	2,548	1,269	101.0%	2,540	1,253	0	0	0	0	8	16
Minnesota	5,559	3,313	68.0%	4,591	2,562	899	685	29	25	39	41
Missouri	NM	2,810	NM	NM	2,752	NM	12	53	33	11	13
Nebraska	321	454	-29.0%	319	452	0	0	2	1	0	1
North Dakota	892	1,695	-47.0%	878	1,658	0	0	0	0	13	37
South Dakota	542	499	8.7%	542	499	0	0	0	423	0.004	0.047
South Atlantic	203,654		11.0%	164,781				494	120	2,024	2,047
Delaware	4,132	5,842	-29.0%	39	70	3,677	5,273	0	0	416	500
District of Columbia	100.750	45	-100.0%	00.014	00.400	0 505	0 500	0	45 14	622	0
Florida	106,752	97,682	9.3%	99,614	90,482	6,505	6,580	11	14		605
Georgia Maryland	30,205 3,748	26,352 3,625	15.0% 3.4%	21,704	21,413	8,229 3,238	4,611 3,241	469	354	273 41	328 30
North Carolina	22,619	18,598	22.0%	19,471	14,661	3,236	3,241	409	504	62	
South Carolina	11,867	10,834	9.5%	9,263	9,644	2,532	1,156	0	1	72	34
Virginia	22,046	18,398	20.0%	14,489	11,307	7,204	6,753	4	3	348	335
West Virginia	2,285	1,789	28.0%	200	94	1,894	1,538	0	0	191	158
East South Central	68,920	69,715	-1.1%	48,246	46,957	19,702	21,789	72	67	901	902
Alabama	31,092	30,840	0.8%	12,507	8,678	18,092	21,721	0	0	494	442
Kentucky	5,470	4,785	14.0%	4,862	4,650	520	59	0	0	88	76
Mississippi	26,006	27,401	-5.1%	24,757	27,224	1,080	9	0	0	169	168
Tennessee	6,352	6,688	-5.0%	6,121	6,404	10	1	72	67	150	216
West South Central	180,449	179,097	0.8%	65,284	62,620	86,844	85,767	232	338	28,090	30,371
Arkansas	10,272	8,847	16.0%	4,412	3,943	5,728	4,776	0	31	133	97
Louisiana	35,982	34,719	3.6%	22,974	19,829	2,590	2,548	NM	54	10,386	12,288
Oklahoma	18,284	18,934	-3.4%	11,827	12,913	6,221	5,919	0	0	236	101
Texas	115,911	116,597	-0.6%	26,072	25,935	72,305	72,524	200	253	17,335	17,885
Mountain	56,103	55,262	1.5%	41,603	37,661	13,142	16,452	202	182	1,155	967
Arizona	21,648	20,831	3.9%	13,433	10,009	8,161	10,772	53	50	0	0
Colorado	6,167	5,701	8.2%	5,080	4,810	1,057	859	0	12	30	20
Idaho	2,093	1,391	51.0%	1,183	426	858	914	15	10	38	41
Montana	436	405	7.6%	322	336	111	68	0	0	3	1
Nevada	16,731	15,147	10.0%	15,123	13,618	1,351	1,334	22	20	235	176
New Mexico	6,038	6,949	-13.0%	4,577	4,563	1,411	2,333	49	50	0	3
Utah	2,540	4,407	-42.0%	1,829	3,853	193	172	64	40	455	342
Wyoming	450	430	4.5%	55	45	0	0	0	0	395	385
Pacific Contiguous	79,657	78,715	1.2%	28,545	30,375	44,557	41,359	1,043	1,077	5,511	5,905
California	61,464	66,619	-7.7%	19,316	23,195	35,711	36,532	1,015	1,056	5,422	5,836
Oregon	10,274		32.0%	4,055	4,367	6,157	3,367	19	16	43	
Washington	7,919		84.0%	5,174	2,813	2,690	1,460	8	5	46	31
Pacific Noncontiguous	2,749		33.0%	2,732	2,055	0	0	0	0	17	18
Alaska	2,749	2,073	33.0%	2,732	2,055	0	0	0	0	17	18
Hawaii	0	0		0	0	0	0	0	0	0	0
U.S. Total	797,995	760,610	4.9%	399,415	368,087	353,498	345,831	3,719	3,675	41,363	43,017

Table 2.11.B. Consumption of Nautral Gas for Electricity Generation by State, by Sector,

Year-to-Date through October 2017 and October 2016 (Million Cubic Feet)

Year-to-Date through October					Electric Po	wer Sector					
Census Division		All Contons		Flootwick	114:11:41	Independe		0	al Castan	ماد ماد مداده	l Castan
and State	October	All Sectors October	Percentage	Electric October	October	Produ October	October	Commerci October	October	Industria October	October
	2017 YTD	2016 YTD	Change	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD
New England	309,986	337,154	-8.1%	3,825	3,153	297,383	324,990	3,920	4,400	4,858	4,611
Connecticut	93,577	107,113	-13.0%	594	339	89,127	102,724	1,655	1,857	2,201	2,193
Maine	18,237	21,799	-16.0%	0	0	16,681	20,349	128	119	1,429	1,331
Massachusetts	139,185	138,030	0.8%	NM	2,353	133,390	132,629	1,896	2,135	1,063	913
New Hampshire	22,896	28,815	-21.0%	383	451	22,313	28,112	34	78	165	174
Rhode Island	36,077	41,383	-13.0%	0	0	35,872	41,176	205	207	0	0
Vermont	13	15	-9.0%	10	11	0	0	3	4	0	0
Middle Atlantic	953,666	1,094,849	-13.0%	79,158	97,602	860,004	982,309	5,213	5,548	9,292	9,391
New Jersey	232,894	276,546	-16.0%	NM	2,252	228,553	271,880	803	824	1,576	1,590
New York	338,947	394,156	-14.0%	77,137	95,264	256,211	292,960	3,847	4,209	1,751	1,723
Pennsylvania	381,825	424,148	-10.0%	58	86	375,240	417,469	563	515	5,965	6,078
East North Central	676,617	735,154	-8.0%	296,328	332,464	354,667	383,343	6,232	6,466	19,390	12,881
Illinois	134,018	132,448	1.2%	18,473	12,566	109,811	114,052	1,636	1,578	4,097	4,252
Indiana	118,801	125,780	-5.5%	94,509	101,756	14,686	20,846	829	858	8,778	2,319
Michigan	164,766	195,408	-16.0%	60,763	78,071	97,049	110,111	2,371	2,602	4,583	4,624
Ohio	176,190	179,284	-1.7%	48,982	48,132	125,409	129,865	1,112	903	686	383
Wisconsin	82,842	102,235	-19.0%	73,602	91,938	7,711	8,468	284	525	1,245	1,303
West North Central	154,300	160,087	-3.6%	133,606	134,465	17,365	21,871	1,241	1,395	2,087	2,356
lowa	23,904	19,978	20.0%	22,302	18,930	NM	0	383	401	1,219	648
Kansas	20,341	18,108	12.0%	20,179	17,863	0	0	0	0	161	245
Minnesota	48,096	59,439	-19.0%	39,936	47,427	7,234	10,357	427	528	498	1,127
Missouri	43,811	42,133	4.0%	33,127	30,031	10,130	11,514	422	455	131	133
Nebraska	4,973	4,953	0.4%	4,964	4,933	0	0	10	11	0	9
North Dakota	7,681	8,924	-14.0%	7,604	8,729	0	0	0	0	77	195
South Dakota	5,495	6,552	-16.0%	5,495	6,552	0	0	0	0	0	0
South Atlantic	2,079,778	2,093,411	-0.7%	1,679,886	1,672,180	374,042	397,636	5,326	5,518	20,524	18,077
Delaware	46,490	52,483	-11.0%	177	632	42,246	47,617	0	0	4,067	4,234
District of Columbia	542	518	4.7%	0	0	0	0	542	517	0	0
Florida	1,026,986	1,032,277	-0.5%	952,386	936,131	68,178	89,522	112	149	6,311	6,475
Georgia	320,482	330,994	-3.2%	241,309	252,637	75,914	75,954	0	0	3,259	2,403
Maryland	47,410	52,101	-9.0%	0	0	42,478	47,034	4,563	4,741	369	326
North Carolina	236,790	248,427	-4.7%	204,373	213,249	31,810	34,602	66	60	541	516
South Carolina	112,198	110,800	1.3%	97,305	90,467	14,217	20,067	2	7	674	259
Virginia	276,464	255,529	8.2%	182,786	177,690	90,000	74,544	41	43	3,637	3,252
West Virginia	12,417	10,283	21.0%	1,551	1,375	9,198	8,295	0	0	1,668	613
East South Central	752,475	798,783	-5.8%	515,151	526,216	226,565	262,632	735	775	10,025	9,160
Alabama	318,288	343,544	-7.4%	111,399	101,745	201,631	236,647	0	0	5,258	5,152
Kentucky	71,300	57,622	24.0%	67,013	51,676	3,454	5,068	0	0	833	878
Mississippi	292,596	319,553	-8.4%	269,483	296,929	21,355	20,907	21	0	1,737	1,718
Tennessee	70,290	78,064	-10.0%	67,255	75,866	124	10	714	775	2,197	1,413
West South Central	1,902,795	2,166,898	-12.0%	643,838	785,516	954,962	1,057,107	3,255	3,985	300,740	320,290
Arkansas	110,388	114,356	-3.5%	44,010	48,346	65,226	64,508	0	370	1,152	1,132
Louisiana	348,548	416,962	-16.0%	203,991	248,115	26,277	39,258	483	635	117,796	128,955
Oklahoma	203,421	240,090	-15.0%	130,224	168,296	71,537	70,679	0	0	1,660	1,115
Texas	1,240,438	1,395,490	-11.0%	265,613	320,759	791,922	882,662	2,771	2,980	180,132	189,088
Mountain	573,220	649,756	-12.0%	438,668	480,936	122,048	156,381	1,836	2,001	10,668	10,438
Arizona	195,098	234,321	-17.0%	128,873	136,665	65,697	97,084	528	572	0	0
Colorado	80,204	80,712	-0.6%	65,452	67,043	14,471	13,377	0	12	281	280
Idaho	17,131	21,443	-20.0%	9,852	12,552	6,667	8,207	142	152	470	532
Montana	4,341	4,732	-8.3%	3,481	3,953	847	762	0	0	14	17
Nevada	166,939	177,087	-5.7%	152,146	162,021	12,466	12,791	204	229	2,123	2,046
New Mexico	65,022	70,419	-7.7%	44,384	47,226	20,157	22,665	468	513	14	14
Utah	40,080	56,608	-29.0%	33,470	50,229	1,730	1,483	494	524	4,386	4,372
Wyoming	4,405	4,435	-0.7%	1,011	1,248	13	12	0	0	3,381	3,176
Pacific Contiguous	655,812	745,160	-12.0%	250,478	285,774	339,233	392,209	9,695	9,721	56,407	57,456
California	532,010	592,538	-10.0%	186,997	204,769	279,915	321,612	9,498	9,480	55,600	56,677
Oregon	65,792	86,384	-24.0%	27,688	40,911	37,568	44,897	146	169	390	407
Washington	58,010	66,237	-12.0%	35,793	40,094	21,749	25,700	51	71	417	372
Pacific Noncontiguous	22,195	23,458	-5.4%	21,949	23,232	0	0	22	4	224	221
Alaska	22,195	23,458	-5.4%	21,949	23,232	0	0	22	4	224	221
Hawaii	0	0		0	0	0	0	0	0	0	0

Table 2.12.A. Consumption of Landfill Gas for Electricity Generation by State, by Sector, October 2017 and October 2016 (Million Cubic Feet)

	6 (Million Cubi				Electric Pov	wer Sector					
Census Division		AII 0 . 1		-	11.11.1	Independe		_			10.
and State	October	All Sectors October	Percentage	Electric October	October	Produ October	ucers October	Commerc October		Industria October	
	2017	2016	Change	2017	2016	2017	2016	2017	2016	2017	
New England	802	897	-11.0%	0	0	778	880	24	17	0	(
Connecticut	NM	38	NM	0	0	NM	38	0	0	0	(
Maine	NM	63	NM	0	0	NM	63	0	0	0	(
Massachusetts	344	338	1.8%	0	0	344	338	0	0	0	(
New Hampshire	86	130	-33.0%	0	0	NM	113	24	17	0	(
Rhode Island	252	294	-14.0%	0	0	252	294	0	0	0	(
Vermont	NM	34	NM	0	0	NM	34	0	0	0	(
Middle Atlantic	4,173	3,812	9.5%	0	0	3,986	3,660	74		113	9′
New Jersey	654	670	-2.3%	0	0	629	644	NM	26	0	(
New York	1,240	1,440	-14.0%	0	0	1,240	1,440	0	0	0	`
Pennsylvania	2,279	1,702	34.0%	0	0	2,117	1,575	NM	36	113	
East North Central	5,148	4,336	19.0%	595	489	4,512	3,818	28	11	12	
Illinois	959	747	28.0%	24	24	935	723	0	0	0	
Indiana	667	532	25.0%	561	454	104	77	0	0	NM	
Michigan	1,697	1,444	17.0%	0	0	1,697	1,444	0	0	0	
Ohio	890	746	19.0%	0	0	890	746	0	0	0	
Wisconsin	935	867	7.9%	NM	11	887	828	28		10	
West North Central	940	981	-4.3%	272	298	667	684	0	0	0	
lowa	216	234	-7.9% NM	0	0	216	234	0	0	0	
Kansas	NM	111			0	NM 045	111		0	0	·
Minnesota	312	303	2.9%	NM	67	245 NM	237	0	0	0	
Missouri Nebraska	163	182 150	-11.0%	NM 126	81	INIVI	102	0	0	0	
North Dakota	136	150	-9.8%	136	150 0	0	0	0	0	0	
South Dakota	0	0		0	0	0	0	0	0	0	,
South Atlantic	3,811	2,923	30.0%	384	343	3,144	o l	99	95		154
Delaware	NM	102	NM	0	0	3, 144 NM	91	0		NM	
District of Columbia	14141	102	INIVI	0	0	14101	0	0		0	<u>'</u> ,
Florida	584	605	-3.4%	138	133	446	470	0	1	0	,
Georgia	366	358	2.2%	0	0	328	335	0	. 0	37	
Maryland	219	223	-1.7%	0	0	156	158	NM	65	0	
North Carolina	905	92	880.0%	0	0	888	84	NM	8	0	
South Carolina	404	352	15.0%	237	205	NM	28	0	0	134	120
Virginia	1,226	1,192	2.8%	9	5	1,198	1,166	NM	21	0	(
West Virginia	0	0		0	0	0	0	0	0	0	(
East South Central	440	494	-11.0%	172	197	268	297	0	0	0	(
Alabama	NM	99	NM	0	0	NM	99	0	0	0	(
Kentucky	182	224	-19.0%	172	197	10	27	0	0	0	(
Mississippi	NM	23	NM	0	0	NM	23	0	0	0	(
Tennessee	151	148	2.1%	0	0	151	148	0	0	0	(
West South Central	1,151	1,358	-15.0%	0	0	1,098	1,308	54	51	0	(
Arkansas	128	100	28.0%	0	0	128	100	0	0	0	(
Louisiana	0	0		0	0	0	0	0	0	0	(
Oklahoma	NM	32	NM	0	0	NM	32	0	0	0	
Texas	993	1,227	-19.0%	0	0	939	1,176	54		0	
Mountain	524	513	2.1%	NM	19	467	447	39	46	0	(
Arizona	NM	68	NM	0	0	NM	68	0	0	0	(
Colorado	NM	104	NM	0	0	NM	104	0	0	0	
Idaho	NM	79	NM	NM	19	NM	45	20		0	
Montana	0	0		0	0	0	0	0	0	0	(
Nevada	NM	117	NM	0	0	NM	117	0	0	0	(
New Mexico	NM	2	NM	0	0	NM	2	0	0	0	(
Utah	164	143	14.0%	0	0	NM	112	18	31	0	
Wyoming Regific Contiguous	0	4 000		٥	0 576	0.040	2 150	1.007	0	0	
Pacific Contiguous	4,515	4,990	-9.5%	589	576	2,919	3,158	1,007	1,256	0	
California	3,700	4,191	-12.0%	204	206	2,526	2,766	969	1,218	0	,
Oregon	474 341	442	7.2% -4.3%	118 267	122	318 NM		NM	38	0	
Washington Pacific Noncontinuous		357	2.4%		247	IVIVI	110	0 74		0	
Pacific Noncontiguous Alaska	74 74	72 72	2.4%	0	0	0	0	74			
	/4	0	2.4%	0	0	0	0	0	72	0	
Hawaii	l V	20,377	5.9%	2,029	1,922	17,840	ŭ	1,398	Ŭ	U	

Table 2.12.B. Consumption of Landfill Gas for Electricity Generation by State, by Sector,

Year-to-Date through October 2017 and October 2016 (Million Cubic Feet)

Year-to-Date through October	ear-to-Date through October 2017 and October 2016 (Million Cu			Electric Power Sector Independent Power							
Census Division	T				Electric Po		nt Power		T		
and State		All Sectors		Electric		Produ	cers	Commerci		Industrial	
	October	October	Percentage	October	October	October	October	October	October	October	October
N. F. J. J	2017 YTD		Change	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD
New England	9,008	9,451	-4.7%	0	0	8,808	9,288	200	164	0	0
Connecticut	364	399	-8.6%	0	0	364	399	0	0	0	0
Maine	566	611	-7.5%	0	0	566	611	0	0	0	0
Massachusetts	3,558	3,439	3.5%	0	0	3,558	3,439	9	0	0	0
New Hampshire	859	1,176	-27.0%	0	0	660	1,013	200	164	0	0
Rhode Island	3,351	3,468	-3.4%	0	0	3,351	3,468	0	0	0	0
Vermont	308	357	-14.0%	0	0	308	357	700	0	0	0
Middle Atlantic	44,243	44,301	-0.1%	0	0	42,179	42,476	793	695	1,272	1,129
New Jersey	6,434	6,740	-4.5%	0	0	6,180	6,487	254	253	0	0
New York	13,249	13,308	-0.4%	0	0	13,249	13,308	500	0	4 070	1 100
Pennsylvania	24,560	24,253	1.3%	0	5.700	22,749	22,681	539	442	1,272	1,129
East North Central	53,190	51,255	3.8%	6,534	5,706	46,168	45,225	301	123	189	201
Illinois	10,282	10,379	-0.9%	340	338	9,942	10,041	0	0	0	0
Indiana	7,069	6,151	15.0%	6,084	5,249	977	892	0	0	NM	10
Michigan	17,350	16,476	5.3%	0	0	17,350	16,476	0	0	0	0
Ohio	8,931	8,621	3.6%	0	0	8,931	8,621	0	0	0	0
Wisconsin	9,559	9,629	-0.7%	NM	119	8,967	9,196	301	123	181	191
West North Central	9,031	9,375	-3.7%	2,886	2,896	6,145	6,480	0	0	0	0
lowa	1,473	2,138	-31.0%	0	0	1,473	2,138	0	0	0	0
Kansas	1,169	1,054	11.0%	0	0	1,169	1,054	0	0	0	0
Minnesota	3,240	3,027	7.1%	707	634	2,533	2,393	0	0	0	0
Missouri	1,714	1,607	6.7%	743	711	971	895	0	0	0	0
Nebraska	1,436	1,551	-7.4%	1,436	1,551	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	37,838		0.5%	•	3,729	31,240	30,445	993	1,589	1,735	1,878
Delaware	1,118	1,137	-1.7%	0	0	994	1,015	0	0	124	122
District of Columbia	0	0		0	0	0	0	0	0	0	0
Florida	5,905	6,477	-8.8%	1,322	1,396	4,583	5,064	0	6	0	10
Georgia	3,237	3,973	-19.0%	0	0	2,974	3,564	0	0	263	409
Maryland	2,246	2,222	1.1%	0	0	1,616	1,572	630	650	0	0
North Carolina	8,962	8,093	11.0%	0	0	8,787	7,372	175	721	0	0
South Carolina	4,166	3,931	6.0%	2,484	2,287	334	308	0	0	1,348	1,336
Virginia	12,205	11,808	3.4%	65	46	11,951	11,551	189	211	0	0
West Virginia	0	0		0	0	0	0	0	0	0	0
East South Central	4,568	4,541	0.6%	1,773	1,800	2,795	2,741	0	0	0	0
Alabama	924	904	2.3%	0	0	924	904	0	0	0	0
Kentucky	1,904	2,049	-7.1%	1,773	1,800	131	249	0	0	0	0
Mississippi	175	161	9.0%	0	0	175	161	0	0	0	0
Tennessee	1,565	1,428	9.6%	0	0	1,565	1,428	0	0	0	0
West South Central	12,668	12,533	1.1%		0	12,245	12,089	423	444	0	0
Arkansas	1,324	1,205	9.8%	0	0	1,324	1,205	0	0	0	0
Louisiana	0	0		0	0	0	0	0	0	0	0
Oklahoma	314	303	3.8%	0	0	314	303	0	0	0	0
Texas	11,030	11,025	0.0%	0	0	10,607	10,581	423	444	0	0
Mountain	5,343	5,362	-0.4%	185	203	4,786	4,679	372	479	0	0
Arizona	747	707	5.6%	0	0	747	707	0	0	0	0
Colorado	900	1,086	-17.0%	0	0	900	1,086	0	0	0	0
Idaho	700	822	-15.0%	185	203	350	467	166	152	0	0
Montana	0	0		0	0	0	0	0	0	0	0
Nevada	1,315	1,225	7.4%	0	0	1,315	1,225	0	0	0	0
New Mexico	NM	24	NM		0	NM	24	0	0	0	0
Utah	1,653	1,498	10.0%	0	0	1,447	1,170	206	327	0	0
Wyoming	0	0		0	0	0	0	0	0	0	0
Pacific Contiguous	45,819	49,909	-8.2%	5,655	5,964	28,506	31,142	11,658	12,804	0	0
California	37,645	41,789	-9.9%	1,654	2,400	24,709	27,006	11,282	12,383	0	0
Oregon	4,609	4,889	-5.7%	1,211	1,351	3,022	3,118	375	420	0	0
Washington	3,565	3,231	10.0%		2,212	775	1,019	0	0	0	0
Pacific Noncontiguous	635	632	0.5%		0	0	0	635	632	0	0
Alaska	635	632	0.5%	0	0	0	0	635	632	0	0
Hawaii	0	0		0	0	0	0	0	0	0	0
U.S. Total	222,343	225,000	-1.2%	20,903	20,298	182,872	184,565	15,373	16,929	3,196	3,208

Table 2.13.A. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State, by Sector, October 2017 and October 2016 (Thousand Tons)

Census Division	T				Electric Po	wer Sector Independe	ant Power		Т		
and State		All Sectors		Electric	Utilities	Produ		Commerc	ial Sector	Industria	I Sector
	October	October	Percentage	October	October	October	October	October	October	October	October
N. FII	2017	2016	Change	2017	2016	2017	2016	2017	2016	2017	2016
New England	295	311	-5.3%	0	0	278	295	17	17	0	
Connecticut Maine	101	107 26	-5.7% -2.7%	0	0	101	107 10	17	17	0	
Massachusetts	157	167	-2.7% -5.9%	0	0	9 157	167	17	17	0	
New Hampshire	11	11	1.5%	0	0	11	11	0	0	0	
Rhode Island	0	0	1.5%	0	0	0	0	0	0	0	
Vermont	0	0		0	0	0	0	0	0	0	
Middle Atlantic	455	460	-1.2%	0	0	361	370	94	91	0	
New Jersey	118	124	-5.6%	0	0	88	97	30	27	0	
New York	169	180	-6.1%	0	0	126	131	43	49	0	
Pennsylvania	168	156	7.9%	0	0	147	142	21	14	0	
East North Central	18	21	-15.0%	3	3	0	0	15	18	0	0
Illinois	0	0		0	0	0	0	0	0	0	C
Indiana	1	1	-3.4%	0	0	0	0	1	1	0	0
Michigan	14	17	-17.0%	0	0	0	0	14	17	0	C
Ohio	0	0		0	0	0	0	0	0	0	C
Wisconsin	3	3	-6.7%	3	3	0	0	0	0	0	C
West North Central	52	57	-8.4%	30	34	22	22	0	1	0	C
Iowa	0	0		0	0	0	0	0	0	0	C
Kansas	0	0		0	0	0	0	0	0	0	C
Minnesota	52	57	-8.4%	30	34	22	22	0	1	0	C
Missouri	0	0		0	0	0	0	0	0	0	C
Nebraska	0	0		0	0	0	0	0	0	0	C
North Dakota	0	0		0	0	0	0	0	0	0	C
South Dakota	0	0		0	0	0	0	0	0	0	C
South Atlantic	384	417	-7.9%	0	0	340	374	45	44	0	C
Delaware	0	0		0	0	0	0	0	0	0	C
District of Columbia	0	0		0	0	0	0	0	0	0	C
Florida	280	280	0.0%	0	0	280	280	0	0	0	C
Georgia	0	0		0	0	0	0	0	0	0	C
Maryland	59	43	37.0%	0	0	59	43	0	0	0	C
North Carolina	0	0		0	0	0	0	0	0	0	C
South Carolina	0	0		0	0	0	0	0	0	0	C
Virginia	45	94	-52.0%	0	0	0	50	45	44	0	C
West Virginia	0	0		0	0	0	0	0	0	0	C
East South Central	0	0		0	0	0	0	0	0	0	C
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	10.00/	0	0	0	0	0	0	0	
West South Central	1	0	-10.0%	0	0	0	0	0	0	0	1
Arkansas Louisiana	0	0		0	0	0	0	0	0	0	0
Oklahoma	1	1	-10.0%	0	0	0	0	0	0	1	1
Texas	0	0	-10.076	0	0	0	0	0	0	0	
Mountain	0	0	-100.0%	0	0	0	0	0	0	0	
Arizona	0	0	100.076	0	0	0	0	0	0	0	
Colorado	0	0		0	0	0	0	0	0	0	
Idaho	0	0		0	0	0	0	0	0	0	
Montana	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	C
Wyoming	0	0		0	0	0	0	0	0	0	0
Pacific Contiguous	51	66	-23.0%	0	0	51	66	0	0	0	0
California	27	42	-35.0%	0	0	27	42	0	0	0	C
Oregon	10	10	-4.5%	0	0	10	10	0	0	0	C
Washington	14	14	1.2%	0	0	14		0	0	0	C
Pacific Noncontiguous	40	43	-7.8%	0	0	0		40	43	0	C
Alaska	0	0		0	0	0	0	0	0	0	C
Hawaii	40	43	-7.8%	0	0	0	0	40	43	0	C
U.S. Total	1,296	1,378	-5.9%	33	37	1,051	1,127	210		1	1

Table 2.13.B. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State, by Sector,

Year-to-Date through October 2017 and October 2016 (Thousand Tons)

Census Division	Т				Electric Po	wer Sector Independe	nt Power				
and State		All Sectors		Electric	Utilities	Produ		Commerci	al Sector	Industria	I Sector
	October	October	Percentage	October	October	October	October	October	October	October	October
	2017 YTD	2016 YTD	Change	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD
New England	3,021	3,122	-3.3%	0	0	2,851	2,966	170	157	0	C
Connecticut	1,036	1,108	-6.6%	0	0	1,036	1,108	0	0	0	C
Maine	265	252	5.1%	0	0	95	95	170	157	0	C
Massachusetts	1,615	1,661	-2.7%	0	0	1,615	1,661	0	0	0	C
New Hampshire	105	101	3.5%	0	0	105	101	0	0	0	C
Rhode Island	0	0		0	0	0	0	0	0	0	C
Vermont	0	0		0	0	0	0	0	0	0	C
Middle Atlantic	4,502	4,502	0.0%	0	0	3,589	3,545	913	957	0	C
New Jersey	1,191	1,194	-0.3%	0	0	899	905	292	289	0	
New York	1,659	1,697	-2.2%	0	0	1,249	1,230	411	467	0	
Pennsylvania	1,652	1,611	2.5%	0	0	1,441	1,410	211	201	0	
East North Central	199	209	-5.0%	30	32	0	0	168	177	0	
Illinois	0	0		0	0	0	0	0	0	0	
Indiana	15	15	-0.2%	0	0	0	0	15	15	0	
Michigan	154	162	-5.4%	0	0	0	0	154	162	0	- 0
Ohio	0	0		0	0	0	0	0	0	0	0
Wisconsin	30	32	-5.5%	30	32	0	100	0	0	0	0
West North Central	526	543	-3.2%	330	354	196	180	0	9	0	
lowa	0	0		0	0	0	0	0	0	0	- 0
Kansas	0	542		0	0	0	0	0	0	0	0
Minnesota	526	543	-3.2%	330	354	196	180	0	9	0	0
Missouri	0	0		0	0	0	0	0	0	0	
Nebraska	0	0		0	0	0	0	0	0	0	
North Dakota	0	0		0	0	0	0	0	0	0	C
South Dakota	0	0	40.00/	0	0	0	0	0	0	0	
South Atlantic	4,213		-12.0%		0	3,777	4,312	436	465	0	C
Delaware	0	0		0	0	0	0	0	0	0	
District of Columbia	0	0		0	0	0	0	0	0	0	
Florida	3,184	3,302	-3.6%	0	0	3,184	3,302	0	0	0	
Georgia	0	0		0	0	0	0	0	0	0	
Maryland	527	527	0.0%	0	0	527	527	0	0	0	
North Carolina	0	0		0	0	0	٥	0	0	0	
South Carolina		<u> </u>	47.00/	0	0	<u> </u>	0	<u> </u>		0	
Virginia West Virginia	502	949	-47.0%	0	0	66	483	436	465	0	
	0	0		0	0	0	0	0	0	0	
East South Central Alabama	0	0		0	0	0	0	0	0	0	
Kentucky	0	0		0	0	0	0	0	0	0	
	0	0		0	0	0	0	0	0	0	
Mississippi	0	0			0	0	0	0	0	0	
Tennessee West South Central	7	10	-34.0%	0	0	0	0	0	0	7	10
	0	0	-34.0%		0	0	0	0	0	0	10
Arkansas Louisiana	0	0		0	0	0	0	0	0	0	
Oklahoma	0	10	-34.0%	0	0	0	0	0	0	7	10
Texas	0	0	-34.0%	0	0	0	0	0	0	0	10
Mountain	0	3	-82.0%	0	0	0	3	0	0	0	
Arizona	0	0	-02.0 /6	0	0	0	0	0	0	0	
Colorado	0	0		0	0	0	0	0	0	0	
Idaho	0	0		0	0	0	0	0	0	0	
Montana	0	0	 	0	0	0	0	0	0	0	
Nevada	0	0		0	0	0	0	0	0	0	
New Mexico	0	0		0	0	0	0	0	0	0	
Utah	0	3	-82.0%	0	0	0	3	0	0	0	
Wyoming	0	0	-UZ.U /0 _	0	0	0	0	0	0	0	
Pacific Contiguous	614	601	2.2%	0	0	614	601	0	0	0	
California	390	368	5.8%	0	0	390	368	0	0	0	
Oregon	91	95	-4.3%	0	0	91	95	0	0	0	
Washington	134	138	-4.3% -3.2%		0	134	138	0	0	0	
Pacific Noncontiguous	355	372	-3.2% -4.6%	0	0	0	138	355	372	0	
Alaska	355	0	-4.0%	0	0	0	0	355	0	0	
Hawaii	355	372	-4.6%		0	0	0	355	372	0	-
U.S. Total	13,437	14,139	-4.6% -5.0%	361	386	11,027	11,606	2,042	2,137	7	10

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

Census Division					Electric Pov		ant Bower				
and State		All Sectors		Electric	Utilities	Independe Produ		Commerc	ial Sector	Industria	al Sector
una ciato	October	October	Percentage	October	October	October	October	October	October	October	October
	2017	2016	Change	2017	2016	2017	2016	2017	2016	2017	2016
New England	5,157	4,173	24.0%	809	755	3,968		1	1	380	357
Connecticut	386	228	69.0%	0	0	386	228	0	0	0	C
Maine	2,006	1,432	40.0%	0	0	1,626	1,075	0	0	380	357
Massachusetts	NM	172	NM	0	0	NM	172	0	0	0	C
New Hampshire	2,025	1,867	8.5%	436	473	1,589	1,394	0	0	0	C
Rhode Island	0	0		0	0	0	0	0	0	0	(
Vermont	557	475	17.0%	373	282	NM	192	0	1	0	(
Middle Atlantic	1,132	1,026	10.0%	0	0	552	470	0	0	580	557
New Jersey	0	0	40.00/	0	0	0	0	0	0	0	(
New York	646	556	16.0%	0	0	552	470	0	0	93	86
Pennsylvania	487	471	3.4%	0	0	1 100	0	0	0	487	471
East North Central	2,385	1,702	40.0%	556	174	1,189	894	0	0	641	635
Illinois	0	0		0	0	0	0	0	0	0	(
Indiana	4 475	1 202	22.00/	0	0	1 170	0	0	0	0	224
Michigan Ohio	1,475	1,202	23.0%	0	0	1,178	881		0	297	321 93
	102	106	-3.7% 105.0%	0 556	0 174	11	13	0	0	91 252	221
Wisconsin West North Central	808 972	394 846	105.0%	556 177	174	554	368	26	15	252	
	9/2	846	-100.0%	1//	185	554	368	20	15	215	2/9
lowa Kansas	0	0	-100.0%	0	0	0	0	0	0	0	(
Minnesota	946	831	14.0%	177	185	554	368	0	0	215	279
Missouri	26	15	72.0%	0	0	004	0	26	15	0	218
Nebraska	20	0	72.076	0	0	0	0	0	0	0	
North Dakota	0	0		0	0	0	0	0	0	0	
South Dakota	0	0		0	0	0	0	0	0	0	
South Atlantic	10,740	8,343	29.0%	1,919	1,009	3,545	٥	7	13	5,269	5,151
Delaware	10,740	0,545	23.070	1,313	0	0,049	0	0	0	0,203	3,131
District of Columbia	0	0		0	0	0	0	0	0	0	(
Florida	1,927	1,554	24.0%	0	0	1,205	921	0	0	722	633
Georgia	2,738	2,488	10.0%	0	0	738	541	0	0	2,000	1,947
Maryland	43	70	-39.0%	0	0	0	0	7	13	36	57
North Carolina	1,437	942	52.0%	0	0	816	362	0	0	621	581
South Carolina	1,390	1,273	9.2%	154	85	484	320	0	0	753	869
Virginia	3,205	2,015	59.0%	1,766	924	303	26	0	0	1,137	1,065
West Virginia	0	0		0	0	0	0	0	0	0	. (
East South Central	2,904	3,015	-3.7%	0	0	198	231	0	0	2,706	2,784
Alabama	1,840	1,961	-6.2%	0	0	198	231	0	0	1,642	1,730
Kentucky	134	109	23.0%	0	0	0	0	0	0	134	109
Mississippi	618	630	-1.8%	0	0	0	0	0	0	618	630
Tennessee	312	316	-1.3%	0	0	0	0	0	0	312	316
West South Central	2,575	2,458	4.8%	0	0	241	0	0	0	2,334	2,458
Arkansas	577	525	9.8%	0	0	0	0	0	0	577	525
Louisiana	1,233	1,413	-13.0%	0	0	0	0	0	0	1,233	1,413
Oklahoma	166	162	2.6%	0	0	0	0	0	0	166	162
Texas	600	358	68.0%	0	0	241	0	0	0	359	358
Mountain	472	565	-16.0%	0	0	392	415	0	0	80	149
Arizona	280	263	6.6%	0	0	280	263	0	0	0	C
Colorado	87	126	-31.0%	0	0	87	126	0	0	0	(
Idaho	85	157	-46.0%	0	0	25	27	0	0	60	130
Montana	20	19	4.1%	0	0	0	0	0	0	20	19
Nevada	0	0		0	0	0	0	0	0	0	(
New Mexico	0	0		0	0	0	0	0	0	0	(
Utah	0	0		0	0	0	0	0	0	0	(
Wyoming	0	0		0	0	0	0	0	0	0	(
Pacific Contiguous	5,713	5,470	4.4%	432	452	3,754		0	0	1,528	1,487
California	3,889	3,496	11.0%	0	0	3,464	3,171	0	0	424	325
Oregon	641	694	-7.7%	0	0	289	360	0	0	351	334
Washington	1,184	1,281	-7.6%	432	452	0		0	0	752	828
Pacific Noncontiguous	0	0		0	0	0	0	0	0	0	(
A.L				^ 1	^I	^					
Alaska Hawaii	0	0		0	0	0	0	0	0	0	C

Table 2.14.B. Consumption of Wood / Wood Waste Biomass for Electricity Generation by State, by Sector,

Year-to-Date through October 2017 and October 2016 (Billion Btus)

					Electric Pov						
Census Division and State		All Sectors		Electric	Litilities	Independe Produ		Commercia	ol Soctor	Industrial	Sector
and State	October	October	Percentage	October	October	October	October	October	October	October	October
	2017 YTD	2016 YTD	Change	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD	2017 YTD	2016 YTD
New England	51,578	49,553	4.1%	7,078	7,663	39,976	37,621	44	17	4,479	4,252
Connecticut	3,936	3,724	5.7%	0	0	3,936	3,724	0	0	0	0
Maine	20,948	20,055	4.5%	0	0	16,433	15,794	36	8	4,479	4,252
Massachusetts	1,944	1,877	3.5%	0	0	1,944	1,877	0	0	0	0
New Hampshire	19,642	18,523	6.0%	3,831	4,016	15,811	14,508	0	0	0	0
Rhode Island	0	5 272	4.00/	0	0	0	0	0	0	0	0
Vermont Middle Atlantic	5,108	5,373	-4.9%	3,247	3,648	1,852	1,717	8	8	F 660	E 445
New Jersey	11,352	10,536	7.7%	0	0	5,683	5,091	0	0	5,669	5,445
New York	6,571	5,973	10.0%	0	0	5,682	5,076	0	0	889	897
Pennsylvania	4,781	4,563	4.8%	0	0	3,002	15	0	0	4,779	4,548
East North Central	21,867	19,900	9.9%	4,405	3,568	11,055	9,817	0	0	6,407	6,514
Illinois	0	0		0	0,000	0	0,017	0	0	0, 107	0,011
Indiana	0	0		0	0	0	0	0	0	0	0
Michigan	13,880	12,742	8.9%	0	0	10,930	9,685	0	0	2,950	3,056
Ohio	1,059	1,083	-2.2%	0	0	125	131	0	0	934	951
Wisconsin	6,928	6,076	14.0%	4,405	3,568	0	0	0	0	2,523	2,507
West North Central	9,366	7,909	18.0%	1,826	1,706	4,844	3,641	298	284	2,398	2,278
Iowa	10	5	111.0%	0	0	0	0	10	5	0	0
Kansas	0	0		0	0	0	0	0	0	0	0
Minnesota	9,095	7,660	19.0%	1,826	1,706	4,844	3,641	26	36	2,398	2,278
Missouri	261	244	7.3%	0	0	0	0	261	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	00.040		0	0	0	00 570	0	0	50.040	50.040
South Atlantic	105,147	96,849	8.6%	18,795	17,118	32,678	26,573	34	109	53,640	53,049
Delaware District of Columbia	0	0		0	0	0	0	0	0	0	0
Florida	16,937	13,517	25.0%	0	0	9,419	6,119	0	0	7,518	7,398
Georgia	27,152	25,737	5.5%	0	0	7,262	5,916	0	0	19,891	19,822
Maryland	550	597	-7.8%	0	0	0	0,310	34	109	516	488
North Carolina	13,443	12,114	11.0%	0	0	7,700	6,794	0	0	5,743	5,320
South Carolina	15,809	15,281	3.5%	1,520	1,382	5,590	5,269	0	0	8,699	8,631
Virginia	31,256	29,603	5.6%	17,275	15,736	2,707	2,476	0	0	11,274	11,391
West Virginia	0	0		0	0	0	0	0	0	0	0
East South Central	30,615	30,478	0.5%	0	0	2,043	2,056	0	0	28,572	28,421
Alabama	19,809	19,615	1.0%	0	0	2,043	2,056	0	0	17,766	17,559
Kentucky	1,367	1,363	0.3%	0	0	0	0	0	0	1,367	1,363
Mississippi	5,846	6,040	-3.2%	0	0	0	0	0	0	5,846	6,040
Tennessee	3,593	3,460	3.9%	0	0	0	0	0	0	3,593	3,460
West South Central	24,891	25,503	-2.4%	0	337	1,218	1,449	0	0	23,672	23,717
Arkansas	5,667	5,345	6.0%	0	0	0	0	0	0	5,667	5,345
Louisiana	12,997	13,281	-2.1%	0	0	0	0	0	0	12,997	13,281
Oklahoma	1,288	1,375 5,501	-6.3% -10.0%	0	337	0 1,218	0 1,449	0	0	1,288 3,720	1,375 3,716
Texas Mountain	4,938 5,662	5,613	0.9%	0	0	4,303	4,081	0	0	1,359	1,531
Arizona	2,949	2,811	4.9%	0	0	2,949	2,811	0	0	1,359	1,551
Colorado	1,101	999	10.0%	0	0	1,101	999	0	0	0	0
Idaho	1,406	1,609	-13.0%	0	0	253	272	0	0	1,154	1,337
Montana	205	194	5.9%	0	0	0	0	0	0	205	194
Nevada	0	0		0	0	0	0	0	0	0	0
New Mexico	0	0		0	0	0	0	0	0	0	0
Utah	0	0		0	0	0	0	0	0	0	0
Wyoming	0	0		0	0	0	0	0	0	0	0
Pacific Contiguous	55,090	52,500	4.9%	4,340	3,996	36,024	33,776	0	0	14,726	14,727
California	36,941	35,062	5.4%	0	0	33,256	31,257	0	0	3,685	3,805
Oregon	6,192	5,835	6.1%	0	0	2,768	2,519	0	0	3,424	3,316
Washington	11,957	11,602	3.1%	4,340	3,996	0	0	0	0	7,617	7,606
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	315,566	298,840	5.6%	36,444	34,388	137,824	124,105	376	411	140,922	139,936

Table 3.1. Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, 2007 - October 2017

Tubio offi otoono	s of Coal, Petrolet	Electric Power Sector			Electric Utilities		Inder	pendent Power Produ	icers
		Petroluem			Petroluem		Шаср	Petroluem	10013
		Liquids	Petroleum		Liquids	Petroleum		Liquids	Petroleum
	Coal	•	Coke	Coal	(Thousand	Coke	Coal	,	Coke
Period	(Thousand Tons)	Barrels)	(Thousand Tons)	(Thousand Tons)	Barrels)	(Thousand Tons)	(Thousand Tons)	Barrels)	(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		739	127,463	26,108	468	34,126	·	270
2009	189,467	39,210	1,394	154,815	25,811	1,194	34,652	13,399	201
2010	· · · · · · · · · · · · · · · · · · ·	35,706	1,019	143,744	24,798	850	31,173	· ·	168
2011	172,387	34,847	508	142,103	25,648	404	30,284	· ·	104
2012	·		495	150,942	23,875	414	34,174	,	81
2013	·	31,673	390	120,792	22,494	303	27,092	·	86
2014	151,548		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 Mo	onth 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		1,102	128,351	21,450	973	33,757	9,941	129
October	175,588		1,151	138,712	21,540	1,026	36,876	,	125
November	188,595		1,290	149,168	21,946	1,159	39,427	11,542	131
December	· · · · · ·		1,340	153,226	21,443	1,163	42,322	11,441	177
Year 2016, End of Mo	,	,,,,,	,		, -	,	,-	,	
January	•	32,307	1,320	146,300	20,894	1,089	40,903	11,412	231
February	·		1,323	145,895	20,651	1,064	41,168	·	259
March			1,240	148,648	20,642	974	42,905	·	266
April	193,185	31,788	1,181	150,859	20,926	901	42,327	10,863	280
May	·	32,139	1,071	150,639	21,202	826	41,778	,	246
June			905	144,309	21,133	689	37,777	10,859	216
July	168,119	·	858	134,344	20,906	678	33,775	·	180
August	158,908	·	780	128,256	20,846	589	30,652	14,635	191
Sept	156,567	35,555	768	127,532	20,925	566	29,035	·	201
October	160,932	35,754	813	131,510	21,022	606	29,422	14,732	207
November	, ,	31,920	833	138,091	21,192	606	32,185	·	227
December			845		20,920	603	31,124		241
Year 2017, End of Mo		31,702	043	130,003	20,920	003	31,124	10,701	241
	· · · · · · · · · · · · · · · · · · ·	31,468	794	125,187	20,714	542	30,988	10,754	252
January February	160,447	31,468	821	125,187	20,714	542	32,438	·	252 270
March	161,691	31,622	855	128,575	21,144	566	32,436	·	289
	·				·		·	·	304
April	163,726	31,325	933	130,310	21,030	630	33,416	·	304
May	162,396	30,891	881	129,229	20,604	570	33,167	10,286	
June	·	30,545	867	126,381	20,543	542	31,336		325
July	·		875	117,574	20,548	552	27,944	·	323
August	141,672	30,068	918	114,013	20,225	576	27,659	·	341
Sept	139,531	29,643	987	113,336	20,051	632	26,195	·	356
October	141,169	29,642	1,056	114,806	20,002	690	26,363	9,641	366

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, October 2017 and 2016

Census Division and State		Coal (Thousand Tons)			etroleum Liquid housand Barrel	s)		Petroleum Coke (Thousand Tons))
	October 2017	October 2016	Percentage Change	October 2017	October 2016	Percentage Change	October 2017	October 2016	Percentage Change
New England	W	1,839	W	3,891	4,539	-14.3%	0	0	
Connecticut	W	W	W	1,404	1,618	-13.2%	0	0	
Maine	0	0		389	482	-19.3%	0	0	
Massachusetts	W	W	W	1,572	1,856	-15.3%	0	0	
New Hampshire	W	W	W	336	374	-10.0%	0	0	
Rhode Island	W	W	W	149	156	-4.2%	0	0	
Vermont	0	0		41	53	-22.2%	0	0	
Middle Atlantic	4,656		-2.0%	5,399	9,622	-43.9%	0	W	W
New Jersey	141	787	-82.2%	625	685	-8.8%	0	9	
New York	W	W	W	3,542	7,566	-53.2%	0	0	
Pennsylvania	W	W	W	1,232	1,371	-10.1%	0		
East North Central	29,696	·	-16.7%	1,074	1,131	-5.1%	408		
Illinois	6,735		-0.4%	72	84	-14.0%	0		
Indiana	8,273	·	-18.6%	109	113	-3.6%	W		
Michigan	5,420		-9.8%	310	338	-8.3%	W		
Ohio	5,452		-34.2%	394	372	6.0%	W		
Wisconsin	3,816	·	-13.4%	188	224	-16.2%	W		
West North Central	27,353		-12.2%	853	1,068	-20.1%	0	0	
lowa	6,601	8,199	-19.5%	106	159	-33.3%	0	0	
Kansas	4,093		-12.4%	113	136	-16.5%	0	0	
Minnesota	3,473	·	-15.3%	112	149	-24.8%	0	,	
Missouri	8,095		-12.4%	343	403	-14.8%	0	·	
Nebraska	3,186	·	-0.9% W	105	123	-15.0%	0	·	
North Dakota South Dakota	W	W	W	29 45	42 57	-29.8% -21.1%	0	,	
South Atlantic	24,438		-5.9%	45 12,048	11,979	-21.1% 0.6%	0 W		
Delaware	24,436 W	25,966 W	-5.9% W	385	575	-33.1%	0		
Delaware	VV	VV	VV	300	5/5	-33.1%	0	0	
District of Columbia	0	0		0	0		0	0	'
Florida	4,146	4,830	-14.2%	5,458	4,917	11.0%	W	W	W
Georgia	5,101	4,372	16.7%	811	816	-0.7%	0	0	
Maryland	1,551	927	67.3%	755	925	-18.4%	0	0	
North Carolina	4,225	4,775	-11.5%	1,210	1,246	-2.9%	0	0	
South Carolina	4,138	5,136	-19.4%	701	718	-2.4%	0	0	
Virginia	1,051	1,066	-1.4%	2,578	2,644	-2.5%	0	0	
West Virginia	W	W	W	151	138	8.8%	W	W	W
East South Central	13,593	15,339	-11.4%	1,866	1,871	-0.3%	W	W	W
Alabama	3,083	3,706	-16.8%	327	339	-3.6%	0	0	
Kentucky	7,021	7,479	-6.1%	241	238	1.4%	W	W	W
Mississippi	950	1,066	-10.9%	566	571	-0.8%	0	0	
Tennessee	2,538	3,087	-17.8%	731	723	1.1%	0	0	
West South Central	19,427	23,550	-17.5%	1,713	1,852	-7.5%	W	W	W
Arkansas	2,720	3,950	-31.1%	183	191	-4.1%	0	0	
Louisiana	2,310	2,382	-3.0%	383	426	-10.1%	W	W	W
Oklahoma	3,782	4,966	-23.8%	96	112	-14.0%	0	0	
Texas	10,615	12,252	-13.4%	1,051	1,124	-6.5%	0	0	
Mountain	19,676	21,290	-7.6%	390	412	-5.2%	W	W	W
Arizona	3,235	3,854	-16.1%	133	140	-4.9%	0	0	
Colorado	4,378	5,191	-15.7%	141	132	7.1%	0	0	
Idaho	0	0		0	0	-17.6%	0	0	
Montana	W	W	W	20	18	7.3%	W	W	W
Nevada	W	W	W	5	15	-64.6%	0	0	
New Mexico	W	W	W	NM	41	NM	0	0	
Utah	5,042	5,239	-3.8%	29	37	-20.0%	0	0	
Wyoming	4,568	4,121	10.9%	35	28	23.8%	0	0	
Pacific Contiguous	W	W	W	333	500	-33.3%	0	0	
California	0	0		166	162	2.8%	0	0	
Oregon	W	VV	W	69	78	-11.3%	0	0	
Washington	W	W	W	98	260	-62.4%	0	0	
Pacific Neppertiqueus	101	100	10.0	0.074	0.700	05.404		_	
Noncontiguous	W			2,074	2,780		0		
Alaska	0		W	101	407	-75.2%	0		
Hawaii	141 160		W	1,973	2,373		1.056		
U.S. Total	141,169	160,932	-12.3%	29,642	35,754	-17.1%	1,056	813	29.9%

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.

 $^{{\}sf NM}={\sf Not}$ 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.

Table 3.3 Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, by Census Divison, October 2017 and 2016

	E	lectric Power Secto	r	Electric	Utilities	Independent Po	wer Producers
Census Division	October 2017	October 2016	Percentage Change	October 2017	October 2016	October 2017	October 2016
Coal (Thousand Tons)							
New England	W	1,839	W	W	W	W	W
Middle Atlantic	4,656	4,751	-2.0%	W	0	W	4,751
East North Central	29,696	35,632	-16.7%	19,419	22,909	10,277	12,723
West North Central	27,353	31,151	-12.2%	27,353	W	0	W
South Atlantic	24,438	25,966	-5.9%	21,801	24,234	2,636	1,732
East South Central	13,593	15,339	-11.4%	13,593	15,339	0	0
West South Central	19,427	23,550	-17.5%	13,050	16,102	6,377	7,448
Mountain	19,676	21,290	-7.6%	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	141,169	160,932	-12.3%	114,806	131,510	26,363	29,422
Petroleum Liquids (Thousand Barr	rels)						
New England	3,891	4,539	-14.3%	619	699	3,273	3,840
Middle Atlantic	5,399	9,622	-43.9%	2,223	2,228	3,177	7,393
East North Central	1,074	1,131	-5.1%	741	822	333	309
West North Central	853	1,068	-20.1%	831	1,042	23	26
South Atlantic	12,048	11,979	0.6%	9,909	9,504	2,139	2,475
East South Central	1,866	1,871	-0.3%	1,793	1,798	73	73
West South Central	1,713	1,852	-7.5%	1,320	1,397	393	455
Mountain	390	412	-5.2%	355	379	35	32
Pacific Contiguous	333	500	-33.3%	228	404	NM	97
Pacific Noncontiguous	2,074	2,780	-25.4%	1,984	2,749	90	32
U.S. Total	29,642	35,754	-17.1%	20,002	21,022	9,641	14,732
Petroleum Coke (Thousand Tons)	•						
New England	0	0		0	0	0	0
Middle Atlantic	0	W	W	0	0	0	W
East North Central	408	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	C
Mountain	W	W	W	0	0	W	W
Pacific Contiguous	0	0		0	0	0	C
Pacific Noncontiguous	0	0		0	0	0	0
U.S. Total	1,056	813	29.9%	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 - October 2017

		Electric Power Sect	or	
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

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 - October 2017

Table 4.1. Red	eipts, Average	e Cost, and Q	uality of Fossi		I (All Sectors)	, 2007 - Octob	er 2017		Detrolous			
	Recei	inte	Coa Average				Rece	vinte		m Liquids ge Cost	I	
	Recei	ipts	Average	COSI			Nece	ipis	Averaç	Je Cost		
			(Dollars	(Dollars	Average Sulfur				(Dollars	(Dollars	Average Sulfur	
Period	(Billion Btu)	(Thousand Tons)	per MMBtu)	per Ton)	Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	per MMBtu)		-	Percentage of Consumption
Annual Totals	Btuj	10115)	WIIWIBCU)	1011)	Weight	Consumption	Biu)	Barreis	WIND(u)	Barrei	Weight	Consumption
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			99.6
2009	19,437,966	981,477	2.21	43.74	1.01	102.8	330,043	54,181	10.25			104.8
2010	19,289,661	979,918	2.27	44.64	1.16	97.9	275,058	45,472	14.02			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			60.6
February	1,175,859	61,197	2.26	43.43	1.29	89.2	20,116	3,305	12.61			36.0
March	1,237,697	63,691	2.26	43.97	1.28	106.4	14,354	2,373	12.54			116.0
April	1,183,833	61,120	2.23	43.29	1.32	122.6	9,153	1,520	13.18			
May	1,228,784	63,030	2.26	44.13	1.35	107.8	11,636	1,923	12.71			
June	1,201,874	62,061	2.25	43.65	1.36	88.3	9,858	1,630	13.57			
July	1,302,808	68,352	2.21	42.10	1.25	87.6	8,538	1,410	12.57	76.20		
August	1,395,614	72,257	2.23	43.11	1.30	96.1	9,362	1,552	12.08			77.4
Sept	1,361,468	70,737	2.22	42.67	1.30	107.0	14,105	2,316	9.67			
October	1,285,699	67,027	2.15	41.16	1.26	122.1	13,066	2,137	9.10			121.0
November December	1,170,593 1,124,253	61,257 58,569	2.15 2.16	41.17 41.43	1.25 1.28	121.9 113.5	14,148 10,037	2,306 1,657	8.96 8.83			119.9 92.5
Year 2016	1,124,233	56,569	2.10	41.43	1.20	113.5	10,037	1,057	0.03	55.52	0.42	92.5
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		0.47	52.0
March	896,983	45,720		42.66	1.46	110.7	6,912	1,140	6.92			
April	807,001	41,015		42.44	1.45	101.8	8,592	1,414	8.37			
May	871,890	44,729	2.16	42.13	1.44	96.6	9,231	1,536	9.82		0.45	
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			
February	997,916	52,098		39.58	1.30	106.1	6,122	1,015	11.61			
March	966,998	50,174	2.08	40.17	1.35	100.2	11,990	2,018	11.62			
April	893,611	46,168		40.85	1.34	101.6	6,223	1,033	11.59			
May	939,123	48,842	2.13	40.90	1.32	94.1	6,485	1,082	W			
June	1,032,209	53,498		40.71	1.31	89.0	7,209	1,196	W			63.4
July	1,080,359	56,632	2.09	39.84	1.22	79.7	6,488		W			
August	1,172,537	61,134	2.08	39.85	1.30	91.1	6,866	1,136	W			61.0 57.6
Sept	1,005,155 990,301	52,845 51,848	2.03	38.55 38.86	1.24 1.27	94.6 100.8	6,394 7,328	1,061 1,212	11.87	71.73		
October	990,301	51,848	2.03	38.86	1.27	100.8	1,328	1,212	11.87	/1./3	0.52	04.6
Year to Date 2015	12,791,362	663,103	2.24	43.14	1.30	101.3	123,462	20,358	12.00	72.83	0.48	71.8
2015	10,324,062	536,031	2.24	43.14	1.35	92.7	84,155	13,885	9.17			
2016	10,324,062	530,701	2.12	39.92	1.29	93.6	74,410		11.47			
	Ending in Octobe		2.00	39.92	1.29	93.0	74,410	12,305	11.47	1 00.91	0.49	00.2
2016	12,618,908	655,857	2.13	40.92	1.34	96.4	108,341	17,848	9.11	55.35	0.49	73.2
2017	12,369,556	645,441	2.08	39.89	1.29	94.5	92,064	15,306	9.11 W			
2017	12,000,000	040,441	2.00	59.09	1.29	34.3	32,004	10,000	VV	. **	0.48	01.3

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, 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.

1 4510 7.1.116	ceipts, Average	o oost, and G	Petroleu		ii (All Ocotols)	,, <u>2007</u> - Octob	,	,	Natural Gas			All Fossil Fuels
	Recei	pts	Averag	e Cost			Rece	eipts	Averag	e Cost		Average Cost
	(Billion	(Thousand	(Dollars per	(Dollars per	Average Sulfur Percent by		(Billion	(Thousand	(Dollars per	(Dollars per	Percentage of	(Dollars per
Period	` Btu)	Tons)	MMbtu)	Ton)	_	_	•	•	MMBtu)	Mcf)		MMBtu)
Annual Totals												
2007	161,091	5,656	1.51	43.02		77.5	7,396,233		7.11	7.30		
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		119.3	8,319,329		4.74	4.86		
2010	169,508	5,963	2.28	64.85		98.5	8,867,396		5.09	5.20		3.26
2011	171,100	5,980	3.03	86.78		98.2	9,250,652		4.72	4.83		
2012	119,667	4,180	2.24	64.14		83.3	9,746,691	9,531,389	3.42	3.50		
2013	132,474	4,660	2.18	61.95		73.5	8,721,114		4.33	4.44	89.7	3.09
2014	147,310	5,195		56.23		91.2	8,679,286		5.00	5.14	89.6	
2015 2016	138,668 116,942	4,897 4,166	1.84 1.65	52.11 46.30	5.25 5.40	94.4 77.9	10,173,502 10,619,105		3.23 2.87	3.34 2.97	89.9 90.7	
Year 2015	110,942	4,100	1.65	40.30	5.40	77.9	10,619,105	10,271,100	2.01	2.91	90.7	2.47
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		
March	9,700	346	2.00	56.19			755,061	731,417	3.55	3.66		
April	11,283	401	1.96	55.27	5.00	98.8	717,016	·	3.10	3.21	90.7	2.58
May	12,122	428	2.02	57.16		98.3	787,887	762,232	3.14	3.25		
June	9,569	337	1.87	53.03		84.8	934,171	902,955	3.12	3.23		
July	13,055	461	1.90	53.83		94.1	1,093,897	1,057,630	3.11	3.22	90.7	2.63
August	11,554	405	1.82	52.03		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		79.8	826,179		3.02	3.13		
February	11,273	408	1.30	35.80	5.53	96.1	736,278	711,506	2.70	2.79		
March	10,313	363	1.41	40.14		81.1	797,607	771,918	2.23	2.30		2.21
April	10,308	369	1.35	37.75	5.56	81.0	773,337	748,523	2.42	2.50	90.9	
May	8,554	307	1.32	36.76		65.8	857,644	830,896	2.39	2.47	91.1	2.31
June	6,895	240		40.48		50.1	1,020,410	·	2.67	2.75		2.39
July	10,032	355	1.47	41.45		70.8	1,189,145		2.97	3.07	91.3	
August	11,033 10,741	398 381	1.75 2.07	48.48 58.30		76.5 84.6	1,205,876 968,648		2.95	3.06 3.18		2.52
Sept October	8,844	317	1.98	55.43		92.5	795,915	935,630 770,111	3.07 3.13	3.18		2.55 2.51
November	9,365	333	2.26	63.59		92.5 82.0	718,522	695,273	3.13	3.12	90.3	2.47
December	9,945	355	2.07	57.94		82.3	729,545		3.96	4.10	89.9	
Year 2017	0,040	000	2.07	07.04	0.40	02.0	720,040	700,000	0.00	4.10	00.0	2.02
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		83.0	532,101	514,990	3.58	3.70		2.60
March	8,628	309	2.06	57.51	5.29	86.8	616,880	597,210	3.36	3.47	71.3	
April	5,835	208	2.00	55.96		93.1	576,203		3.38	3.49	76.1	2.62
May	6,776	242	2.05	57.46		61.1	646,016		3.49	3.60		
June	8,657	308		W		71.1	762,488	737,995	3.30	3.41	76.4	
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	
Sept	7,915	284	W	W		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
Year to Date												
2015	115,513	4,075	1.89	53.63		91.4	8,571,566		3.34	3.46		
2016	97,632	3,479	1.55	43.45		77.0	9,171,038		2.78	2.87	90.8	
2017	77,280	2,756	W	W	5.53	76.9	7,019,637	6,791,159	3.37	3.48	75.2	W
	s Ending in Octobe		,		Г							
2016		4,300	1.55	43.66		82.0	10,772,975		2.75	2.85		
2017	96,589	3,443	W	W	5.53	77.9	8,467,704	8,191,790	3.39	3.51	77.4	W

Displayed values of zero may represent small values that round to zero.

NM = Not meaningful due to large relative standard error or excessive percentage change.

W = Withheld to avoid disclosure of individual company data.

Notes:

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

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

- Values for 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.

Table 4.2 Receipts Average Cost and Quality of Fossil Fuels: Flectric Utilities 2007 - October 2017

Table 4.2. Red	eipts, Average	e Cost, and Q	uality of Fossi		tric Utilities, 2	007 - October	2017		Detrolou	m l invido		
	Recei	nte	Coa Average	1			Rece	inte		m Liquids ge Cost	I	
	Kecei	pis	Average	COST			Nece	ipis	Avera	Je Cost		
			(Dollars	•	Average Sulfur				(Dollars		Average Sulfur	
Period	(Billion Btu)	(Thousand Tons)	per MMBtu)	per Ton)	Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	per MMBtu)		-	Percentage of Consumption
Annual Totals	Biaj	10113/	WWIDtaj	1011)	Weight	Consumption	Btuj	Daireis)	WW Dta)	Barrery	Weight	Consumption
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			99.7
2009	14,402,019	719,253	2.22	44.47	0.99	103.4	202,598	32,959	10.44			103.5
2010	14,226,995	713,094	2.27	45.33	1.14	98.8	189,790	31,099	13.94			101.0
2011	13,871,559	699,353	2.40	47.67	1.16	101.5	144,255	23,859	20.30			114.5
2012	11,939,543	609,445	2.43	47.51	1.18	99.0	86,030	14,252	22.11			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			58.8
February	722,024	37,129	2.16	41.95	1.23	98.2	5,814	955	6.92			64.1
March	685,422	34,609	2.19	43.49	1.34	110.9	5,223	851	6.69			77.5
April	612,742	30,953	2.19	43.39	1.31	107.4	6,897	1,126	8.35			106.4
May	655,166	33,408	2.17	42.60	1.25	98.5	6,742	1,114	9.12			91.7
June	775,536	39,900	2.15	41.79	1.24	85.9	5,511	908	10.51			70.9
July	849,005	43,981	2.17	41.99	1.15	81.1	7,117	1,142	11.54		0.52	66.7
August	925,332	47,610	2.17	42.19	1.19	88.3	6,737	1,090	9.15			66.2
Sept	851,137	43,822	2.18	42.34	1.18	97.6	5,514	896	9.00			79.2
October	842,651	43,693	2.12	40.99	1.16	110.5	5,205	851	9.80			73.4
November	805,502	41,615	2.13	41.25	1.20	117.8	6,780	1,106	9.80			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	704 000	44.454	0.44	44.04	4.44	07.5	0.400	4.000	44.00	07.00	0.44	70.7
January	791,083	41,154	2.14	41.21	1.14	87.5	6,498	1,069	11.09			72.7
February	732,712	38,088	2.11	40.63	1.20	106.6	4,563	754	11.53			64.8
March	702,185 646,292	36,293	2.13 2.15	41.15 41.91	1.21 1.22	101.0 104.4	10,468 4,679	1,759 774	11.58 11.38			130.7
April	688,996	33,094 35,438		41.91	1.22	94.5	4,679	774	11.38			65.0 58.4
May June	781,557	40,089	2.16 2.13	42.03	1.20	94.5	5,560	915	10.86			58.4 70.7
July	811,773	40,089	2.13	40.90	1.20	80.4	4,654	774	10.86			59.6
	882,432	45,611	2.12	40.90	1.12	92.4	5,107	838	11.08			65.5
August Sept	736,582	38,557	2.11	39.78	1.19	92.4	4,752	779	11.08			62.0
October	736,582	38,557	2.08	40.19	1.10		4,752	779	11.75			
Year to Date	720,081	37,815	2.09	40.19	1.10	103.9	4,000	7 90	11.90	73.15	J 0.49	J 59.6
2015	9,400,306	484,096	2.26	43.93	1.17	103.7	74,080	12,151	11.89	72.50	0.46	75.5
2016	7,669,928	394,169	2.17	42.18	1.17	94.6	60,948	9,954	8.95			73.6
2017	7,502,204	388,284	2.12	41.01	1.17	94.8	55,752	9,221	11.36			71.2
Rolling 12 Months			2.12	41.01	1.17	54.0	55,752	3,221	11.30	1 00.09	0.40	/ 1.2
2016	9,358,253	481,780	2.17	42.25	1.20	98.3	76,909	12,550	8.89	54.49	0.46	78.1
2017	9,089,153	470,322	2.12	41.04	1.18	95.5	68,098	11,252	11.15			70.1
2017	5,005,105	710,322	۷.۱۷	71.04	1.10	90.0	00,090	11,202	11.13	07.50	U.47	12.0

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Notes:

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

COAL - includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.

PETROLEUM LIQUIDS - includes distillate fuel oil and residual fuel oil. Prior to 2013, petroleum liquids included distillate fuel oil, 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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- 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.

			Petroleu	m Coke					Natural Gas			All Fossil Fuels
	Recei	pts	Average	Cost			Rece	eipts	Averag	e Cost		Average Cost
	(Billion	(Thousand	(Dollars per	(Dollars per	Average Sulfur Percent by	Percentage of	(Billion	(Thousand	(Dollars per	(Dollars per	Percentage of	(Dollars per
Period	Btu)	Tons)	MMbtu)	Ton)	Weight	Consumption	Btu)	Mcf)	MMBtu)	Mcf)	Consumption	MMBtu)
Annual Totals												
2007	84,812	2,964	1.73	49.57	5.09	105.6	2,378,104		7.47	7.67	84.6	
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		5.50	5.63		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		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		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		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		3.20	3.31	96.5	2.62
August	9,306	335	1.62	45.01	5.45	99.4	571,170		3.23	3.34	96.9	2.59
Sept	9,059	320	2.00	56.51	5.12	102.8	457,872		3.43	3.55		2.64
October	7,088	253	1.87	52.47	5.71	146.9	370,666	358,541	3.53	3.65		2.58
November	7,871	279	2.22	62.85	5.74	116.3	339,777	328,019	3.36	3.48		2.54
December	8,017	284	1.99	56.17	5.39	108.8	348,255	336,401	4.15	4.30		2.78
Year 2017	<u> </u>						·					
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		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		3.52	3.63		2.60
May	6,776	242	2.05	57.46	5.57	91.5	323,910		3.71	3.82		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		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	,	3.58	3.70		2.61
October	7,454	265	2.37	66.84	5.58	154.2	329,450	319,249	3.59	3.70		2.60
Year to Date	7,454	200	2.01	00.04	5.56	104.2	020,400	010,248	5.59	3.70	19.2	2.00
2015	97,356	3,418	1.84	52.37	5.14	125.8	3,966,269	3,837,110	3.63	3.75	96.1	2.71
2016	83,818	2,976	1.41	39.71	5.35	101.5	4,387,305		3.06	3.16		2.51
2017	75,309	2,684	2.11	59.24	5.52	118.1	3,381,051	3,271,909	3.64	3.76		2.63
ļ.	s Ending in Octobe		2.11	33.24	3.32	110.1	5,501,051	0,211,808	3.04	3.70	19.0	2.03
2016	102,391	3,628	1.41	39.81	5.41	108.4	5,138,784	4,971,049	3.04	3.14	96.8	2.51
2016	91,197	3,020	2.11	59.29	5.53	117.0	4,069,083	3,936,328	3.66	3.78		2.51
2017	91,197	3,247	۷.۱۱	59.29	5.53	117.0	4,009,063	3,930,328	3.00	3.78	0∠.3	∠.04

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

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

Table 4.3. Red	eipts, Average	e Cost, and Q	uality of Fossi		pendent Powe	er Producers,	2007 - Octobe	er 2017	Dotrolou	m Liquids		
	Recei	inte	Average				Rece	ainte		ge Cost		
	i i i i i i i i i i i i i i i i i i i	pts	Average	COSt			Nece	ripto	Averag			
			(Dollars	(Dollars	Average Sulfur				(Dollars	(Dollars	Average Sulfur	
Dorind	(Billion	(Thousand	per	per	Percent by	_	(Billion	(Thousand	per MMBtu)		Percent by	Percentage of
Period Annual Totals	Btu)	Tons)	MMBtu)	Ton)	Weight	Consumption	Btu)	Barrels)	WIWIDTU)	Barrel)	Weight	Consumption
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			94.4
2009	4,563,080	240,687	2.11	39.94	1.06	101.1	68,030	11,408	10.02			102.0
2010	4,555,898	243,585	2.20	41.15	1.21	96.0	49,598	8,420	14.80			89.9
2011	4,292,284	233,295	2.28	41.95	1.25	95.9	41,599	7,096	20.30		0.50	
2012	4,036,436	218,341	2.21	40.92	1.42	104.9	23,922	4,073	22.34			79.8
2013	4,032,431	217,572	2.20	40.95	1.48	99.1	43,432	7,205	19.71			110.1
2014	4,243,949	226,600	2.25	42.20	1.61	100.1	71,774	11,980	19.90			
2015	3,731,508	198,982	2.10	39.39	1.66	100.5	55,248	9,189	11.69			
2016	3,047,358	164,648	1.93	35.69	1.73	91.8	25,975	4,410	9.97			
Year 2015	· · · · · · · · · · · · · · · · · · ·	,	I				,	,				
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	
February	241,497	12,970	1.92	35.76	1.91	101.0	1,867	313	6.94	41.57		42.4
March	192,217	10,216	2.04	38.36	1.89	117.0	1,484	256		W		66.8
April	178,203	9,323	1.99	38.00	1.97	90.2	1,473	252			0.00	
May	200,347	10,560	2.08	39.52	2.05	94.7	2,331	396	11.84			
June	228,760	12,535	1.87	34.19	1.72	74.5	1,842	312	10.09			82.9
July	288,156	15,689	1.89	34.68	1.67	78.4	1,828	310	12.96			
August	309,421	16,607	1.89	35.21	1.71	83.3	2,262	383	10.26			
Sept	289,363	15,859	1.91	34.96	1.65	90.6	2,478	420	10.16			
October	280,681	15,236	1.88	34.66	1.62	101.0	2,885	492	10.39			
November	276,435	15,051	1.91	35.16	1.53	117.1	2,652	446				115.5
December	297,372	16,171	1.91	35.08	1.60	91.6	2,202	370	W	T W	0.50	65.7
Year 2017	202.070	15 606	1 02	26.25	1 50	04.6	2 670	AEG	12.00	92.00	0.47	02.7
January February	293,070 250,099	15,606 13,304	1.93 1.90	36.35 35.74	1.59 1.60	94.6 108.7	2,679 1,438	456 241	13.98 W			92.7 63.4
March	250,099	13,304	1.93	36.69	1.75	108.7	1,438	231	12.02			
April	231,929	12,350	1.93	37.09	1.75	97.9	1,344	233	12.02 W			78.7
May	234,471	12,642	1.99	36.90	1.67	95.0	1,718	293	W			
June	235,473	12,689	2.00	37.14	1.68	85.0	1,507	258				
July	253,594	13,865	1.97	36.04	1.55	78.8	1,739	297	W			
August	274,367	14,784	1.94	35.96	1.64	88.9	1,649	280	W			
Sept	254,384	13,609	1.84	34.37	1.64	90.0	1,491	258	W			59.9
October	246,724	13,227	1.83	34.24	1.61	96.2	2,321	393				
Year to Date	2.0,727	. 5,227	1.00	31.24		00.2	2,021	230	11.00		0.50	101.0
2015	3,167,367	168,714	2.12	39.88	1.67	97.9	47,438	7,889	12.10	72.86	0.47	80.7
2016	2,473,551	133,426	1.93	35.83	1.77	89.6	21,121	3,594	9.73			73.0
2017	2,521,769	135,134	1.93	36.03	1.64	92.8	17,270	2,941	11.84			
Rolling 12 Months			7.00	20.00		52.0	,2.0	_,0.1		1 23.30	1	. 5.0
2016	3,037,692	163,694	1.94	35.98	1.74	93.8	28,931	4,893	W	l w	0.47	84.8
2017	3,095,576	166,356	1.93	35.86	1.62	94.5	22,124	3,757	W			
	-,,			20.00	2	00	, '	3,. 31			L	. 5.0

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, 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.

			Petroleu	m Coke					Natural Gas			All Fossil Fuels
	Recei	pts	Averag	e Cost			Rece	eipts	Averag	e Cost		Average Cost
	(Billion	(Thousand		, per		Percentage of	•	•	(Dollars per	(Dollars per		(Dollars per
Period	Btu)	Tons)	MMbtu)	Ton)	Weight	Consumption	Btu)	Mcf)	MMBtu)	Mcf)	Consumption	MMBtu)
Annual Totals												
2007	56,580	1,994	1.02	28.95		69.3	4,097,825		6.92	7.11	97.2	4.06
2008	79,122	2,788	1.47	41.85		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		93.6	4,087,573		4.30	4.41	100.7	3.18
2010	30,079	1,050	1.74	49.80		72.3	4,212,611	4,119,103	4.94	5.05		3.5
2011	33,643	1,175	2.54	72.85		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		3.17	3.25	93.8	2.74
2013	16,150	575	W	W		65.6	4,025,263	3,917,898	4.25	4.36		V
2014	13,781	488	2.48	70.31	5.33	70.9	4,054,540	3,934,672	4.90	5.05		V
2015	14,550	524	2.45	68.22	5.26	67.3	4,683,291	4,530,195	2.94	3.04	93.2	V
2016	13,573	492	2.50	68.88	5.44	69.9	4,791,729	4,634,518	2.54	2.63	94.0	V
Year 2015												
January	1,427	52	W	W	5.10	77.7	341,822	330,761	4.08	4.22	91.0	V
February	562	20	W	W	4.53	30.3	301,145	291,394	5.27	5.45	92.2	V
March	956	34	W	W	4.81	48.8	347,024	336,090	3.37	3.49	93.3	V
April	1,501	54	W	W	4.95	79.8	324,962	313,969	2.65	2.75	94.0	V
May	1,348	48	W	W	5.17	69.5	359,864	347,963	2.75	2.85	93.5	V
June	1,237	44	W	W	5.22	69.1	425,118	410,985	2.68	2.78	93.7	V
July	1,119	40	W	W	5.30	58.9	516,995	500,696	2.71	2.79	93.6	V
August	1,289	45	W	W	5.62	67.7	511,789	495,450	2.71	2.80	93.7	V
Sept	432	16	W	W	5.44	22.4	445,913	431,110	2.69	2.79	93.4	V
October	1,295	47	W	W	5.38	71.8	394,437	381,566	2.55	2.64	93.1	V
November	1,643	59	W	W	5.35	82.8	351,912	340,122	2.31	2.40	93.1	V
December	1,742	65	W	W		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		30.6	384,972	373,040	2.04	2.11	94.6	W
June	348	12	W	W		20.5	457,044	·	2.41	2.49	94.4	V
July	223	8	W	W		12.1	552,956		2.66	2.75		W
August	1,510	55	W	W		77.3	569,120		2.62	2.71	94.3	V
Sept	1,483	53		W		90.7	448,820	433,556	2.61	2.70		W
October	1,549	56		W		78.5	362,466		2.60	2.69		W
November	1,294	47	W	W		83.4	313,867	304,227	2.59	2.67	93.5	W
December	1,501	55	W	W		84.2	313,521	303,233	3.83	3.95		
Year 2017	.,						0.10,0=	333,=33				
January	0	0				0.0	259,636	250,896	3.97	4.11	79.9	2.84
February	0	n				0.0	227,496	·	3.33	3.44		2.0- W
March	0	n				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		2.50 W
May	0	٥				0.0	269,235		3.19	3.29		W
June	0	٥				0.0	339,166		2.92	3.02	79.0	W
July	0	0				0.0	423,924		2.86	2.96		W
	0	0				0.0	412,138	398,444	2.76	2.90		W
August	0	0				0.0	342,641	398,444	2.76	2.85		W
Sept	0	0										
October Data	υ	0			<u></u>	0.0	310,113	300,091	2.60	2.69	78.8	2.26
Year to Date	44.400	2001	0.44	00.05	F 47	50.51	2.000.000	2 020 000	0.00	0.40	00.0	1 A
2015	11,166	399		68.35		59.5	3,969,069		3.06	3.16		V
2016	10,778	391	2.50	68.92	5.43	67.0	4,164,340		2.44	2.52		V 2.5/
2017	0	0				0.0	3,089,468	2,987,549	3.03	3.13	78.1	2.50
Rolling 12 Months				1			4.0=0 ====	4 - 4		1		
2016	14,162	516		W		74.5	4,878,562		2.41	2.50	94.0	W
2017	2,795	102	W	W	5.47	17.3	3,716,857	3,595,009	3.05	3.15	80.3	W

Displayed values of zero may represent small values that round to zero.

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Notes:

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

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

Table 4.4. Red	eipts, Average	e Cost, and Q			mercial Secto	or, 2007 - Octo	ber 2017		Detrolous			
	Recei	inte	Co Average				Rece	inte		m Liquids ge Cost	I	
	Rece	ipts	Average	e Cost	I		Nece	ipis	Averaç			
			(Dollars	,	Average Sulfur		<i></i>		(Dollars	-	Average Sulfur	
Period	(Billion Btu)	(Thousand Tons)	per MMBtu)	per Ton)	Percent by Weight	_	(Billion Btu)	(Thousand Barrels)	per MMBtu)			_
Annual Totals	Btuj	10113)	Wilvibra	1011)	Weight	Consumption	Btuj	Darreis	Wilvibta)	Barrery	Weight	Consumption
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		102.0
2009	41,182	1,876		63.68	1.67	104.3	3,517	583	10.82			
2010	37,778	1,747	2.82	61.06	1.77	101.6	2,395	400	15.24	91.25	0.38	
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	2.65	14.4	0	0				0.0
February	479	23		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	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	130 182	8	W W	W	3.08 3.00	11.1 13.6	0	0				0.0
November December	188	8		W	2.86	11.5		0				0.0
Year 2016	100	이	vvI	VV	2.00	11.5	Ч					0.0
January	139	6	W	W	2.87	8.1	0	ol				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	2.96	6.7 3.5	0	0				0.0
October Veer to Date	35	2	VV	VV	2.96	3.5	<u> </u>	<u> </u>				0.0
Year to Date 2015	2,070	92	2.88	64.62	2.48	13.8	0	0			I	0.0
2016	837	37	2.88 W	04.02 W	3.02	6.7	0	0				0.0
2017	446	20		W	2.99	3.9	0	0				0.0
Rolling 12 Months			v/	VV	2.39	3.9	٥	0		I		0.0
2016	1,207	53	w	W	3.00	7.8	0	٥١		I		0.0
2017	896	39		W	3.02	6.2	0	0				0.0
2017	000	00	**	**	0.02	0.2	<u> </u>	<u>_</u>		<u> </u>	<u> </u>	0.0

NM = Not meaningful due to large relative standard error or excessive percentage change.

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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, 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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			Petroleu						Natural Gas			All Fossil Fuels
	Recei	pts	Averag	e Cost			Rece	eipts	Averag	e Cost		Average Cost
			(Dollars	(Dollars	Average Sulfur				(Dollars	(Dollars		
B. C. I	(Billion	(Thousand	per	per	Percent by			•	per	per	Percentage of	
Period	Btu)	Tons)	MMbtu)	Ton)	Weight	Consumption	Btu)	Mcf)	MMBtu)	Mcf)	Consumption	MMBtu
Annual Totals		ء ا								2.10		
2007	0	0				0.0	23,502		7.99	8.18		
2008	370	14	2.14	58.36	5.53	135.3	71,670	·	9.01	9.24		
2009	252	9	1.65	46.54	5.11	102.8	81,134		5.18	5.30		
2010	410	15	2.19	60.59	5.67	122.5	92,055		5.39	5.51	105.1	4.8
2011	268	9	W	W	5.46	147.4	95,287	93,306	5.20	5.31	107.2	V
2012	0	0				0.0	18,315	18,008	5.88	5.98		V
2013	0	0				0.0	5,497	5,450	W	W		
2014	0	0				0.0	5,849	5,795	W	W		
2015	0	0				0.0	6,499	6,371	W	W		
2016	0	0				0.0	8,005	7,766	W	W	6.1	V
Year 2015		•										
January	0	0				0.0	552		W	W		
February	0	0				0.0	378		W	W		V
March	0	0				0.0	438		W	W		V
April	0	0				0.0	420		W	W		V
May	0	0				0.0	494		W	W		V
June	0	0			-	0.0	522		W	W	5.2	V
July	0	0			1	0.0	540	528	W	W	4.6	V
August	0	0			-	0.0	694	680	W	W	6.1	V
Sept	0	0				0.0	632	620	W	W	5.8	V
October	0	0				0.0	530	523	W	W	5.4	V
November	0	0				0.0	775	749	W	W	8.0	V
December	0	0				0.0	524	507	W	W	5.2	V
Year 2016												
January	0	0				0.0	1,241	1,203	W	W	11.3	V
February	0	0				0.0	488	477	W	W	4.9	V
March	0	0				0.0	620	610	W	W	6.2	V
April	0	0				0.0	578	567	W	W	6.1	V
May	0	0				0.0	599	587	W	W	6.1	V
June	0	0				0.0	599	585	W	W	5.3	V
July	0	0				0.0	691	667	W	W	5.0	V
August	0	0				0.0	802	765	W	W	5.6	V
Sept	0	0				0.0	610		W	W	5.3	V
October	0	0				0.0	598		W	W		
November	0	0				0.0	613		W	W		
December	0	0				0.0	568		W	W		
Year 2017	- 1											
January	0	0	1			0.0	662	639	W	W	5.6	V
February	0	0				0.0	646		W	W		
March	0	0				0.0	680		W	W		V
April	0	0				0.0	502		W	W		V
May	0	0				0.0	497		W	W		V
June	0	0				0.0	615		W	W		
July	0	0				0.0	636		W	W		V
	0	0				0.0	809		W	W		V
August	0	0				0.0	707	685	W	W		
Sept	0									W		
October	υ	0	1			0.0	605	588	W	VV	6.0	<u> </u>
Year to Date	<u> </u>		1			0.01	F 000	F 44.1	141	3.6.2	F ^	
2015	0	0				0.0	5,200		W	W		
2016	0	0				0.0	6,825		W	W		٧
2017	0	0				0.0	6,358	6,156	W	W	6.1	V
	Ending in Octobe		T			_ 1					_	
2016	0	0				0.0	8,124		W	W		V
2017	0	0				0.0	7,538	7,294	W	W	6.1	V

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Notes:

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

Table 4.5. Red	eipts, Average	e Cost, and Q	uality of Foss		strial Sector,	2007 - Octobe	er 2017		Dotrolou	m Liquids		
	Recei	nte	Average				Rece	ainte		ge Cost		
	Recei	pts	Average	0031			Rece	ipto	Averag			
	/	<u>,</u>	(Dollars	`	Average Sulfur		(-	, .	(Dollars		Average Sulfur	
Period	(Billion Btu)	(Thousand Tons)	per MMBtu)	per Ton)	Percent by Weight	_	(Billion Btu)	(Thousand Barrels)	per MMBtu)		_	Percentage of Consumption
Annual Totals	Btaj	10113)	www.bca/j	1011/	Weight	Consumption	Diay	Barreisy	iiiiiibta)	Burren	Weight	Consumption
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			109.0
2009	431,686	19,661	2.81	61.68	1.22	99.5	55,899	9,232	9.83			112.8
2010	468,991	21,492	2.75	60.08	1.26	87.2	33,276	5,554	13.21			125.6
2011	476,108	22,204	2.93	62.86	1.33	99.5	28,939	4,878	17.67			144.8
2012	285,172	13,206	3.02	65.24	1.33	65.8	6,739	1,095	W	<u> </u>		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				
February	17,418	814	W	W	1.42	63.5	342	55				
March	19,181	888	W	W	1.29	69.7	205	33				
April	16,048	739	W	W	1.43	68.7	222	36			1100	
May	16,376	761	2.67	57.42	1.39	64.6	158	26			1.49	11.7
June	18,607	865	2.66	57.25	1.25	69.6	259	42	10.38			21.3
July	18,586	875	2.64	56.18	1.23	66.2	85	14	11.10			7.1
August	19,629	929	W	W	1.16	71.9	119	19	11.84			12.4
Sept	16,052	753	W	W	1.20		162	27				
October	18,491	879	W	W	1.25	78.1	297	48				25.7
November	14,936	701	W	W	1.27	64.1	283	47	10.57			30.7
December	16,067	759	W	W	1.33	59.3	172	28	W	T W	1.12	18.0
Year 2017	14,872	698	W	14/1	1.31	54.3	120	24	11.64	72.27	1.06	10.7
January		702	W	W	1.31		128 121	21 19				12.7
February March	15,014 17,051	819	W	W	1.10	69.8	178	29	10.66			16.3 21.7
	15,389	724	W	W	1.28	67.9	178	29				17.8
April May	15,645	762	W	W	1.17		155	25				15.7
June	15,163	702	W	W	1.32	65.8	142	23				15.7
July	14,992	720 721	2.47	51.34	1.23	68.8	95	15				12.2
August	15,734	738	2.47 W	31.34 W	1.30		110	18				12.2
Sept	14,117	677	W	W	1.10	65.7	151	24				19.3
October	14,951	704	W	W	1.30		149					
Year to Date	17,301	704	٧٧	VV	1.50	01.3	149	24	11.43	1 71.09	1.36	10.4
2015	221,619	10,201	2.73	59.31	1.33	71.3	1,944	318	13.84	84.66	1.41	16.1
2016	179,745	8,399	2.73 W	39.31 W	1.30		2,086	338				17.3
2017	152,927	7,264	W	W	1.22	65.5	1,388	223	11.11			15.9
Rolling 12 Months			٧٧	VV	1.22	00.0	1,500	223	11.11	1 09.29	1.31	15.9
2016	221,756	10,330	w	W	1.32	68.8	2,500	405	W	l w	1.31	17.9
2017	183,931	8,723	W	W	1.24	64.8	1,842	297	W			17.3
2017	100,001	0,723	V V	VV	1.24	04.0	1,042	231	٧٧	<u> </u>	1.29	17.4

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Notes:

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COAL - includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.

PETROLEUM LIQUIDS - includes distillate fuel oil and residual fuel oil. Prior to 2013, petroleum liquids included distillate fuel oil, 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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			Petroleu	m Coke					Natural Gas			All Fossil Fuels
	Recei	pts	Averag	e Cost			Rece	eipts	Averag	e Cost		Average Cost
	(Billion	(Thousand	(Dollars per	per	Average Sulfur Percent by	Percentage of	(Billion	(Thousand	(Dollars per	(Dollars per		(Dollars per
Period	Btu)	Tons)	MMbtu)	Ton)	Weight	Consumption	Btu)	Mcf)	MMBtu)	Mcf)	Consumption	MMBtu)
Annual Totals												
2007	19,700	698	1.96	55.42		43.6	896,803	871,178	6.97	7.18		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		114.2	1,117,489	1,088,880	4.27	4.38		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	V
2012	23,861	858	2.62	72.96	5.86	42.2	834,245	813,288	2.97	3.05	70.8	V
2013	17,236	623	W	W	5.82	30.5	750,946	728,835	W	W	62.3	V
2014	9,736	358	W	W	5.83	23.2	742,347	718,360	W	W	62.7	V
2015	8,189	304	W	W	5.50	24.1	765,964	740,975	W	W	60.6	V
2016	3,664	135	W	W	5.84	11.2	744,034	721,358	W	W	59.6	V
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	V
March	794	29	W	W	5.66	26.6	63,904	61,821	W	W	62.5	W
April	937	34	W	W		27.3	59,995	58,072	W	W	62.5	W
May	650	24	W	W		22.7	62,594	60,498	W	W		V
June	847	32	W	W		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		18.9	68,195	66,008	W	W		W
Sept	648	24	W	W		22.0	63,672	61,594	W	W		V
October	218	9	W	W		9.6	57,688	55,868	W	W		W
November	393	15	W	W		13.3	65,289	63,274	W	W		W
December	804	30	W	W			69,647	67,528	W	W		W
Year 2016			1			V=	33,011	0.,020	•••		0.10	
January	400	15	W	W	5.94	15.3	63,059	61,034	W	W	59.0	W
February	122	4	W	W		4.3	56,120	54,342	W	W		W
March	574	21	W	W		23.8	60,020	58,279	W	W	58.9	W
April	669	25	W	W		31.0	60,005	58,224	W	W		W
May	206	8	W	W		7.0	59,608	57,927	W	W		W
June	222	8	W	W		7.0	60,985	59,247	W	W		W
July	222	8	W	W		7.0	64,456	62,488	W	W		W
August	217	8	W	W		7.2	64,784	62,548	W	W		W
Sept	200	8	W	W		9.6	61,346	59,335	W	W		W
October	207	8	W	W		7.9	62,185	60,320	W	W		W
November	200	8	W	W		7.0	64,265	62,438	W	W		W
December	427	16	W	W		15.4	67,201	65,176	W	W		W
Year 2017	721	10	**	***	0.55	10.4	07,201	03,170		•	02.1	V V
	ol	ol				0.0	57,392	55,497	w	W	52.1	W
January February	0	0			-	0.0	53,322	51,652	W	W		W
March	0	0				0.0	53,322	53,082	W	W		W
	0	0				0.0	54,774	53,082 51,178	W	W		W
April	0	0			-		52,826	50,733	W	W		W
May	271	0	 W	 W		0.0	-		W	W		W
June		9				9.5	54,356 57,703	52,640		W		W
July	253	9	W	W		10.1	57,702	55,842	W		52.3	
August	296	11	W	W		11.9	54,898	53,122	W	W		V
Sept	257	9	W	W		12.0	53,389	51,642	W	W		V
October	893	32	W	W	5.85	37.4	51,726	50,157	W	W	50.4	W
Year to Date		1		1		1	201			1		
2015	6,992	259	W	W		24.4	631,028	610,174	W	W		V
2016	3,037	112	W	W		11.3	612,568	593,745	W	W		W
2017	1,971	71	W	W	5.84	8.5	542,760	525,545	W	W	52.0	W
	Ending in Octobe		. 1		Г							
2016	4,234	157	W	W		13.1	747,504	724,546	W	W		W
2017	2,597	95	W	W	5.83	9.1	674,226	653,159	W	W	53.9	W

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

(Thousand Tons)		Electric Po	wer Sector								
Census Division				, .							
and State	Т	All Sectors	Percentage	Electric	Utilities	Independent Po	ower Producers	Commerc	ial Sector	Industri	al Sector
	October 2017	October 2016	Change	October 2017	October 2016	October 2017		October 2017	October 2016	October 2017	October 2016
New England	7	91	-92.0%	0	37	7	53	0	0	0	1
Connecticut	0	0		0	0	0	0	0	0	0	(
Maine	7	9	-19.0%	0	0	7	8	0	0	0	1
Massachusetts	0	45	-100.0%	0	0	0	45	0	0	0	`
New Hampshire Rhode Island	0	37	-100.0%	0	37	0	0	Ŭ	0	0	,
Vermont	0	0		0	0	0	0	0	0	0	
Middle Atlantic	1,335	1,955	-32.0%	26	0	1,291	1,907	0	0	19	48
New Jersey	57	1,955	-0.6%	0	0	57		0	0	19	
New York	8	72	-89.0%	0	0	0	48	0	0	8	`
Pennsylvania	1,271	1,826	-30.0%	26	0	1,234	1,802	0	0	11	24
East North Central	11,032	11,731	-6.0%	6,774	7,060	4,084	4,434	•	0	174	
Illinois	3,134	3,446	-9.0%	615	493	2,359	2,754	0	0	161	199
Indiana	2,408	2,388	0.9%	2,273	2,261	135	-	0	0	0	100
Michigan	1,998	1,990	0.4%	1,980	1,955	18		0	0	0	
Ohio	2,090	2,172	-3.8%	518	654	1,572	1,518	0	0	0	(
Wisconsin	1,402	1,736	-19.0%	1,388	1,698	0	0	0	0	13	39
West North Central	9,765	10,591	-7.8%	9,511	10,312	0	0	2	7	253	
Iowa	1,468	1,934	-24.0%	1,278	1,734	0	0	0	0	190	
Kansas	1,152	1,491	-23.0%	1,152	1,491	0	_	0	0	0	
Minnesota	1,037	1,422	-27.0%	1,037	1,414	0	0	0	0	0	8
Missouri	3,113	2,817	10.0%	3,111	2,810	0	0	2	7	0	(
Nebraska	995	1,137	-12.0%	932	1,074	0	0	0	0	63	63
North Dakota	1,944	1,718	13.0%	1,944	1,718	0	0	0	0	0	(
South Dakota	57	71	-20.0%	57	71	0	0	0	0	0	C
South Atlantic	7,045	8,178	-14.0%	6,110	6,871	841	1,192	0	0	94	115
Delaware	0	0		0	0	0	0	0	0	0	(
District of Columbia	0	0		0	0	0	0	0	0	0	(
Florida	1,295	1,548	-16.0%	1,285	1,535	0	13	0	0	10	(
Georgia	1,532	1,676	-8.6%	1,516	1,651	0	0	0	0	16	25
Maryland	350	659	-47.0%	0	0	334	641	0	0	16	19
North Carolina	937	1,206	-22.0%	915	1,163	1	7	0	0	21	35
South Carolina	501	266	88.0%	494	259	0	•	0	0	7	8
Virginia	165	621	-73.0%	109	534	33		0	0	24	29
West Virginia	2,265	2,201	2.9%	1,793	1,729	472		0	0	0	(
East South Central	4,211	6,347	-34.0%	3,984	6,095	155	183	0	0	71	69
Alabama	1,249	1,443	-13.0%	1,249	1,443	0	0	0	0	0	C
Kentucky	2,267	3,584	-37.0%	2,267	3,584	0	0	0	0	0	C
Mississippi	262	440	-40.0%	107	256	155	183	0	0	0	,
Tennessee	433	880	-51.0%	361	812	0	0	0	0	71	69
West South Central	10,513	11,888	-12.0%	4,981	5,804	5,515	·	0	0	18	54
Arkansas	1,499	1,330	13.0%	1,249	1,108	247	215	0	0	3	Ī
Louisiana	671	656	2.2%	489	442	182		0	0	0	(
Oklahoma	1,152	1,334	-14.0%	1,051	1,179	86 5.001		0	0	15	48
Texas Mountain	7,192 7,236	8,568 8,432	-16.0% -14.0%	2,191 6,361	3,075 7,401	5,001 856	5,493 1,013	0	0	20	17
Arizona	1,526	1,529	-14.0% -0.2%	1,526	1,529	0	1,013	0	0	20	17
Colorado	1,526	1,529	-0.2% 10.0%	1,526	1,529	0	0	0	0	0	
Idaho	1,566	0	10.0%	1,566	0	0		0	0	0	
Montana	749	916	-18.0%	14	26	735		0	0	0	`
Nevada	46	131	-65.0%	0	87	46		0	0	0	`
New Mexico	757	1,100	-31.0%	757	1,100	0		0	0	0	(
Utah	962	1,228	-22.0%	915	1,175	28		0	0	20	17
Wyoming	1,610	2,087	-23.0%	1,562	2,044	47	43	0	0	0	(
Pacific Contiguous	623	526	18.0%	152	97	416		0	0	55	65
California	55	65	-17.0%	0	0	0		0	0	55	
Oregon	152	97	56.0%	152	97	0	0	0	0	0	(
Washington	416	363	15.0%	0		,	363		0	0	
Pacific Noncontiguous	80	77	3.5%	17	15				0		
Alaska	17	15	12.0%	17	15	0	0	0	0	0	
Hawaii	63	62	1.3%	0	0	63	62	0	0	0	
U.S. Total	51,848	59,814	-13.0%	37,915	43,693			-	7	704	879

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Notes:

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

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

(Thousand Tons)		Electric Po	wer Sector								
Census Division											
and State		All Sectors		Electric		Independent Po		Commerc			al Sector
	October 2017 YTD	October 2016 YTD	Percentage Change	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	
New England	184	1,070	-83.0%	45	177	140	881	0	0	C	13
Connecticut	0	85	-100.0%	0	0	0	85	0	0	C	(
Maine	53	70	-24.0%	0	0	53		0	0	C	13
Massachusetts	87	739	-88.0%	0	0	87	739	0	0	C	(
New Hampshire	45	177	-75.0%	45	177	0	0	0	0	C	(
Rhode Island	0	0		0	0	0	0	0	0	C	(
Vermont	0	0		0	0	0	0	0	0	C	(
Middle Atlantic	16,731	20,198	-17.0%	119	0	16,357	19,685	0	0	254	513
New Jersey	537	529	1.6%	0	0	537	529	0	0	C	(
New York	252	465	-46.0%	0	0	97	229	0	0	155	
Pennsylvania	15,942	19,204	-17.0%	119	0	15,723	18,928	0	0	99	277
East North Central	114,182	114,025	0.1%	69,602	67,988	42,942	43,844	0	0	1,638	2,193
Illinois	33,390	32,113	4.0%	6,537	5,820	25,303	24,611	0	0	1,550	1,683
Indiana	23,782	24,055	-1.1%	22,548	22,532	1,234	1,523	0	0	C) (
Michigan	19,338	18,191	6.3%	19,122	17,969	209	212	0	0	8	10
Ohio	21,698	24,351	-11.0%	5,502	6,701	16,197	17,498	0	0	C	152
Wisconsin	15,974	15,316	4.3%	15,894	14,967	0	0	0	0	80	349
West North Central	95,124	97,955	-2.9%	92,370	95,416	0	0	20	37	2,734	2,503
Iowa	12,528	15,401	-19.0%	10,736	13,591	0	0	0	0	1,793	1,810
Kansas	9,855	11,883	-17.0%	9,855	11,883	0	0	0	0	C	(
Minnesota	10,341	10,099	2.4%	10,032	10,045	0	0	0	0	310	54
Missouri	30,961	29,368	5.4%	30,941	29,331	0	0	20	37	C) (
Nebraska	10,977	11,494	-4.5%	10,345	10,856	0	0	0	0	632	638
North Dakota	19,389	18,628	4.1%	19,389	18,628	0	0	0	0	C) (
South Dakota	1,071	1,082	-1.0%	1,071	1,082	0	0	0	0	C) (
South Atlantic	74,383	79,381	-6.3%	65,378	68,484	8,150	9,886	0	0	855	1,011
Delaware	200	199	0.3%	0	0	200	199	0	0	C) (
District of Columbia	0	0		0	0	0	0	0	0	C) (
Florida	12,995	12,806	1.5%	12,834	12,516	26	290	0	0	136	6 (
Georgia	14,604	14,346	1.8%	14,510	14,219	0	0	0	0	94	127
Maryland	3,176	4,266	-26.0%	0	0	3,015	4,077	0	0	161	189
North Carolina	11,459	9,911	16.0%	11,163	9,559	47	60	0	0	249	291
South Carolina	5,545	6,723	-18.0%	5,519	6,641	0	0	0	0	26	82
Virginia	4,581	6,711	-32.0%	4,056	5,943	337	515	0	0	188	253
West Virginia	21,822	24,419	-11.0%	17,297	19,605	4,525	4,745	0	0	C	69
East South Central	50,892	55,809	-8.8%	48,071	52,241	2,023	2,546	0	0	798	1,022
Alabama	13,305	13,617	-2.3%	13,305	13,617	0	0	0	0	C	(
Kentucky	27,216	30,781	-12.0%	27,216	30,781	0	0	0	0	C) (
Mississippi	3,263	3,576	-8.7%	1,240	1,030	2,023	2,546	0	0	C	(
Tennessee	7,108	7,836	-9.3%	6,310	6,814	0	0	0	0	798	1,022
West South Central	101,043	88,303	14.0%	46,467	42,677	54,217	45,248	0	0	358	377
Arkansas	11,430	10,327	11.0%	10,175	8,547	1,200	1,729	0	0	55	5 52
Louisiana	6,863	5,480	25.0%	4,223	4,157	2,640	1,323	0	0	0	
Oklahoma	9,068	9,122	-0.6%	7,899	7,897	866		0	0	303	326
Texas	73,682	63,373	16.0%	24,171	22,077	49,511	41,296	0	0	C	
Mountain	73,629	74,720	-1.5%	65,501	66,136	8,017	8,353	0	0	111	231
Arizona	13,781	12,694	8.6%	13,781	12,694	0	0	0	0	C	
Colorado	13,629	13,075	4.2%	13,629	13,075	0	0	0	0	C	
Idaho	0	0		0	0	0	0	0	0	C	(
Montana	6,967	7,390	-5.7%	215	209	6,752	7,181	0	0	C	
Nevada	668	835	-20.0%	182	423	486	413	0	0	C	(
New Mexico	9,061	8,730	3.8%	9,061	8,730	0	0	0	0	C	
Utah	10,042	11,271	-11.0%	9,594	10,712	337	328	0	0	111	231
Wyoming	19,481	20,725	-6.0%	19,038	20,294	443	431	0	0	C	
Pacific Contiguous	3,848	3,738	2.9%	591	881	2,741	2,320	0	0	516	
California	516	536	-3.8%	0	0	0	0	0	0	516	536
Oregon	591	881	-33.0%	591	881	0	0	0	0	C) (
Washington	2,741	2,320	18.0%	0	0	2,741	2,320	0	0	C	
Pacific Noncontiguous	686	832	-18.0%	139	168				0	C) (
Alaska	139	168	-17.0%	139	168	0	0	0	0	C	
Hawaii	547	663	-18.0%	0	0	547	663	0	0	C) (
U.S. Total	530,701	536,031	-1.0%	388,284	394,169			20	37	7,264	8,399

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

Table 4.7.A. Receipts of Petroleum Liquids Delivered for Electricity Generation by State, October 2017 and 2016 (Thousand Barrels)

(Thousand Barrels)					Electric Po	wer Sector					
Census Division											
and State		All Sectors	Percentage	Electric	Utilities	Independent Po	ower Producers	Commerc	ial Sector	Industri	al Sector
	October 2017	October 2016			October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016
New England	54	86	-37.0%	1	0	53	86	0	0	0	C
Connecticut	0	1	-87.0%	0	0	0	1	0	0	0	0
Maine	3	2	39.0%	0	0	•		0	0	0	0
Massachusetts	50	83	-39.0%	0	0	50	83	0	0	0	0
New Hampshire	1	0	438.0%	1	0	0	0	0	0	0	0
Rhode Island	0	0		0	0		_	0	0	0	O
Vermont	0	0		0	0			0	0	0	0
Middle Atlantic	41	204	-80.0%	0	104				0	9	
New Jersey	1	0	291.0%	0	0	•	0	0	0	0	U
New York	10	139	-93.0%	0	104			0	0	2	1
Pennsylvania East North Central	31 74	64 95	-52.0% -22.0%	39	0			0	0	2	12
Illinois	6	95	-22.0%	39	35	5		0	0	2	
Indiana	20	14	39.0%	20	14			0	0	0	0
Michigan	10	10	39.0 %	10	10			0	0	0	· ·
Ohio	36	66	-45.0%	6	10			0	0	2	
Wisconsin	30	0	3.0 /6	3	0			0	0	2	
West North Central	37	33	12.0%	37	29			0	0	0	
Iowa	9	10	-10.0%	9	10			0	0	0	
Kansas	9	0		9	0			0	0	0	0
Minnesota	4	8	-44.0%	4	4	0		0	0	0	0
Missouri	14	12	17.0%	14	12	0	0	0	0	0	0
Nebraska	0	0	22.0%	0	0		0	0	0	0	O
North Dakota	0	3	-100.0%	0	3	0	0	0	0	0	C
South Dakota	0	0		0	0	0	0	0	0	0	C
South Atlantic	197	191	2.7%	95	76	90	89	0	0	12	27
Delaware	2	27	-93.0%	0	0	2	27	0	0	0	O
District of Columbia	0	0		0	0	0	0	0	0	0	O
Florida	23	12	87.0%	20	10	0	2	0	0	3	C
Georgia	16	16	1.6%	10	4	0	0	0	0	6	11
Maryland	47	42	13.0%	0	0	* *	42	0	0	0	0
North Carolina	29	11	164.0%	26	10			0	0	3	1
South Carolina	5	10	-50.0%	5	4	0	_	0	0	0	
Virginia	55	57	-3.7%	14	30			0	0	0	0
West Virginia	20	17	17.0%	20	17			0	0	0	O
East South Central	31	30	1.9%	28	30		0	0	0	1	1
Alabama	5	3	61.0%	3	3		0	0	0	0	
Kentucky	18	14	33.0%	18	14			0	0	0	
Mississippi	8	2 12	-89.0% -36.0%	7	11			0	0	1	1
Tennessee West South Central	10		-73.0%	5	32	0	5	0	0	1	1
Arkansas	10	37 5	-73.0% 36.0%	3	5		5	0	0	0	
Louisiana	0	3	-100.0%	0	3		0	0	0	0	
Oklahoma	1	23	-96.0%	1	23		0	0	0	0	
Texas	2	7	-65.0%	1	2		5	0	0	0	0
Mountain	18	30	-38.0%	17	28		2		0	0	_
Arizona	8	16	-51.0%	8	16		0	0	0	0	0
Colorado	0	2	-100.0%	0	2		0	0	0	0	0
Idaho	0	0		0	0		0	0	0	0	C
Montana	0	0		0	0	0	0	0	0	0	0
Nevada	1	1	-29.0%	0	0	1	1	0	0	0	0
New Mexico	6	4	46.0%	6	4	0	0	0	0	0	0
Utah	3	6	-45.0%	3	5	0	0	0	0	0	0
Wyoming	1	1	-4.0%	1	1	0	0	0	0	0	C
Pacific Contiguous	1	1	25.0%	0	0	1	1	0	0	0	0
California	0	0		0	0	0	0	0	0	0	C
Oregon	0	0		0	0	0	0	0	0	0	, and the second
Washington	1	1	25.0%	0			1	0	0		
Pacific Noncontiguous	749	683	9.8%	573	516				0		
Alaska	0	3	-100.0%	0	3	0		0	0		<u> </u>
Hawaii	749	680	10.0%	573	513			0	0	0	•
U.S. Total	1,212	1,390	-13.0%	796	851	393	492	0	0	24	48

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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.

Table 4.7.B. Receipts of Petroleum Liquids Delivered for Electricity Generation by State, (Year-to-Date) October 2017 and 2016 (Thousand Barrels)

(Thousand Barrels)					Electric Po	wer Sector					
Census Division					Licotric i o						
and State	0-1-100471	All Sectors	D	Electric		Independent Po	ower Producers		ial Sector		al Sector
	October 2017 YTD	October 2016 YTD	Percentage Change		October 2016 YTD					October 2017 YTD	
New England	253	360	-30.0%	10	73	244			0	0	
Connecticut	22	30	-25.0%	0	0	22			0	0	
Maine	92	21	334.0%	0	0	92			0	0	
Massachusetts	129	293	-56.0%	0	65	129		0	0	0	
New Hampshire	10	8	25.0%	10	8	0		0	0	0	
Rhode Island	0	8	-100.0%	0	0	0	8	0	0	C	
Vermont	0	0		0	0	0	0	0	0	C)
Middle Atlantic	611	856	-29.0%	172	158	363	612	0	0	75	80
New Jersey	4	13	-65.0%	0	0	4	13	0	0	C	(
New York	288	441	-35.0%	172	158	96	264	0	0	20	19
Pennsylvania	318	402	-21.0%	0	0	263	336	0	0	55	60
East North Central	642	830	-23.0%	386	430	235	375	0	0	22	2
Illinois	69	99	-30.0%	4	4	66	95	0	0	C	(
Indiana	167	157	6.5%	167	157	0	0	0	0	C	(
Michigan	115	150	-24.0%	106	144	0	0	0	0	9	
Ohio	260	382	-32.0%	78	87	170	276	0	0	12	18
Wisconsin	32	43	-26.0%	32	39	0	4	0	0	0	
West North Central	319	292	9.2%	319	288	0	4	0	0	C	
Iowa	80	77	3.9%	80	77	0	0	0	0	C	
Kansas	76	29	162.0%	76	29	0	0	0	0	C	
Minnesota	29	37	-21.0%	29	33	0	4	0	0	C	
Missouri	70	95	-27.0%	70	95	0	0	0	0	C	
Nebraska	1	3	-59.0%	1	3	0	0	0	0	C	
North Dakota	58	48	21.0%	58	48	0	0	0	0	C	
South Dakota	5	2	109.0%	5	2	0	0	0	0	C	
South Atlantic	2,514	3,205	-22.0%	2,081	2,383	312	605	0	0	120	210
Delaware	15	78	-81.0%	0	0	15	78	0	0	C	
District of Columbia	0	0		0	0	0	0	0	0	C	(
Florida	1,367	829	65.0%	1,337	822	0		0	0	30	
Georgia	155	226	-31.0%	118	142	3		0	0	34	5
Maryland	190	242	-21.0%	0	0	190		0	0	C	(
North Carolina	229	285	-20.0%	200	189	1	66		0	28	
South Carolina	98	232	-58.0%	82	125	0	· ·	0	0	16	_
Virginia	295	1,135	-74.0%	179	927	103		0	0	13	
West Virginia	164	178	-7.8%	164	178	0		0	0	0	`
East South Central	302	381	-21.0%	290	363	6	. •		0	6	
Alabama	40	58	-31.0%	34	48	6			0	0	
Kentucky	138	156	-12.0%	138	156	0		0	0	0	· ·
Mississippi	12	23	-45.0%	12	23	0	_	0	0		
Tennessee West South Central	112	143	-22.0% -27.0%	106	136	0		0	0	6	
	178	245		83	180				-		
Arkansas Louisiana	71	55 53	29.0% -100.0%	26 0	<u>40</u> 51	45 0		0	0	0	
Oklahoma	5	28	-81.0%	5	28	0	_	0	0		,
Texas	102	109	-61.0% -6.5%	52	61	49	ŭ		0		,
Mountain	280	293	-6.5% -4.7%	255	266	25			0		
Arizona	64	85	-24.0%	64	85	0		0	0	0	
Colorado	3	13	-75.0%	3	13	0		0	0		· ·
Idaho	0	0	7 3.0 76	0	0	0		0	0		· ·
Montana	16	19	-17.0%	0	0	16			0		
Nevada	17	21	-19.0%	11	16	6		0	0	<u>C</u>	· ·
New Mexico	58	69	-15.0%	58	69	0		0	0	0	
Utah	53	27	98.0%	50	24	3	_	0	0		
Wyoming	68	60	12.0%	68	60	0	0	0	0	0	
Pacific Contiguous	29	16	80.0%	14	3	15	13	0	0	0	
California	0	0		0	0	0		0	0	0	
Oregon	14	3	287.0%	14	3	0		0	0	0	
Washington	15	13	23.0%	0	0		-	ū	ŭ	0	
Pacific Noncontiguous	7,257	7,409	-2.0%	5,611	5,809				0	0	
Alaska	1	7	-87.0%	1	7	0		0	0	0	
Hawaii	7,256	7,402	-2.0%	5,610	5,802	1,646	· ·	-	0	0	
U.S. Total	12,385	13,885	-11.0%	9,221	9,954	-			0		·

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Petroleum Liquids includes distillate and residual fuel oils.

See the Technical Notes for fuel conversion factors.

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

(Thousand Tons)					Electric Po	wer Sector					
Census Division								_			
and State		All Sectors	Percentage	Electric	Utilities	Independent Po	ower Producers	Commerc	ial Sector	Industria	al Sector
	October 2017	October 2016	Change		October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016
New England	0	0		0	0	0	0	0	0	0	0
Connecticut Maine	0	0		0	0	0		0	0	0	0
Massachusetts	0	0		0	0	0		0	0	0	0
New Hampshire	0	0		0	0	0		0	0	0	0
Rhode Island	0	0		0	0	0		0	0	0	0
Vermont	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	C
New York	0	0		0	0	0	0	0	0	0	0
Pennsylvania	0	0	-100.0%	0	0	0		0	0	0	0
East North Central	48	78	-39.0%	48	22	0			0	0	0
Illinois	0	0		0	0	0		0	0	0	0
Indiana Michigan	39	0 17	133.0%	39	0 17	0	_	0	0	0	0
Ohio	0	56	-100.0%	0	0	0		ŭ	0	0	0
Wisconsin	8	5	65.0%	8	5	0		0	0	0	0
West North Central	32	0		0	0	0		0	0	32	0
lowa	32	0		0	0	0		0	0	32	
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
North Dakota	0	0		0	0	0	_	0	0	0	0
South Dakota	0	0	40.00/	0	0	0	_	0	0	0	0
South Atlantic Delaware	71 0	50	42.0%	71 0	0	0		0	0	0	8
District of Columbia	0	0		0	0	0		0	0	0	0
Florida	71	42	69.0%	71	42	0		0	0	0	0
Georgia	0	8	-100.0%	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
West Virginia	0	0		0	0	0		0	0	0	0
East South Central	0	17	-100.0%	0	17	0	· ·	0	0	0	0
Alabama Kentucky	0	0 17	-100.0%	0	0 17	0		0	0	0	0
Mississippi	0	0	-100.078	0	0	0		0	0	0	0
Tennessee	0	0		0	0	0		0	0		_
West South Central	146	171	-15.0%	146	171	0	_	0	0	0	0
Arkansas	0	0		0	0	0	0	0	0	0	0
Louisiana	146	171	-15.0%	146	171	0	0	0	0	0	0
Oklahoma	0	0		0	0	0		0	0	0	0
Texas	0	0		0	0	0	_	0	0	0	0
Mountain	0	0		0	0	0		0	0	0	0
Arizona	0	0		0	0	0		0	0	0	0
Colorado Idaho	0	0		0	0	0	_	0	0	0	0
Montana	0	0		0	0	0		0	0	0	
Nevada	0	0		0	0	0		0	0	0	0
New Mexico	0	0		0	0	0		0	0	0	0
Utah	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
Oregon	0	0		0	0	0	_	0	0	0	0
Washington	0	0		0					0		
Pacific Noncontiguous Alaska	0	0		0	0	0			0		
Hawaii	0	0		0	0	0		0	0		_
U.S. Total	297	317	-6.2%	265	253			· ·	0		-
5.5. Fotal	231	317	0.2 /0	203	200	0	30	0	0	32	

NM = Not meaningful due to large relative standard error or excessive percentage change.

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.

W = Withheld to avoid disclosure of individual company data.

Table 4.8.B. Receipts of Petroleum Coke Delivered for Electricity Generation by State, (Year-to-Date) October 2017 and 2016 (Thousand Tons)

(Thousand Tons)					Electric Po	wer Sector					
Census Division					2.001.101.0						
and State		All Sectors		Electric		Independent Po				Industria	
	October 2017 YTD	October 2016 YTD	Percentage Change	October 2017 YTD	October 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	455	867	-48.0%	455	458	0	391	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	413	260	59.0%	413	260	0	0	0	0	0	0
Ohio	0	391	-100.0%	0	0	0	391	0	0	0	0
Wisconsin	42	55	-24.0%	42	37	0	0	0	0	0	18
West North Central	71	0		0	0	0	0	0	0	71	0
Iowa	71	0		0	0	0	0	0	0	71	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	555	1,258	-56.0%	555	1,165	0	0	0	0	0	94
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	555	1,165	-52.0%	555	1,165	0	0	0	0	0	0
Georgia	0	94	-100.0%	0	0	0	0	0	0	0	94
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	65	82.0%	117	65	0	0	0	0	0	0
Alabama	0	0		0	0	0	0	0	0	0	0
Kentucky	117	65	82.0%	117	65	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	<u> </u>	0
West South Central	1,557	1,288	21.0%	1,557	1,288	0	0	0	0	0	0
Arkansas	0	0		0	0	0		0	0	0	0
Louisiana	1,557	1,288	21.0%	1,557	1,288	0		0	0	0	0
Oklahoma	0	0		0	0	0		0	0	0	0
Texas	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
Colorado	0	0		0	0	0		0	0	0	0
Idaho	0	0		0	0	0		0	0	0	
Montana	0	0		0	0	0		0	0	0	0
Nevada	0	0		0	0	0		0	0	0	0
New Mexico	0	0		0	0	0		0	0	0	0
Utah	0	0		0	0	0		0	0	0	0
Wyoming	0	0		0	0	0		0	0	0	0
Pacific Contiguous	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
Washington	0	0		0					0		
Pacific Noncontiguous	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	_
U.S. Total	2,756	3,479	-21.0%	2,684	2,976	0	391	0	0	71	112
	,	,		,,,	.,						

NM = Not meaningful due to large relative standard error or excessive percentage change.

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.

 $W = Withheld \ to \ avoid \ disclosure \ of \ individual \ company \ data.$

Table 4.9.A. Receipts of Natural Gas Delivered for Electricity Generation by State, October 2017 and 2016 (Million Cubic Feet)

(Million Cubic Feet)					Electric Po	wer Sector					
Census Division and State		All Sectors		Electric	Utilities	Independent Po	ower Producers	Commerc	ial Sector	Industri	al Sector
	October 2017		Percentage								
New England	October 2017 20,498	October 2016 25,160	Change -19.0%	October 2017 205	October 2016 45				October 2016	October 2017	October 2016
Connecticut	8,532	9,252	-7.8%	0		8,532	9,252	0	0		
Maine	11	1,792	-99.0%	0	0	•	1,792	0	0	0	
Massachusetts	9,047	8,795	2.9%	151	44	8,896	•	0	0	0	
New Hampshire	1,668	2,365	-29.0%	54	0	1,614	2,365	0	0		
Rhode Island	1,239	2,955	-58.0%	0	0	1,239	2,955	0	0	0	
Vermont	0	2,000		0	0	0	2,000	0	0	0	
Middle Atlantic	75,868	93,046	-18.0%	4,265	5,993	71,365	86,823	0	0	238	230
New Jersey	10,707	26,222	-59.0%	7,200	0,555	10,707	26,222	0	0	200	200
New York	22,567	28,828	-22.0%	4,265	5,993	18,246		0	0	56	86
Pennsylvania	42,595	37,995	12.0%	0	0,000	42,412	37,851	0	0	183	
East North Central	49,422	57,914	-15.0%	17,853	23,443	,	32,837	408	484		
Illinois	4,243	10,778	-61.0%	17,000	806		9,973	-100	0	1,040	1,101
Indiana	9,110	10,775	-15.0%	8,135	9,520	,	·	0	0		
Michigan	15,485	16,866	-8.2%	2,428	5,591	12,149	·	408	484	500	448
Ohio	13,559	14,279	-5.0%	1,098	3,287	12,149	10,673	0	704	346	
Wisconsin	7,025	5,256	34.0%	6,186	4,239	644	633	0	0	196	
West North Central	4,808	12,540	-62.0%	4,127	11,283			179	91		
Iowa	2,157	2,794	-02.0%	1,674	2,516		003	179	91	483	
Kansas	1,718	1,058	62.0%	1,718	1,058		0	0	0	403	210
Minnesota	55	3,262	-98.0%	37	2,376			0	1	1	
Missouri	688	2,827	-76.0%	509	2,737	0	003	179	90		
Nebraska	149	392	-62.0%	149	389	_	0	0	90		
North Dakota	40	1,809	-98.0%	40	1,809		0	0	0		
South Dakota	0	397	-100.0%	40	397	0	0	0	0		
South Atlantic	176,657	182,215		148,957	147,151	ŭ	31,061		0	3,036	4,003
Delaware	2,087	6,366	-67.0%	0	0	2,087	5,038	0	0	3,030	1,328
District of Columbia	2,007	0,000		0	0	2,007	0,000	0	0		1,020
Florida	96,043	94,781	1.3%	94,678	89,699	1,158	5,083	0	0	207	, ,
Georgia	23,460	27,025	-13.0%	17,341	21,516	·	4,562	0	0	662	
Maryland	2,629	3,230	-19.0%	17,041	21,510	2,389	3,077	0	0	239	
North Carolina	20,144	18,556	8.6%	17,464	14,660	2,411	3,873	0	0	269	
South Carolina	10,298	10,768	-4.4%	7,484	9,610	·	·	0	0	174	147
Virginia	19,458	19,140	1.7%	11,790	11,570	6,906	6,823	0	0	763	
West Virginia	2,539	2,349	8.1%	200	96		1,593	0	0		
East South Central	58,778	71,714	-18.0%	40,344	48,025	,	22,324	0	0		
Alabama	26,808	30,798	-13.0%	11,110	8,548		22,250	0	0	1,120	1,000
Kentucky	2,732	4,966	-45.0%	2,212	4,907	520	59	0	0	0	
Mississippi	22,589	28,164	-20.0%	21,499	28,150	1,090	15	0	0	0	
Tennessee	6,649	7,786	-15.0%	5,524	6,420	0,000	0	0	0	1,125	1,366
West South Central	169,549	207,313	-18.0%	41,564	58,132	85,842	98,180	- J	0	·	
Arkansas	5,446	8,670	-37.0%	۸ ا	3,484	5,242	5,073	0	0	196	· ·
Louisiana	37,083	39,776	-6.8%	19,693	19,479	2,920	3,072	0	0	14,469	
Oklahoma	15,701	19,260	-18.0%	9,162	13,313	6,232	5,876	0	0	307	
Texas	111,319	139,607	-20.0%	12,701	21,856		84,159	0	0		33,592
Mountain	49,815	51,526	-3.3%	39,273	36,678		14,785	0	0	·	
Arizona	21,204	20,814	1.9%	13,059	10,049	8,145	10,765	0	0	0	0
Colorado	5,856	5,473	7.0%	4,997	4,750	859	723	0	0	0	
Idaho	0	1,201	-100.0%	0	355	0		0	0	0	
Montana	240	257	-6.8%	240	252	0		0	0	0	
Nevada	15,098	13,637	11.0%	15,098	13,637	0	0	0	0	0	
New Mexico	5,648	6,492	-13.0%	4,326	4,183	1,322	2,310	0	0	0	
Utah	1,715	3,640	-53.0%	1,499	3,442	147	135	0	0	68	63
Wyoming	54	12	361.0%	54	12	177	100	0	0	0	7
Pacific Contiguous	64,426	67,641	-4.8%	22,394	26,749	40,014	38,668	ŭ	0	2,017	2,224
California	52,826	56,007	-5.7%	16,933	19,615	33,876	34,169	0	0	2,017	2,224
Oregon	7,929	7,841	1.1%	1,791	4,492	6,138	-	0	0	2,017	2,22
Washington	3,671	3,793	-3.2%	3,671	2,643		-	•	0		
Pacific Noncontiguous	266	1,042	-3.2% -74.0%	266	1,042		1,150		0		
•	266		-74.0% -74.0%	266	1,042		0	0	0		
Alaska	200	1,042	-74.0%	∠66	1,042	_	0	0	0		
Hawaii	070.000	770 444	40.004	040.040	050.541	0	0.50.075	0	575	50.453	00.000
U.S. Total	670,086	770,111	-13.0%	319,249	358,541	300,091	350,675	588	575	50,157	60,32

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.

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Notes:

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Table 4.9.B. Receipts of Natural Gas Delivered for Electricity Generation by State, (Year-to-Date) October 2017 and 2016 (Million Cubic Feet)

(Million Cubic Feet)				Electric Power Sector		wer Sector					
Census Division											
and State	Ootobox 2017	All Sectors	Doroontogo	Electric		Independent Po		Commerce 2017			al Sector
	October 2017 YTD	October 2016 YTD	Percentage Change	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD
New England	225,632	323,209	-30.0%	1,081	1,882	224,551	321,327	0	0	0	0
Connecticut	80,745	99,746	-19.0%	0	0	80,745	99,746	0	0	0	C
Maine	70	20,641	-100.0%	0	0	70	20,641	0	0	0	C
Massachusetts	110,033	133,155	-17.0%	698	1,431	109,335	131,724	0	0	0	C
New Hampshire	22,727	28,597	-21.0%	383	451	22,344	28,146	0	0	0	C
Rhode Island	12,058	41,070	-71.0%	0	0	12,058	41,070	0	0	0	C
Vermont	0	0		0	0	0	0	0	0	0	C
Middle Atlantic	734,162	1,043,351	-30.0%	67,834	89,561	663,641	951,796	0	0	2,687	1,995
New Jersey	121,657	270,533	-55.0%	0	0	121,657	270,533	0	0	0	C
New York	270,177	367,929	-27.0%	67,834	89,561	201,431	277,646	0	0	912	723
Pennsylvania	342,328	404,890	-15.0%	0	0	340,553	403,617	0	0	1,775	1,272
East North Central	496,152	727,793	-32.0%	188,279	324,150	291,897	389,792	4,810	5,369	11,166	8,483
Illinois	53,692	120,284	-55.0%	198	11,739	53,450	108,518	0	0	43	28
Indiana	91,313	122,683	-26.0%	75,591	100,425	15,722	22,258	0	0	0	C
Michigan	148,497	205,512	-28.0%	31,278	74,935	107,556	120,582	4,810	5,369	4,853	4,627
Ohio	146,763	178,011	-18.0%	36,019	48,391	106,772	128,710	0	0	3,972	910
Wisconsin	55,887	101,302	-45.0%	45,192	88,660	8,397	9,723	0	0	2,297	2,919
West North Central	39,493	158,491	-75.0%	34,350	133,180	377	22,655	1,346	1,259	3,421	1,397
Iowa	16,663	26,748	-38.0%	13,354	26,453	0	0	0	0	3,309	
Kansas	13,229	14,891	-11.0%	13,229	14,891	0	0	0	0	0	0
Minnesota	920	57,876	-98.0%	427	44,860	377	11,926	5	9	112	1,081
Missouri	5,624	40,482	-86.0%	4,283	28,502	0	10,729	1,341	1,250	0	0
Nebraska	1,944	3,609	-46.0%	1,944	3,588	0	0	0	0	0	21
North Dakota	1,113	9,747	-89.0%	1,113	9,747	0	0	0	0	0	2.
South Dakota	0	5,137	-100.0%	0	5,137	0	0	0	0	0	0
South Atlantic	1,803,087	2,075,704	-13.0%	1,520,239	1,667,534	254,307	375,389	0	0	28,542	32,781
Delaware	25,486	56,008	-54.0%	0	0	25,486		0	0	20,012	
District of Columbia	0	0		0	0	0	0	0	0	0	,
Florida	914,936	1,004,218	-8.9%	899,724	928,559	13,392	75,659	0	0	1,820	0
Georgia	258,136	338,701	-24.0%	200,174	254,848	50,489	75,767	0	0	7,473	8,086
Maryland	33,068	46,457	-29.0%	0	0	31,111	44,652	0	0	1,957	1,804
North Carolina	213,039	247,319	-14.0%	185,915	212,560	25,580	34,602	0	0	1,544	-
South Carolina	94,948	109,616	-13.0%	79,657	90,243	14,324	17,794	0	0	966	
Virginia	248,787	260,809	-4.6%	153,215	179,951	87,621	74,322	0	0	7,951	6,535
West Virginia	14,688	12,577	17.0%	1,552	1,373	6,304	8,339	0	0	6,831	2,865
East South Central	645,265	802,559	-20.0%	428,502	529,376	201,871	263,894	0	0	14,892	9,288
Alabama	278,054	335,074	-17.0%	101,169	97,215	176,885	237,859	0	0	14,002	3,200
Kentucky	41,091	57,704	-29.0%	37,537	52,637	3,554	5,067	0	0	0	0
Mississippi	253,446	324,232	-22.0%	232,015	303,264	21,432	20,968	0	0	0	0
Tennessee	72,674	85,548	-15.0%	57,782	76,260	21,402	20,500	0	0	14,892	9,288
West South Central	1,798,297	2,476,601	-27.0%	411,170	765,660	948,432	1,196,015	0	0	438,695	-
Arkansas	61,748	116,169	-47.0%	411,170	45,315	60,079	69,003	0	0	1,620	
Louisiana	363,171	461,486	-47.0% -21.0%	172,492	239,653	29,003	43,851	0	0	161,676	· · · · · · · · · · · · · · · · · · ·
Oklahoma	174,702	238,859	-21.0% -27.0%	172,492	167,423	71,460	70,731	0	0	1,824	705
Texas	1,198,676	1,660,087	-27.0%	137,212	313,269	71,460	1,012,430	0	0	273,575	
Mountain	514,470	605,508	-28.0% -15.0%	416,287	465,668	97,551	1,012,430	0	0	633	·
Arizona	193,055	232,792	-17.0%	127,414	135,801	65,641	96,991	0	0	033	030
	·			· · · · · · · · · · · · · · · · · · ·	66,151			0	0	0	0
Colorado Idaho	75,598	78,434 18,605	-3.6% -100.0%	64,276	11,078	11,321	12,283 7,527	0	0	0	
	Ŭ			0.000	-	0	•	0	0	0	
Montana	2,639	2,977	-11.0%	2,639	2,958	ŭ	18		0	0	0
Nevada	152,354	162,691	-6.4%	152,354	162,691	0	04.050	0	0	0	0
New Mexico	58,504	62,884	-7.0%	39,199	41,527	19,305	21,358	0	0	0	0.50
Utah	31,476	46,973	-33.0%	29,573	45,322	1,270	1,002	0	0	633	650
Wyoming	844	152	456.0%	831	140	13		0	0	0	0
Pacific Contiguous	533,329	646,270	-17.0%	202,896	255,045	304,923	367,000	0	0	25,510	1
California	463,436	501,336	-7.6%	170,667	177,881	267,259	299,229	0	0	25,510	24,225
Oregon	47,833	86,691	-45.0%	10,168	41,874	37,664	44,818		0	0	C
Washington	22,060	58,243	-62.0%	22,060	35,290		22,953	0			
Pacific Noncontiguous	1,271	11,063	-89.0%	1,271	11,063	0	0	0	0	0	C
Alaska	1,271	11,063	-89.0%	1,271	11,063	0	0	0	0	0	C
Hawaii	0	0		0	0	0	0	0	0	0	0
U.S. Total	6,791,159	8,870,549	-23.0%	3,271,909	4,243,119	2,987,549	4,027,058	6,156	6,628	525,545	593,745

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Table 4.10.A. Average Cost of Coal Delivered for Electricity Generation by State, October 2017 and 2016

Census Division and State	FI	lectric Power Secto	r	Electric	Utilities	Independent Po	wer Producers
	October 2017	October 2016	Percentage Change		October 2016	October 2017	October 2016
New England	W	W	W		4.14	W	W
Connecticut							
Maine	W	W	W			W	W
Massachusetts		W	W				W
New Hampshire		4.14			4.14		
Rhode Island							
Vermont							
Middle Atlantic	W	1.92	W	1.66		W	1.92
New Jersey	W	W	W			W	W
New York		W	W				W
Pennsylvania	1.91	1.83	4.4%	1.66		1.92	1.83
East North Central	1.99	2.06	-3.4%	2.06	2.20	1.86	1.83
Illinois	W	W	W	1.87	1.92	W	W
Indiana	W	W	W	2.09	2.30	W	W
Michigan	W	W	W	2.13	2.24	W	W
Ohio	1.91	2.10	-9.0%	1.73	1.96	1.96	2.15
Wisconsin	2.14	2.19	-2.3%	2.14	2.19		
West North Central	1.69	1.69	0.0%	1.69	1.69		
Iowa	1.57	1.54	1.9%	1.57	1.54		
Kansas	1.66	1.65	0.6%	1.66	1.65		
Minnesota	1.97	2.02	-2.5%	1.97	2.02		
Missouri	1.89	1.90	-0.5%	1.89	1.90		
Nebraska	1.34	1.33	0.8%	1.34	1.33		
North Dakota	1.42	1.41	0.7%	1.42	1.41		
South Dakota	2.06	2.28	-9.6%	2.06	2.28		
South Atlantic	2.69	2.70	-0.4%	2.73	2.73	2.43	2.54
Delaware							
District of Columbia							
Florida	3.03	W	W	3.03	2.92		W
Georgia	2.75	2.69	2.2%	2.75	2.69		
Maryland	2.53	2.87	-12.0%			2.53	2.87
North Carolina	W	W	W	2.97	3.08	W	W
South Carolina	3.33	3.35	-0.6%	3.33	3.35		
Virginia	W	2.99	W		2.96	W	3.28
West Virginia	W	W	W	2.22	2.22	W	W
East South Central	W	W	W		2.13	W	W
Alabama	2.14	2.07	3.4%	2.14	2.07		
Kentucky	2.01	2.11	-4.7%	2.01	2.11		
Mississippi	W	W	W	2.33	2.67	W	W
Tennessee	2.44	2.20	11.0%	2.44	2.20		
West South Central	1.80	1.93	-6.7%	2.01	2.12	1.61	1.73
Arkansas	W	W	W	1.94	2.09	W	W
Louisiana	W	W	W	3.02	3.25	W	W
Oklahoma	W	W	W		1.90	W	W
Texas	1.69	1.83	-7.7%	1.96	2.06	1.58	1.70
Mountain	W	W	W		1.85	W	W
Arizona	2.25	2.10	7.1%	2.25	2.10		
Colorado	1.73	1.77	-2.3%	1.73	1.77		
Idaho							
Montana	W	W	W	1.90	1.43	W	W
Nevada	W	W	W		2.00	W	W
New Mexico	1.86	1.99	-6.5%	1.86	1.99		
Utah	1.93	1.91	1.0%	1.93	1.91		
Wyoming	W	W	W	1.88	1.59	W	W
Pacific Contiguous	W	W	W		2.14	W	W
California				2.31			
Oregon	2.31	2.14	7.9%	2.31	2.14		
Washington	W	W	W W	2.01	2.17	W	W
Pacific Noncontiguous	W	W	W	2.88	3.04		W
Alaska	2.88	3.04	-5.3%	2.88			
Hawaii	2.88 W	3.04 W	-5.5% W		3.04	W	W
U.S. Total	2.03	2.06			2.12		1.88

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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.

Table 4.10.B. Average Cost of Coal Delivered for Electricity Generation by State, (Year-to-Date) October 2017 and 2016 (Dollars per MMBtu)

(Dollars per MMBtu) Census Division								
and State	E	lectric Power Secto		Electric	Utilities	Independent Po	wer Producers	
	October 2017 YTD	October 2016 YTD	Percentage Change	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 VTD	
New England	W W	3.10	W	4.34	4.07	W	2.86	
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	4.04	4.07			4.07			
Vermont								
Middle Atlantic	1.97	1.96	0.5%	1.66		1.97	1.96	
New Jersey	W	W	W	1.00		W	W	
New York	W	W	W			W	W	
Pennsylvania	1.91	1.90	0.5%	1.66		1.91	1.90	
East North Central	2.02	2.09	-3.3%	2.10	2.19	1.89	1.95	
Illinois	W W	W	-3.376 W	1.85	2.00	W.03	W	
Indiana	W	W	W	2.16	2.25	W	W	
Michigan	W	W	W	2.15	2.26	W	W	
Ohio	1.93	2.07	-6.8%	1.73	1.91	1.99	2.13	
Wisconsin	2.24		0.9%			1.99	2.13	
West North Central	1.75	2.22 1.72	1.7%	2.24 1.75	2.22 1.72			
lowa	1.75	1.72	4.4%	1.75	1.72			
	1.67	1.60	1.2%	1.67	1.69			
Kansas								
Minnesota	2.08	2.07	0.5%	2.08	2.07			
Missouri	1.87	1.86	0.5%	1.87	1.86			
Nebraska	1.37	1.35	1.5%	1.37	1.35			
North Dakota	1.60	1.55	3.2%	1.60	1.55			
South Dakota	2.25	2.24	0.4%	2.25	2.24			
South Atlantic	2.70	2.75	-1.8%	2.73	2.79	2.49	2.52	
Delaware	W	W	W			W	W	
District of Columbia								
Florida	W	W	W	2.95	3.02	W	W	
Georgia	2.76	2.81	-1.8%	2.76	2.81			
Maryland	2.70	2.83	-4.6%			2.70	2.83	
North Carolina	W	W	W	2.96	3.09	W	W	
South Carolina	3.29	3.20	2.8%	3.29	3.20			
Virginia	W	W	W	2.76	2.90	W	W	
West Virginia	W	2.26	W	2.21	2.31	W	2.05	
East South Central	W	W	W	2.09	2.20	W	W	
Alabama	2.18	2.37	-8.0%	2.18	2.37			
Kentucky	1.99	2.12	-6.1%	1.99	2.12			
Mississippi	W	W	W	2.69	2.68	W	W	
Tennessee	2.29	2.22	3.2%	2.29	2.22			
West South Central	1.94	1.91	1.6%	2.07	2.15	1.82	1.66	
Arkansas	W	W	W	2.05	2.19	W	W	
Louisiana	W	W	W	2.41	2.84	W	W	
Oklahoma	W	W	W	1.84	1.91	W	W	
Texas	1.90	1.80	5.6%	2.09	2.10	1.80	1.62	
Mountain	W	W	W	1.91	1.89	W	W	
Arizona	2.24	2.14	4.7%	2.24	2.14			
Colorado	1.77	1.88	-5.9%	1.77	1.88			
Idaho								
Montana	W	W	W	1.76	1.75	W	W	
Nevada	W	W	W	3.08	2.02	W	W	
New Mexico	1.97	1.85	6.5%	1.97	1.85			
Utah	1.96	1.95	0.5%	1.96	1.95			
Wyoming	W	W	W	1.70	1.70	W	W	
Pacific Contiguous	W	W	W	2.31	2.25	W	W	
California								
Oregon	2.31	2.25	2.7%	2.31	2.25			
Washington	W	W	W			W	W	
Pacific Noncontiguous	W	W	W	3.04	3.09	W	W	
Alaska	3.04	3.09	-1.6%	3.04	3.09			
						W	W	
Hawaii	W	W	W			VVI	VVI	

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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.

Table 4.11.A. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, October 2017 and 2016

(Dollars per MMBtu) Census Division								
and State	Ele	ectric Power Sector		Electric	Utilities	Independent Po	ower Producers	
	October 2017	October 2016	Percentage Change	October 2017	October 2016	October 2017	October 2016	
New England	W	W	W	14.58	12.82	W W	W W	
Connecticut	W		W			W		
Maine	W	W	W			W	W	
Massachusetts	W	W	W			W	W	
New Hampshire	14.58	12.82	14.0%	14.58	12.82			
Rhode Island								
Vermont								
Middle Atlantic	W	W	W		7.59	W	W	
New Jersey	W	W	W			W	W	
New York	W	W	W		7.59	W	W	
Pennsylvania	14.41	10.65	35.0%			14.41	10.65	
East North Central	14.77	11.93	24.0%	14.86	12.44	14.66	11.63	
Illinois	W	W	W	15.35	12.01	W	W	
Indiana	14.69	12.12	21.0%	14.69	12.12	-		
Michigan	14.59	12.39	18.0%	14.59	12.39	-		
Ohio	W	W	W	15.99	12.92	W	W	
Wisconsin	14.48			14.48				
West North Central	14.17	W	W	14.17	12.33		W	
Iowa	14.17	12.55	13.0%	14.17	12.55			
Kansas	14.10			14.10				
Minnesota	14.22	W	W	14.22	12.60		W	
Missouri	14.18	11.89	19.0%	14.18	11.89			
Nebraska	14.49	13.74	5.5%	14.49	13.74			
North Dakota		12.82			12.82			
South Dakota								
South Atlantic	12.51	12.41	0.8%	13.21	12.46		12.36	
Delaware	W		W			W		
District of Columbia								
Florida	12.14	W	W	12.14	15.91		W	
Georgia	13.18	11.71	13.0%	13.18	11.71			
Maryland	W	W	W			W	W	
North Carolina	13.64	W	W	13.64			W	
South Carolina	13.93 W	12.49 W	12.0% W	13.93 11.45	12.49 11.73	 W	 W	
Virginia West Virginia	14.87	12.15	22.0%	14.87	12.15		VV	
East South Central	14.67 W	11.94	22.0% W	14.03				
Alabama	W	12.64	W	13.38		W		
Kentucky	14.25	11.93	19.0%	14.25	11.93			
Mississippi	13.17	12.11	8.8%	13.17	12.11			
Tennessee	13.74	11.74	17.0%	13.74	11.74			
West South Central	W	W	W	13.98		W	W	
Arkansas	W	11.97	W	14.04	11.97	W		
Louisiana		12.04			12.04			
Oklahoma	14.85	12.16	22.0%	14.85	12.16			
Texas	W	W	W	13.32	9.04	W	W	
Mountain	W	W	W	15.78		W	W	
Arizona	14.55	11.74	24.0%	14.55	11.74			
Colorado		12.55			12.55			
Idaho								
Montana								
Nevada	W	W	W			W	W	
New Mexico	17.13	13.05	31.0%	17.13	13.05			
Utah	W	W	W	17.21	13.13	W	W	
Wyoming	13.88	11.21	24.0%	13.88	11.21			
Pacific Contiguous	W	W	W			W	W	
California							-	
Oregon								
Washington	W	W	W			W	W	
Pacific Noncontiguous	W	W	W	11.25	9.22	W	W	
Alaska		15.57			15.57			
Hawaii	W	W	W	11.25	9.19	W	W	
U.S. Total	11.88	10.00	19.0%	11.98	9.80	11.66	10.39	

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Petroleum Liquids includes distillate and residual fuel oils.

See the Technical Notes for fuel conversion factors.

Table 4.11.B. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, (Year-to-Date) October 2017 and 2016

Census Division	_			Electric	116226	la den en de at B	Da. da
and State		Electric Power Secto	Percentage		Utilities	Independent Po	ower Producers
	October 2017 YTD		Change	October 2017 YTD	October 2016 YTD		October 2016 YTD
New England	11.36	8.59	32.0%	14.02	9.60	11.26	
Connecticut	W	9.48				W	
Maine	W	W	W			W	
Massachusetts	W	W	W		9.59	W	W
New Hampshire	14.02	9.68	45.0%	14.02	9.68		
Rhode Island		W	W				W
Vermont							
Middle Atlantic	W	10.42	W		8.41	W	
New Jersey	W	9.75				W	
New York	13.16	10.61	24.0%	9.22	8.41	20.40	
Pennsylvania	W	10.20	W			W	
East North Central	12.75	W	W			12.79	
Illinois	13.05	10.68	22.0%	12.77	10.80	13.07	10.67
Indiana	12.61	10.38	21.0%	12.61	10.38		
Michigan	12.44	10.39	20.0%	12.44			
Ohio	12.97	W	W			12.69	
Wisconsin	12.25	W	W				W
West North Central	12.55	W	W				W
Iowa	12.72	10.64	20.0%	12.72			
Kansas	12.56	10.14	24.0%	12.56			
Minnesota	12.63	W	W				W
Missouri	12.69	10.43	22.0%	12.69			
Nebraska	12.66	11.03	15.0%	12.66			
North Dakota	12.15	9.16					
South Dakota	11.98	7.54	59.0%	11.98			
South Atlantic	W	9.95	W		9.87	W	
Delaware	W	W	W			W	W
District of Columbia							
Florida	12.36	W	W				W
Georgia	W	9.08	W	11.81	9.38		
Maryland	11.17	9.50	18.0%			11.17	9.50
North Carolina	W	9.48		12.41		W	7.91
South Carolina	12.81	10.86	18.0%	12.81	10.86		
Virginia	W	W	W				W
West Virginia	12.99	11.04	18.0%	12.99			
East South Central	W	W	W		10.13		
Alabama	W			12.84		W	VV
Kentucky	12.33	10.36	19.0%	12.33			
Mississippi	11.80	9.19	28.0%	11.80			
Tennessee	11.91	10.16		11.91 12.18	10.16		40.00
West South Central	12.39 W	10.48 W	18.0% W			12.58 W	
Arkansas Louisiana	VV	W	W	_	9.66		W
Oklahoma	13.48	12.15		13.48			VV
Texas	13.46 W	12.15 W	11.0% W			 W	 W
Mountain	13.68	11.18	22.0%	13.70			
Arizona	13.27	10.92	22.0%	13.70	10.92	13.40	12.15
Colorado	13.60	10.92	34.0%	13.60	10.92		
Idaho	13.60	10.12	34.0%	13.60	10.12		
Montana	W	W	W			 W	
Nevada	W	W	W		11.79	W	
New Mexico	13.64	10.82	26.0%	13.64			
	13.64 W	10.82 W	20.0% W				
Utah Wyoming	13.91	11.35	23.0%	14.32 13.91	11.65 11.35		VV
Wyoming Pacific Contiguous	13.91 W	11.35 W	23.0% W		11.35		 W
California	VV	VV	VV	12.71	11.19		
	12.71	 11.19	44.00/	 12.71	 11.19		
Oregon Washington			14.0% W		11.19	 W	
Washington	W W	W			0.04		
Pacific Noncontiguous							
Alaska	16.16	13.95					
Hawaii U.S. Total	W 11.48	W 9.15					

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Petroleum Liquids includes distillate and residual fuel oils.

See the Technical Notes for fuel conversion factors.

Table 4.12.A. Average Cost of Petroleum Coke Delivered for Electricity Generation by State, October 2017 and 2016 (Dollars per MMBtu)

(Dollars per MMBtu) Census Division							
Gensus Division and State	Ele	ectric Power Sector		Electric	Utilities	Independent Pa	ower Producers
and State		ectric Power Sector	Percentage		Otilities	independent PC	ower Producers
	October 2017	October 2016	Change		October 2016	October 2017	October 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	1.53	W	W	1.53	1.41		W
Illinois							
Indiana							
Michigan	1.47	1.31	12.0%	1.47	1.31		
Ohio		W	W				W
Wisconsin	1.79	1.76	1.7%	1.79	1.76		
West North Central	1.73	1.70	1.70	1.79	1.70		
Iowa					-		-
Kansas			<u></u>			<u></u>	
Minnesota							
Missouri							
Nebraska							
North Dakota							
South Dakota							
South Atlantic	2.86	1.66	72.0%	2.86	1.66		-
Delaware							
District of Columbia							
Florida	2.86	1.66	72.0%	2.86	1.66		
Georgia							
Maryland							
North Carolina							-
South Carolina				-			-
Virginia				-			-
West Virginia							-
East South Central		1.46			1.46		
Alabama							
Kentucky		1.46			1.46		
Mississippi							
Tennessee							
West South Central	2.40	2.02	19.0%	2.40	2.02		
Arkansas							
Louisiana	2.40	2.02	19.0%	2.40	2.02		
Oklahoma							
Texas							
Mountain							
Arizona							
Colorado							
Idaho							
Montana							
Nevada							
New Mexico							
Utah							
Wyoming							
Pacific Contiguous							
California							
Oregon							
Washington						 	
Pacific Noncontiguous							
	-		-	-			-
Alaska							
Hawaii							
U.S. Total	2.37	W	W	2.37	1.87		W

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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.

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

(Dollars per MMBtu) Census Division								
and State	E	Electric Power Secto			Utilities	Independent Po	ower Producers	
	October 2017 YTD	October 2016 YTD	Percentage Change		October 2016 YTD	October 2017 YTD	October 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	1.21		W	
Illinois								
Indiana		0.96			0.96			
Michigan	1.46	1.30	12.0%	1.46				
Ohio	1.40	W	W	1.40	1.50		W	
Wisconsin	1.79	1.71	4.7%	1.79	1.71		VV	
West North Central	1.79	1.71	4.1%	1.79	1.71			
Iowa Kansas								
Minnesota								
Missouri								
Nebraska								
North Dakota								
South Dakota			75.00/					
South Atlantic	2.59	1.48	75.0%	2.59	1.48			
Delaware								
District of Columbia								
Florida	2.59	1.48	75.0%	2.59	1.48			
Georgia								
Maryland								
North Carolina								
South Carolina								
Virginia								
West Virginia								
East South Central	1.50	1.57	-4.5%	1.50	1.57			
Alabama								
Kentucky	1.50	1.57	-4.5%	1.50	1.57			
Mississippi								
Tennessee								
West South Central	2.16	1.41	53.0%	2.16	1.41			
Arkansas			-					
Louisiana	2.16	1.41	53.0%	2.16	1.41			
Oklahoma			-					
Texas		-	1	-				
Mountain		-	-	-				
Arizona		-	-	-				
Colorado								
Idaho								
Montana								
Nevada								
New Mexico								
Utah								
Wyoming								
Pacific Contiguous								
California								
Oregon								
Washington								
Pacific Noncontiguous								
Alaska								
Hawaii								
U.S. Total	2.11	1.53	38.0%		1.41		0.50	
0.5. Total	2.11	1.53	38.0%	2.11	1.41	-	2.50	

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W = Withheld to avoid disclosure of individual company data.

Notes:

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

Petroleum Coke includes petroleum coke-derived synthesis gas.

See the Technical Notes for fuel conversion factors.

Table 4.13.A. Average Cost of Natural Gas Delivered for Electricity Generation by State, October 2017 and 2016

(Dollars per MMBtu)							
Census Division and State	FI	ectric Power Secto	r	Electric	Utilities	Independent Po	wer Producers
und Gtato			Percentage				
	October 2017	October 2016	Change		October 2016	October 2017	October 2016
New England	W	2.78	W	3.26	3.14	W	2.78
Connecticut	2.79	2.39	17.0%			2.79	2.39
Maine	W	W	W			W	W
Massachusetts	W	3.20	W	3.05	3.12	W	3.20
New Hampshire	W	W	W	3.85	9.23	W	W
Rhode Island	W	W	W			W	W
Vermont							
Middle Atlantic	1.69	1.60	5.6%	2.37	1.52	1.65	1.61
New Jersey	1.59	1.80	-12.0%			1.59	1.80
New York	2.26	1.93	17.0%	2.37	1.52	2.24	2.05
Pennsylvania	1.42	1.24	15.0%			1.42	1.24
East North Central	2.91	2.92	-0.3%	3.02	3.06	2.85	2.82
Illinois	W	3.12	W	3.45	3.54	W	3.09
Indiana	W	W	W	2.95	3.26	W	W
Michigan	3.00	3.09	-2.9%	3.15	3.19	2.97	3.04
Ohio	2.74	2.16	27.0%	2.93	1.64	2.72	2.33
Wisconsin	3.08	W	W	3.08	3.47		W
West North Central	W	3.36	W	2.94	3.30	W	4.12
lowa	2.59	2.83	-8.5%	2.59	2.83		
Kansas	3.17	3.80	-17.0%	3.17	3.80		
Minnesota	W	W	W	3.82	3.99	W	W
Missouri	2.62	W	W	2.62	3.21		W
Nebraska	3.79	3.30	15.0%	3.79	3.30		
North Dakota	8.71	2.92	198.0%	8.71	2.92		
South Dakota		3.19			3.19		
South Atlantic	3.91	3.82	2.4%	4.06	3.94	2.67	2.85
Delaware							
District of Columbia							
Florida	W	W	W	4.41	4.06	W	W
Georgia	W	3.47	W	3.60	3.48	W	3.38
Maryland	3.05	2.65	15.0%	3.00	3.40	3.05	2.65
North Carolina	3.03 W	2.03 W	13.0 % W	3.83	4.11	3.03 W	2.03 W
South Carolina	W	W	W	3.35		W	W
Virginia	W	W	W	2.80	4.19	W	W
West Virginia	W	1.60	W	2.65	2.95	W	1.52
East South Central	3.09	3.18	-2.8%	3.08	3.17	3.11	3.24
Alabama	W	W	W	3.12	3.31	W	W
Kentucky	W	W	W	3.78	3.57	W	W
Mississippi	W	W	W	3.04	3.06	W	W
Tennessee	2.87	3.13	-8.3%	2.87	3.13		
West South Central	3.02	3.16	-4.4%	3.12	3.25	2.96	3.10
Arkansas	W	W	W	2.96	3.49	W	W
Louisiana	W	W	W	3.14	3.22	W	W
Oklahoma	W	W	W	2.98	3.24	W	W
Texas	3.03	3.15	-3.8%	3.19	3.24	2.99	3.12
Mountain	W	3.37	W	3.17	3.44	W	2.82
Arizona	W	W	W	3.29	3.68	W	W
Colorado	W	W	W	3.26	3.61	W	W
Idaho		4.78			4.78		
Montana	0.69	W	W	0.69	2.00		W
Nevada	3.04	3.33	-8.7%	3.04	3.33		
New Mexico	3.20	3.16	1.3%	3.20	3.16		
Utah	W	W	W	3.53	3.21	W	W
Wyoming	W	11.04	W	3.82	11.04	W	
Pacific Contiguous	3.47	3.17	9.5%	3.74	3.52	3.23	2.85
California	W	3.23	W	3.97	3.66	W	2.92
Oregon	W	W	W	2.43	2.63	W	W
Washington	3.39	W	W				W
Pacific Noncontiguous	8.09	6.83	18.0%	8.09			
Alaska	8.09	6.83	18.0%	8.09			
Hawaii	0.09	0.00	10.070				
U.S. Total	3.17	3.13	1.3%	3.59	3.53	2.60	2.60
o.o. rotal	3.17	3.13	1.3%	3.39	3.33	2.00	2.00

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

(Dollars per MMBtu)								
Census Division and State	E	Electric Power Secto	r Percentage	Electric	Utilities	Independent Power Producers		
	October 2017 YTD	October 2016 YTD	Change	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	
New England	W	3.10	W	3.37	3.50	W	3.09	
Connecticut	W	3.41	W			W	3.41	
Maine	W	W	W			W	W	
Massachusetts	3.29	2.95	12.0%	3.13	3.38	3.29	2.95	
New Hampshire	W	W	W	3.80	3.91	W	W	
Rhode Island	W	W	W			W	W	
Vermont								
Middle Atlantic	2.74	2.05	34.0%	3.37	2.46	2.66	2.01	
New Jersey	2.71	1.99	36.0%			2.71	1.99	
New York	3.18	2.47	29.0%	3.37	2.46	3.11	2.47	
Pennsylvania	2.39	1.71	40.0%			2.39	1.71	
East North Central	3.08	2.56		3.12	2.70	3.05	2.45	
Illinois	3.09	2.75		3.80	3.00	3.09	2.73	
Indiana	W	W	W	3.07	2.84	W.00	W	
Michigan	3.17	2.64	20.0%	3.38	2.82	3.12	2.53	
Ohio	2.90	2.14	36.0%	2.81	2.16	2.94	2.13	
Wisconsin	2.90 W	2.14 W	30.0% W	3.30	2.70	2.94 W	2.13 W	
	W		W			W		
West North Central		2.83		3.20	2.83	VV	2.80	
lowa	2.70	2.56		2.70	2.56			
Kansas	3.53	3.28		3.53	3.28			
Minnesota	W	W	W	3.48	2.97	W	W	
Missouri	3.02	W	W	3.02	2.78		W	
Nebraska	3.77	3.06		3.77	3.06			
North Dakota	5.10	2.55	100.0%	5.10	2.55			
South Dakota		2.43			2.43			
South Atlantic	3.88	3.36	15.0%	3.97	3.47	3.04	2.57	
Delaware								
District of Columbia								
Florida	W	3.70		4.19	3.73	W	2.84	
Georgia	W	2.89	W	3.61	2.95	W	2.68	
Maryland	W	2.83	W			W	2.83	
North Carolina	W	W	W	3.96	3.62	W	W	
South Carolina	W	W	W	3.51	3.23	W	W	
Virginia	3.21	W	W	3.49	2.82	2.43	W	
West Virginia	W	W	W	2.96	2.42	W	W	
East South Central	3.25	2.73	19.0%	3.24	2.74	3.27	2.72	
Alabama	W	W	W	3.37	2.83	W	W	
Kentucky	W	W	W	3.70	3.06	W	W	
Mississippi	W	W	W	3.16	2.71	W	W	
Tennessee	3.03	2.50	21.0%	3.03	2.50			
West South Central	3.10	2.57	21.0%	3.21	2.67	3.04	2.49	
Arkansas	W	W	W	3.18	3.00	W	W	
Louisiana	W	W	W	3.27	2.63	W	W	
Oklahoma	W	W	W	3.18	2.67	W	W	
Texas	3.06	2.54	20.0%	3.15	2.64	3.04	2.51	
Mountain	3.45	2.88		3.45			2.74	
Arizona	3.56	W	W	3.63	3.09	3.01	W	
Colorado	W	W	W	3.43	3.02	W	W	
Idaho		2.80			2.80			
Montana	1.77	W W	W	1.77	1.71		W	
Nevada	3.38	2.81	20.0%	3.38	2.81			
New Mexico	3.39	2.83	20.0%	3.39	2.83			
Utah	3.59 W	2.03 W	20.0% W	3.34	2.54	W	W	
Wyoming	W	W	W	3.41	8.44	W	W	
Pacific Contiguous	3.58	2.85		3.90		3.27	2.53	
California	3.56 W		26.0% W	4.03	3.17	3.27 W	2.53	
	W	2.97 W	W W		3.41 2.25	W	2.61 W	
Oregon				2.64				
Washington	3.72			3.72			W	
Pacific Noncontiguous	8.09			8.09			-	
Alaska	8.09	6.54	24.0%	8.09	6.54			
Hawaii								
U.S. Total	3.38	2.79	21.0%	3.64	3.06	3.03	2.44	

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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.

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

		Bituminous			Subbituminous			Lignite	
		Average Sulfur	Average Ash		Average Sulfur	Average Ash		Average Sulfur	Average Ash
Census Division	Receipts		Percent by			•	•	-	Percent by
and State	(Thousand Tons)			(Thousand Tons)	Weight	Weight	(Thousand Tons)	Weight	Weight
New England	7	0.67	7.1	0			0		
Connecticut	0			0			0		
Maine	7	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	1,178	3.27	8.9				0		
New Jersey	57	1.79	7.5				0		
New York	8	2.87	7.7				0		
Pennsylvania	1,113	3.35	9.0				0		
East North Central	5,198	3.16	10.3		0.25	4.7	0		
Illinois	750	3.62	20.2	· ·	0.21	4.7	0		
Indiana	2,263	2.77	8.8		0.25	4.5	0		
Michigan	97	2.30	7.4		0.28	4.6			
Ohio	2,043	3.48	9.3		0.28	5.2	0		
Wisconsin	46	2.54	9.1	· ·	0.25	5.0			
West North Central	98	3.17	9.0		0.27	5.0	1,944	0.83	9.7
lowa	32	3.55	8.0	·	0.25	4.7	0		
Kansas	15	3.41	13.7		0.32	4.8	0		
Minnesota	0			1,037	0.36	5.9			
Missouri	50	2.85	8.3		0.23	4.7	0		
Nebraska	0			995	0.27	5.0			
North Dakota	0			0			1,944	0.83	9.7
South Dakota	0			57	0.33	5.2	0		
South Atlantic	6,060	2.42	10.0		0.34	4.8	0		
Delaware	0			0			0		
District of Columbia	0			0			0		
Florida	1,295	2.03	8.1				0		
Georgia	594	2.59	7.8		0.34	4.8			
Maryland	337	2.58	10.2		0.60	8.4	0		
North Carolina	937	1.79	9.6				0		
South Carolina	501	1.76	9.1				0		
Virginia	165	1.05	11.0				0		
West Virginia	2,230	3.09	11.9				0		
East South Central	2,602	2.68	9.8		0.27	5.1	155	0.36	12.2
Alabama	432 1,875	1.66 3.10	13.1 9.2		0.29 0.25	5.3 5.0	0		
Kentucky	37	2.97			0.25		155		 12.2
Mississippi	258	1.42	8.5 7.8		0.30	4.9 5.0		0.36	12.2
Tennessee West South Central	51	1.42	14.9		0.24	5.0	2,446	1.02	16.7
Arkansas	31	0.62	14.9		0.28	4.7	2,440	1.02	10.7
Louisiana	18		8.6		0.23	4.7	129	0.66	20.3
Oklahoma	30	1.61	19.2		0.27	4.9		0.00	20.3
Texas	30	1.01	19.2	4,875	0.22	5.3		1.04	 16.5
Mountain	2,190	0.58	13.5		0.50	8.3	2,316	0.58	8.9
Arizona	2,190	0.59	10.1	·	0.50	10.0	0	0.36	0.9
Colorado	163	0.39	10.1		0.30	5.6	0		
Idaho	103	0.40	10.5	1,424	0.31		0		
Montana	0			735	0.68	9.5	Ŭ.	0.58	 8.9
Nevada	0	 - I		46	0.86	5.2	14	0.00	0.9
New Mexico	548	0.70	21.0		0.79	21.1	0		
Utah	869	0.70	12.2		1.02	9.0	0		
Wyoming	0	0.04	12.2	1,610	0.53	7.6	ŭ		
Pacific Contiguous	55	0.47	10.7		0.42	8.0	0		
California	55	0.47	10.7		0.42	0.0	0		
Oregon	0	0.47	10.7	152	0.24	4.8			
Washington	0			413			0		
Pacific Noncontiguous	0			63		5.0	ı Yı	0.13	6.5
Alaska	0			0	0.21	5.0	7	0.13	6.5
Hawaii	0			63	0.21	5.0	0	0.13	
U.S. Total	17,437		10.4					0.92	13.5
o.o. rotal	17,437	2.02	10.4	29,010	0.01	5.0	4,500	0.92	10.0

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Notes:

Bituminous coal includes anthracite coal and coal-derived synthesis gas.

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Table 4.15. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Electric Utilties by State, October 2017

		Bituminous			Subbituminous			Lignite	
Conous Bhrisian	Doosinto	Average Sulfur	Average Ash		Average Sulfur	Average Ash		Average Sulfur	Average Ash
Census Division and State	Receipts (Thousand Tons)	Percent by Weight	Percent by	Receipts (Thousand Tons)	Percent by Weight	Percent by	Receipts (Thousand Tons)	Percent by Weight	Percent by Weight
New England	(Thousand Tons)	weight	vveigni	(Thousand Tons)	weight	vveigni	(Thousand Tons)	weight	vveignt
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	26	4.19	10.1	0			0		
New Jersey	0	4.19	10.1	0			0		
New York	0			0			0		
Pennsylvania	26	4.19	10.1	0			0		
East North Central	2,925	2.85	8.8		0.26	4.7	0		
Illinois	169	3.08	11.7		0.19	4.6	•		
	2,127	2.72	8.7		0.19		0		
Indiana	78	2.65	7.6		0.28	4.5	Ŭ		
Michigan		3.26		•	0.26	4.6	0		
Ohio Wisconsin	518 33	3.26	8.5 8.5		0.25	5.0	Ŭ		
	64	2.98							9.7
West North Central		2.98	9.6	7,503 1,278	0.27	5.0 4.7	1,944	0.83	9.7
lowa	0			·			0		
Kansas	15	3.41	13.7		0.32	4.8			
Minnesota	0			1,037	0.36	5.9			
Missouri	49	2.85	8.3	·	0.23	4.7	0		
Nebraska	0			932	0.27	5.1			
North Dakota	0			0			1,944	0.83	9.7
South Dakota	5 470			57	0.33	5.2	0		
South Atlantic	5,173	2.36	9.7		0.34	4.8	0		
Delaware	0			0			0		
District of Columbia	0			0			0		
Florida	1,285	2.04	8.1				0		
Georgia	578	2.63	7.7		0.34	4.8	-		
Maryland	0			0			0		
North Carolina	915	1.81	9.7				0		
South Carolina	494	1.78	9.1				0		
Virginia	109	1.17	12.6				0		
West Virginia	1,793	3.01	11.4				0		
East South Central	2,531	2.74	9.9	·	0.27	5.1	0		
Alabama	432	1.66	13.1		0.29	5.3			
Kentucky	1,875	3.10	9.2		0.25	5.0			
Mississippi	37	2.97	8.5			4.9			
Tennessee	187	1.66	8.2		0.24	5.0			
West South Central	18	2.82	8.6		0.25	4.9	_	1.41	21.3
Arkansas	0			1,249	0.21	4.7	0		
Louisiana	18	2.82	8.6		0.27	4.9		0.66	20.3
Oklahoma	0			1,051	0.22	4.9			
Texas	0			1,617	0.28	5.1	574	1.59	21.5
Mountain	2,171	0.58	13.5		0.47	8.1	14	0.58	8.9
Arizona	611	0.59	10.1	915	0.50	10.0	0		
Colorado	163	0.45	10.5	1,424	0.31	5.6			
Idaho	0			0			0		
Montana	0			0			14	0.58	8.9
Nevada	0			0			0		
New Mexico	548	0.70	21.0		0.79	21.1	0		
Utah	849	0.54	12.2		1.02	9.0	0		
Wyoming	0			1,562	0.53	7.6			
Pacific Contiguous	0			152	0.24	4.8			
California	0			0			0		
Oregon	0			152	0.24	4.8	0		
Washington	0						0		
Pacific Noncontiguous	0			0			7	0.13	6.5
Alaska	0			0			7	0.13	6.5
Hawaii	0			0			0		
U.S. Total	12,907	2.28	10.1	22,329	0.30	5.5	2,669	0.97	12.5

 ${\sf NM}={\sf Not}$ meaningful due to large relative standard error or excessive percentage change.

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Notes:

Bituminous coal includes anthracite coal and coal-derived synthesis gas.

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Table 4.16. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Independent Power Producers by State, October 2017

	Bituminous				Subbituminous		Lignite		
		Average Sulfur	Average Ash		Average Sulfur	Average Ash		Average Sulfur	Average Ash
Census Division	Receipts		Percent by	Receipts	Percent by		-	Percent by	Percent by
and State	(Thousand Tons)			(Thousand Tons)	Weight	Weight	(Thousand Tons)	Weight	Weight
New England	7	0.67	7.1	0			0		
Connecticut	0			0			0		
Maine	7	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	1,133	3.26	8.9				0		
New Jersey	57	1.79	7.5				0		
New York	0			0			0		
Pennsylvania	1,076	3.34	9.0				0		
East North Central	2,146	3.57	12.4		0.21	4.7	-		
Illinois	466	3.85	27.6		0.21	4.7	0		
Indiana	135	3.60	9.6				0		
Michigan	18	0.36	5.9				0		
Ohio	1,526	3.55	9.6		0.28	5.2			
Wisconsin	0			0			0		
West North Central	0			0			0		
lowa	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	792	2.98	11.8	13	0.60	8.4	0		
Delaware	0			0			0		
District of Columbia	0			0			0		
Florida	0			0			0		
Georgia	0			0			0		
Maryland	321	2.61	9.7		0.60	8.4	0		
North Carolina	1	0.76	5.8	0			0		
South Carolina	0			0			0		
Virginia	33	0.92	9.0				0		
West Virginia	437	3.44	13.8	0			0		
East South Central	0			0			155	0.36	12.2
Alabama	0			0			0		
Kentucky	0			0			0		
Mississippi	0			0			155	0.36	12.2
Tennessee	0			0			0		
West South Central	30	1.61	19.2	·	0.31	5.3	1,742	0.89	15.0
Arkansas	0			247	0.29	5.0	0		
Louisiana	0			182	0.27	4.8			
Oklahoma	30	1.61	19.2		0.24	5.3			
Texas	0			3,258		5.3	1,742	0.89	15.0
Mountain	0	-	-	828	0.65	9.1	0		
Arizona	0			0			0		
Colorado	0			0			0		
Idaho	0			0			0		
Montana	0			735	0.68	9.5	0		
Nevada	0			46	0.34	5.2	0		
New Mexico	0			0			0		
Utah	0			0			0		
Wyoming	0			47	0.46	6.7	0		
Pacific Contiguous	0			413	0.49	9.2	0		
California	0			0			0		
Oregon	0			0			0		
Washington	0			413			ı Yı		
Pacific Noncontiguous	0			63	0.21	5.0	0		
Alaska	0			0			0		
Hawaii	0			63					
U.S. Total	4,107	3.35	11.3	6,998	0.33	5.8	1,898	0.85	14.8

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.

Table 4.17. Receipts and Quality of Coal by Rank Delivered for Electricity Generation:

Commercial Sector by State, October 2017

Commercial Sector by State, October 2017 Bituminous					Subbituminous	Lignite			
Canana Bhriainn	Danainta	Average Sulfur	Average Ash		Average Sulfur	Average Ash		Average Sulfur	Average Ash
Census Division and State	Receipts (Thousand Tons)	Percent by Weight	Percent by	Receipts (Thousand Tons)			Receipts (Thousand Tons)	Percent by Weight	Percent by Weight
	(Tilousaliu Tolis)	vveignt	weight	(Triousariu Toris)	Weight	weight	(Thousand Tons)	Weight	vveigin
New England Connecticut	0			0			0		-
Maine	0			0			0		
	0			0			0		
Massachusetts	0			0			0		
New Hampshire	0			0			0		
Rhode Island	0			0			0		
Vermont	0			0			0		
Middle Atlantic	0			0	-		0		
New Jersey	0			0			0		
New York	0			0			0		
Pennsylvania	0			0			0		
East North Central	0			0			0		
Illinois	0			0			0		
Indiana	0			0			0		
Michigan	0			0			0		
Ohio	0			0			0		
Wisconsin	0			0			0		
West North Central	2	2.96	8.4	0			0		-
Iowa	0			0			0		
Kansas	0			0			0		
Minnesota	0			0			0		
Missouri	2	2.96	8.4	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		<u> </u>	0			0		
Mountain	0			0	-		0		-
Arizona	0			0			0		
Colorado	0			0			0		
Idaho	0			0			0		
Montana	0		<u> </u>	0		<u></u>	0		<u> </u>
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	1		0		
Alaska	0			0			0		
Hawaii	0			0			0		
U.S. Total		J		l '			· •		

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.

Table 4.18. Receipts and Quality of Coal by Rank Delivered for Electricity Generation:

Industrial Sector by State, October 2017

		Bituminous	A A a b		Subbituminous	A A.L		Lignite	A
Census Division	Receipts	Average Sulfur Percent by	Average Ash Percent by		Average Sulfur Percent by	Average Ash Percent by		Average Sulfur Percent by	Average Ash Percent by
and State	(Thousand Tons)	Weight		(Thousand Tons)			(Thousand Tons)	Weight	Weight
New England	0			0			0		
Connecticut	0			0			0		<u>-</u> -
Maine	0			0			0		
Massachusetts	0			0			0		
New Hampshire	0			0			0		
Rhode Island	0			0			0		
Vermont	0			0			0		
Middle Atlantic	19	2.61	7.5	0			0		
New Jersey	13	2.01	7.5	0			0		
New York	8	2.87	7.7	0			0		
Pennsylvania	11	2.43	7.4				0		
East North Central	128	3.33	8.9		0.80	6.5	0		_
Illinois	114	3.68	8.7			6.5			
Indiana	0	3.00		47	0.00	0.3	0		
Michigan	0			0			0		
Ohio	0			0			0		
Wisconsin	13	0.50	10.7	0			0		<u></u>
West North Central	32	3.55	8.0		0.22	4.5	0		
	32	3.55	8.0			4.5			-
Iowa Kansas	0	ა.ეე		108	0.22	4.5	0		
	0			0			0		
Minnesota	0			0			0		
Missouri Nobraska	0			63			Ŭ		
Nebraska	9			63	0.21	4.4	0		
North Dakota	0			0			0		
South Dakota	0			0			0		
South Atlantic	94	1.00	9.7	0			0		
Delaware	0			0			0		
District of Columbia	0			0			0		
Florida	10	0.71	7.1				0		
Georgia	16	1.20	10.1				0		
Maryland	16	1.79	21.9				0		
North Carolina	21	0.85	6.9				0		
South Carolina	/	0.77	7.8				0		
Virginia	24	0.75	7.1				0		
West Virginia	0						0		
East South Central	71	0.89	7.0	0			0		
Alabama	0			0			0		
Kentucky	0						0		
Mississippi	0						0		
Tennessee	71	0.89	7.0				0		
West South Central	3	0.62	10.7		0.19	4.5	0		
Arkansas	3	0.62	10.7				0		
Louisiana	0			0			0		
Oklahoma	0			15	0.19	4.5			
Texas	0			0			0		
Mountain	20	0.49	9.8	0			0		
Arizona	0			0			0		
Colorado	0						0		
Idaho	0			0			0		
Montana	0			0			0		
Nevada	0						0		
New Mexico	0			ı			0		
Utah	20	0.49	9.8				0		
Wyoming	0			0			0		
Pacific Contiguous	55	0.47	10.7				0		
California	55	0.47	10.7				0		
Oregon	0			0			0		
Washington	0			0			0		
Pacific Noncontiguous	0			0			0		
Alaska	0			0			0		
Hawaii	0						0		
U.S. Total	421	1.79	8.9	283	0.31	4.8	0		

Displayed values of zero may represent small values that round to zero.

NM = Not meaningful due to large relative standard error or excessive percentage change.

W = Withheld to avoid disclosure of individual company data.

Notes:

Bituminous coal includes anthracite coal and coal-derived synthesis gas.

See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Table 5.1. Sales of Electricity to Ultimate Customers:

Total by End-Use Sector, 2007 - October 2017 (Thousand Megawatthours)

Period Annual Totals 2007 2008 2009 2010 2011 2011 2012 2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January February December Year 2016 January February Annuary Epbruary Annuary February Annuary February Annuary February Feb	1,392,241 1,380,662 1,364,758 1,445,708 1,422,801 1,374,515 1,394,812 1,407,208 1,404,096 1,411,058 137,765 123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	1,336,315 1,336,133 1,306,853 1,330,199 1,328,057 1,327,101 1,337,079 1,352,158 1,360,752 1,367,191 111,620 105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	1,027,832 1,009,516 917,416 971,221 991,316 985,714 985,352 997,576 986,508 976,715 79,609 76,749 79,709 80,489 82,916 86,218 87,747	8,173 7,653 7,768 7,712 7,672 7,320 7,625 7,758 7,637 7,497 673 699 679 620 609	3,764,561 3,733,965 3,596,795 3,754,841 3,749,846 3,694,650 3,724,868 3,764,700 3,758,992 3,762,462 329,666 306,768 305,352 275,475 288,091
2007 2008 2009 2010 2010 2011 2011 2012 2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January	1,380,662 1,364,758 1,445,708 1,422,801 1,374,515 1,394,812 1,407,208 1,404,096 1,411,058 137,765 123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	1,336,133 1,306,853 1,330,199 1,328,057 1,327,101 1,337,079 1,352,158 1,360,752 1,367,191 111,620 105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	1,009,516 917,416 971,221 991,316 985,714 985,352 997,576 986,508 976,715 79,609 76,749 79,709 80,489 82,916 86,218 87,747	7,653 7,768 7,712 7,672 7,672 7,320 7,625 7,758 7,637 7,497 673 679 620 609 609	3,733,965 3,596,795 3,754,841 3,749,846 3,694,650 3,724,868 3,764,700 3,758,992 3,762,462 329,666 306,768 305,352 275,475 288,091
2008 2009 2010 2011 2011 2012 2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January	1,380,662 1,364,758 1,445,708 1,422,801 1,374,515 1,394,812 1,407,208 1,404,096 1,411,058 137,765 123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	1,336,133 1,306,853 1,330,199 1,328,057 1,327,101 1,337,079 1,352,158 1,360,752 1,367,191 111,620 105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	1,009,516 917,416 971,221 991,316 985,714 985,352 997,576 986,508 976,715 79,609 76,749 79,709 80,489 82,916 86,218 87,747	7,653 7,768 7,712 7,672 7,672 7,320 7,625 7,758 7,637 7,497 673 679 620 609 609	3,733,965 3,596,795 3,754,841 3,749,846 3,694,650 3,724,868 3,764,700 3,758,992 3,762,462 329,666 306,768 305,352 275,475 288,091
2009 2010 2011 2012 2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January	1,364,758 1,445,708 1,422,801 1,374,515 1,394,812 1,407,208 1,404,096 1,411,058 137,765 123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	1,306,853 1,330,199 1,328,057 1,327,101 1,337,079 1,352,158 1,360,752 1,367,191 111,620 105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	917,416 971,221 991,316 985,714 985,352 997,576 986,508 976,715 79,609 76,749 79,709 80,489 82,916 86,218 87,747	7,768 7,712 7,672 7,320 7,625 7,758 7,637 7,497 673 699 679 620 609	3,596,795 3,754,841 3,749,846 3,694,650 3,724,868 3,764,700 3,758,992 3,762,462 329,666 306,768 305,352 275,475 288,091
2010 2011 2012 2013 2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January	1,445,708 1,422,801 1,374,515 1,394,812 1,407,208 1,404,096 1,411,058 137,765 123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	1,330,199 1,328,057 1,327,101 1,337,079 1,352,158 1,360,752 1,367,191 111,620 105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	971,221 991,316 985,714 985,352 997,576 986,508 976,715 79,609 76,749 79,709 80,489 82,916 86,218 87,747	7,712 7,672 7,320 7,625 7,758 7,637 7,497 673 679 679 620 609	3,754,841 3,749,846 3,694,650 3,724,868 3,764,700 3,758,992 3,762,462 329,666 306,768 305,352 275,475 288,091
2011 2012 2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January	1,422,801 1,374,515 1,394,812 1,407,208 1,404,096 1,411,058 137,765 123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	1,328,057 1,327,101 1,337,079 1,352,158 1,360,752 1,367,191 111,620 105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	991,316 985,714 985,352 997,576 986,508 976,715 79,609 76,749 79,709 80,489 82,916 86,218 87,747	7,672 7,320 7,625 7,758 7,637 7,497 673 699 679 620 609	3,749,846 3,694,650 3,724,868 3,764,700 3,758,992 3,762,462 329,666 306,768 305,352 275,475 288,091
2012 2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January	1,374,515 1,394,812 1,407,208 1,404,096 1,411,058 137,765 123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	1,327,101 1,337,079 1,352,158 1,360,752 1,367,191 111,620 105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	985,714 985,352 997,576 986,508 976,715 79,609 76,749 79,709 80,489 82,916 86,218 87,747	7,320 7,625 7,758 7,637 7,497 673 699 679 620 609	3,694,650 3,724,868 3,764,700 3,758,992 3,762,462 329,666 306,768 305,352 275,475 288,091
2013 2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January	1,394,812 1,407,208 1,404,096 1,411,058 137,765 123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	1,337,079 1,352,158 1,360,752 1,367,191 111,620 105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	985,352 997,576 986,508 976,715 79,609 76,749 79,709 80,489 82,916 86,218 87,747	7,625 7,758 7,637 7,497 673 699 679 620 609	3,724,868 3,764,700 3,758,992 3,762,462 329,666 306,768 305,352 275,475 288,091
2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January	1,394,812 1,407,208 1,404,096 1,411,058 137,765 123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	1,337,079 1,352,158 1,360,752 1,367,191 111,620 105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	997,576 986,508 976,715 79,609 76,749 79,709 80,489 82,916 86,218 87,747	7,625 7,758 7,637 7,497 673 699 679 620 609	3,724,868 3,764,700 3,758,992 3,762,462 329,666 306,768 305,352 275,475 288,091
2014 2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January	1,407,208 1,404,096 1,411,058 137,765 123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	1,352,158 1,360,752 1,367,191 111,620 105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	997,576 986,508 976,715 79,609 76,749 79,709 80,489 82,916 86,218 87,747	7,758 7,637 7,497 673 699 679 620 609	3,764,700 3,758,992 3,762,462 329,666 306,768 305,352 275,475 288,091
2015 2016 Year 2015 January February March April May June July August Sept October November December Year 2016 January	1,404,096 1,411,058 137,765 123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	1,360,752 1,367,191 111,620 105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	986,508 976,715 79,609 76,749 79,709 80,489 82,916 86,218 87,747	7,637 7,497 673 699 679 620 609	3,758,992 3,762,462 329,666 306,768 305,352 275,475 288,091
Year 2015 Year 2015 January February March April May June July August Sept October November December Year 2016 January	1,411,058 137,765 123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	1,367,191 111,620 105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	976,715 79,609 76,749 79,709 80,489 82,916 86,218 87,747	673 699 679 620 609	3,762,462 329,666 306,768 305,352 275,475 288,091
Year 2015 January February March April May June July August Sept October November December Year 2016 January	137,765 123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	111,620 105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	79,609 76,749 79,709 80,489 82,916 86,218 87,747	673 699 679 620 609	329,666 306,768 305,352 275,475 288,091
January February March April May June July August Sept October November December Year 2016 January	123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	76,749 79,709 80,489 82,916 86,218 87,747	699 679 620 609	306,768 305,352 275,475 288,091
February March April May June July August Sept October November December Year 2016 January	123,838 117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	105,482 107,796 104,168 109,406 119,270 128,504 128,519 122,195	76,749 79,709 80,489 82,916 86,218 87,747	699 679 620 609	306,768 305,352 275,475 288,091
March April May June July August Sept October November December Year 2016 January	117,167 90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	107,796 104,168 109,406 119,270 128,504 128,519 122,195	79,709 80,489 82,916 86,218 87,747	679 620 609 609	305,352 275,475 288,091
April May June July August Sept October November December Year 2016 January	90,199 95,161 120,300 146,038 144,515 125,417 99,349 92,678	104,168 109,406 119,270 128,504 128,519 122,195	80,489 82,916 86,218 87,747	620 609 609	275,475 288,091
May June July August Sept October November December Year 2016 January	95,161 120,300 146,038 144,515 125,417 99,349 92,678	109,406 119,270 128,504 128,519 122,195	82,916 86,218 87,747	609 609	288,091
June July August Sept October November December Year 2016 January	120,300 146,038 144,515 125,417 99,349 92,678	119,270 128,504 128,519 122,195	86,218 87,747	609	· ·
July August Sept October November December Year 2016 January	146,038 144,515 125,417 99,349 92,678	128,504 128,519 122,195	87,747		206 202
August Sept October November December Year 2016 January	144,515 125,417 99,349 92,678	128,519 122,195	· ·		· ·
Sept October November December Year 2016 January	125,417 99,349 92,678	122,195	00 070	648	· ·
October November December Year 2016 January	99,349 92,678		88,373	625	, , , , , , , , , , , , , , , , , , ,
November December Year 2016 January	92,678		84,730	615	, , , , , , , , , , , , , , , , , , ,
December Year 2016 January	·	112,821	83,249	636	296,055
Year 2016 January	444.070	104,140	78,495	604	275,917
January	111,670	106,829	78,224	619	297,344
- 1					
February	130,972	110,410	78,848	660	320,890
	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	
June	125,211	120,363	83,672	631	329,878
July	154,409	130,038	87,076	648	
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	
November	93,244	105,060	78,421	592	277,317
December	121,281	110,172	78,616	653	
	121,201	110,172	70,010	000	310,722
Year 2017	400,000	400,000	75 702	666	244.275
January	128,998	108,928	75,783		·
February	101,149	99,207	71,933	636	,
March	103,205	106,683	77,550	644	288,082
April	90,781	101,372	75,851	590	
May	98,757	109,456	80,072	583	·
June	121,782	118,815	82,147	629	·
July	148,890	127,902	84,213	630	·
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
Year to Date					
2015	1,199,748	1,149,782	829,789	6,413	3,185,732
2016	1,196,533	1,151,959	819,677	6,252	3,174,422
2017	1,157,094	1,131,265	792,957	6,264	3,087,579
Rolling 12 Months Ending in October		, - ,	- ,	-,	-,,
2016	1,400,881	1,362,929	976,396	7,476	3,747,683
2017	1,371,619	1,346,497	949,995	7,509	

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;

Table 5.2. Revenue from Sales of Electricity to Ultimate Customers:

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals		<u> </u>		•	
2007	148,295	128,903	65,712	792	343,70
2008	155,496	137,036	70,231	820	363,58
2009	157,044	132,747	62,670	828	353,28
2010	166,778	135,554	65,772	814	368,91
2011	166,714	135,927	67,606	803	371,04
2012	163,280	133,898	65,761	747	363,68
2013	169,131	137,188	67,934	805	375,05
2014	176,178	145,253	70,855	810	393,09
2015	177,624	144,781	68,166	771	391,34
2016	177,077	142,643	66,068	722	386,50
Year 2015	177,077	142,040	00,000	122	000,00
January	16,665	11,506	5,310	70	33,55
February	15,215	11,203	5,277	73	31,76
March	14,450	11,460	5,441	69	31,41
			5,323	60	
April May	11,379 12,300	10,803 11,456	5,589	60	27,56 29,40
June	15,537	12,992	6,133	62	34,72
			6,133	67	
July	18,904 18,659	14,229 14,065	6,538	63	39,73 39,28
August					
Sept	16,347	13,420	6,107	63	35,93
October	12,633	12,100	5,728	63	30,52
November	11,775	10,722	5,185	58	27,74
December	13,759	10,825	5,043	61	29,68
Year 2016	45.704	44.400	5,000		04.00
January	15,704	11,133	5,080	63	31,98
February	14,076	10,605	4,927	62	29,67
March	12,593	10,815	5,122	58	28,58
April	10,967	10,398	5,065	57	26,48
May	12,048	11,184	5,357	54	28,64
June	15,942	12,828	5,879	62	34,71
July	19,575	13,891	6,294	64	39,82
August	20,157	14,530	6,440	63	41,19
Sept	16,652	13,298	5,947	64	35,96
October	12,648	11,914	5,491	59	30,11
November	11,886	10,840	5,225	55	28,00
December	14,830	11,206	5,242	62	31,33
Year 2017		Ī	T		
January	15,757	11,140	4,984	62	31,94
February	12,932	10,396	4,760	60	28,14
March	13,309	11,174	5,220	61	29,76
April	11,523	10,540	5,015	56	27,13
May	12,857	11,586	5,453	56	29,95
June	16,098	13,062	5,926	64	35,14
July	19,534	14,065	6,180	64	39,84
August	18,699	14,086	6,215	65	39,06
Sept	15,801	13,087	5,783	62	34,73
October	13,220	12,230	5,524	60	31,03
Year to Date					
2015	152,089	123,234	57,939	652	333,91
2016	150,360	120,596	55,601	605	327,16
2017	149,730	121,366	55,060	609	326,76
Rolling 12 Months Ending in October					
2016	175,895	142,143	65,828	724	384,59
2017	176 446	1/13 //12	65 527	726	396 11

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.

143,412

65,527

726

386,112

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

176,446

Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report;

2017

Table 5.3. Average Price of Electricity to Ultimate Customers:

Total by End-Use Sector, 2007 - October 2017 (Cents per Kilowatthour)

Total by End-Use Sector,					
Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2007	10.65		6.39		
2008	11.26	10.26	6.96		9.74
2009	11.51	10.16	6.83		
2010	11.54	10.19	6.77	10.56	
2011	11.72	10.24	6.82	10.46	
2012	11.88	10.09	6.67		9.84
2013	12.13		6.89		
2014	12.52	10.74	7.10		
2015	12.65		6.91	10.09	
2016	12.55	10.43	6.76	9.63	10.27
Year 2015	40.40	40.04			10.40
January	12.10		6.67		
February	12.29	10.62	6.88		
March	12.33	10.63	6.83		
April	12.62	10.37	6.61	9.76	
May	12.93	10.47	6.74		10.21
June	12.92	10.89	7.11	10.15	
July	12.94	11.07	7.45		
August	12.91	10.94	7.35		
Sept	13.03	10.98	7.21	10.29	
October	12.72	10.73	6.88		10.31
November	12.71	10.30	6.61	9.63	
December	12.32	10.13	6.45	9.81	9.98
Year 2016	44.00	40.00	C 44	0.50	0.07
January	11.99 12.14	10.08 10.25	6.44	9.52 9.61	
February March	12.14	10.23	6.42 6.46		10.00 10.00
	12.43	10.23	6.44	9.53	
April	12.43		6.57		
May June	12.79	10.31 10.66	7.03		
July	12.73	10.68	7.03		
<u> </u>	12.88	10.76	7.23		
August Sept	12.87	10.77	7.14		
October	12.46	10.77	6.73		10.15
November	12.75	10.32	6.66		10.10
December	12.73		6.67		
Year 2017	12.25	10.17	0.07	9.49	10.09
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		10.33
April	12.69	10.40	6.61	9.44	
May	13.02	10.59	6.81	9.58	
June	13.22	10.99	7.21	10.14	
July	13.12	11.00	7.34	10.13	
August	13.19	11.04	7.24		10.98
Sept	13.30		7.21	10.01	10.93
October	12.84	10.82	6.95		
Year to Date	12.01	10.02	0.00	J	10.40
2015	12.68	10.72	6.98	10.16	10.48
2016	12.57	10.47	6.78		
2017	12.94	10.73	6.94		
Rolling 12 Months Ending in Oc		10.70	0.04	1	10.00
2016	12.56	10.43	6.74	9.69	10.26
2017	12.86				
2017	12.00	10.00	0.50	5.07	10.00

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;

Table 5.4.A. Sales of Electricity to Ultimate Customers by End-Use Sector,

by State, October 2017 and 2016 (Thousand Megawatthours)

Census Division	Reside	ntial	Comme	ercial	Indus	strial	Transpo	rtation	All Sec	tors
and State	October 2017	October 2016								
New England	3,399	3,210	4,583	4,242	1,484	1,475	46	42	9,512	8,969
Connecticut	841	821	1,001	992	263	268	17	13	2,122	2,094
Maine	323	328	322	309	285	249	0	0	930	886
Massachusetts	1,578	1,378	2,459	2,130	596	609	27	26	4,659	4,144
New Hampshire	310	317	353	360	164	171	0	0	827	848
Rhode Island	203	219	285	286	58	59	2	2	549	566
Vermont	144	147	163	165	117	118	0	0	424	429
Middle Atlantic	9,222	9,137	12,776	12,747	6,007	6,003	313	312	28,318	28,199
New Jersey	1,906	1,883	3,039	3,116	572	642	24	23	5,541	5,665
New York	3,694	3,717	6,288	6,145	1,443	1,397	231	222	11,655	11,481
Pennsylvania	3,622	3,538	3,449	3,486	3,993	3,964	59	67	11,122	11,054
East North Central	12,290	12,194	15,031	15,036	15,363	16,033	50	42	42,734	43,305
Illinois	2,908	2,971	4,177	4,050	3,475	3,614	45	38	10,605	10,673
Indiana	2,133	2,111	1,963	1,984	3,296	3,673	2	1	7,392	7,770
Michigan	2,422	2,373	3,195	3,230	2,432	2,422	0	. 0	8,049	8,026
Ohio	3,376	3,244	3,735	3,842	4,062	4,264	2	2	11,175	11,353
Wisconsin	1,451	1,495	1,962	1,929	2,099	2,059	0	0	5,512	5,483
West North Central	6,888	6,790	8,224	8,337	7,295	7,451	4	4	22,411	22,581
Iowa	970	903	1,027	1,024	1,942	1,849	0	0	3,938	3,775
Kansas	897	887	1,301	1,302	888	917	0	0	3,936	3,175
			1,801		1,762		0	0	•	5,226
Minnesota	1,492	1,508		1,904	· ·	1,813	2	2	5,057	
Missouri	2,248	2,206	2,453	2,451	983	1,132	2	2	5,686	5,791
Nebraska	655	649	755	754	832	872	0	0	2,242	2,274
North Dakota	316	333	505	528	653	631	0	0	1,474	1,493
South Dakota	310	305	383	373	234	237	0	0	927	916
South Atlantic	26,596	25,665	25,537	25,433	11,737	11,610	107	112	63,976	62,819
Delaware	316	312	347	337	165	200	0	0	828	849
District of Columbia	170	174	666	656	16	15	28	31	880	875
Florida	10,560	10,385	8,107	8,115	1,357	1,367	6	7	20,031	19,875
Georgia	4,222	4,088	3,903	3,882	2,689	2,694	14	13	10,828	10,678
Maryland	1,663	1,595	2,331	2,374	302	308	41	44	4,338	4,321
North Carolina	3,728	3,616	3,876	3,821	2,210	2,268	0	1	9,815	9,705
South Carolina	2,177	2,017	1,801	1,696	2,333	2,208	0	0	6,311	5,922
Virginia	3,049	2,820	3,867	3,938	1,465	1,467	18	16	8,400	8,242
West Virginia	709	657	637	615	1,200	1,083	0	0	2,546	2,355
East South Central	8,384	8,474	7,462	7,808	8,116	8,430	0	0	23,962	24,713
Alabama	2,301	2,266	1,877	1,935	2,763	2,670	0	0	6,940	6,871
Kentucky	1,673	1,686	1,564	1,612	2,306	2,392	0	0	5,543	5,690
Mississippi	1,493	1,526	1,227	1,297	1,343	1,346	0	0	4,063	4,170
Tennessee	2,917	2,996	2,794	2,964	1,704	2,022	0	0	7,415	7,982
West South Central	17,802	17,875	16,971	17,182	15,175	15,729	18	17	49,965	50,804
Arkansas	1,384	1,408	1,056	1,074	1,472	1,337	0	0	3,912	3,819
Louisiana	2,608	2,695	2,187	2,235	2,944	2,999	1	1	7,740	7,930
Oklahoma	1,640	1,622	1,712	1,733	1,387	1,476	0	0	4,739	4,831
Texas	12,170	12,149	12,015	12,140	9,373	9,917	16	16	33,574	34,223
Mountain	6,993	6,821	7,926	8,061	6,590	6,914	13	12	21,522	21,807
Arizona	2,557	2,596	2,487	2,504	1,123	1,268	1	1	6,168	6,369
Colorado	1,380	1,335	1,622	1,727	1,304	1,275	8	5	4,313	4,342
Idaho	594	550	512	503	576	578	0	0	1,681	1,631
Montana	356	341	390	398	352	350	0	0	1,097	1,088
Nevada	798	713	923	947	991	1,149	1	1	2,712	2,809
New Mexico	460	466	745	709	658	649	0	0	1,863	1,824
Utah	638	632	940	937	744	757	4	5	2,326	2,331
Wyoming	210	189	307	335	844	889	0	0	1,361	1,413
Pacific Contiguous	11,018	10,947	14,032	13,622	7,229	7,500	75	73	32,354	32,142
California	7,144	7,101	10,247	9,904	4,244	4,332	73	70	21,708	21,408
Oregon	1,320	1,338	1,346	1,356	979	1,050	2	2	3,647	3,747
Washington	2,554	2,508	2,439	2,361	2,006	2,118	1	1	7,000	6,987
Pacific Noncontiguous	393	394	494	495	436	453	0	0	1,323	1,342
Alaska	159	NM	220	220	116	122	0	0	495	506
								٠,		
Hawaii	234	229	274	275	320	331	Ol	Ol	828	836

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 October 2017 and 2016 (Thousand Megawatthours)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	October 2017 YTD	October 2016 YTD		October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017 YTD	October 2016 YTD	October 2017	October 2016 YTD
New England	38,194	39,234	43,478	44,526	13,894	15,064	460	455	96,026	99,279
Connecticut	10,244	10,714	10,296	10,748	2,613	·	150	151	23,303	24,445
Maine	3,825	3,812	3,354	3,347	2,259	2,399	0	0	9,438	9,558
Massachusetts	16,314	16,647	21,501	21,885	5,614	6,303	287	281	43,716	45,116
New Hampshire	3,650	3,741	3,657	3,780	1,634	1,689	0	0	8,941	9,210
Rhode Island	2,510	2,621	3,018	3,076	616		23	23		6,360
Vermont	1,650	1,700	1,652	1,691	1,158	1,199	2 204	2.244	4,461	4,590
Middle Atlantic	107,360 23,568	113,403 24,988	130,052 31,697	133,746 32,641	59,755 5,862	60,430 6,132	3,201 256	3,211 254	300,368 61,382	310,789 64,016
New Jersey New York	41,141	43,196	62,720	64,512	14,224	14,775	2,306	2,291	120,392	124,774
Pennsylvania	42,650	45,219	35,635	36,592	39,669	· ·	640	665	·	121,999
East North Central	147,679	157,692	152,661	156,371	153,742	164,069	480	482	·	478,614
Illinois	36,333	38,874	41,806	42,770	34,682	36,634	426	427	113,248	118,705
Indiana	25,620	27,682	19,920	20,458	33,875	·	16	17	79,431	87,287
Michigan	27,358	29,030	32,486	32,887	24,766	·	5	4	84,614	87,898
Ohio	40,842	44,045	38,652	40,211	40,121	42,124	33	34		126,414
Wisconsin	17,526	18,060	19,797	20,045	20,299	20,204	0	0	57,622	58,310
West North Central	83,893	85,951	85,019	86,154	72,893	74,793	39	37	241,843	246,935
Iowa	11,421	11,721	10,104	10,211	18,775	18,284	0	0	40,300	40,216
Kansas	11,055	11,561	13,027	13,428	9,114	9,523	0	0	33,196	34,511
Minnesota	17,706	18,015	19,201	19,695	17,355	17,691	20	20	54,282	55,421
Missouri	27,960	28,985	25,534	25,923	9,855	11,403	19	18	63,368	66,329
Nebraska	8,177	8,116	7,967	7,782	9,020	9,363	0	0	25,164	25,261
North Dakota	3,771	3,770	5,136	5,191	6,445	6,176	0	0	15,351	15,138
South Dakota	3,804	3,783	4,048	3,922	2,330	2,352	0	0	10,182	10,057
South Atlantic	291,928	308,156	260,408	264,898	115,278	117,569	1,080	1,119	668,694	691,741
Delaware	3,898	4,071	3,503	3,577	1,765		0	0	9,166	9,536
District of Columbia	2,032	,	·	7,072			277		-,	·
Florida	102,718	106,390	79,812	80,683	13,739	14,052	74	80	,	201,205
Georgia	46,495	49,760	39,294	40,613	26,270	27,221	141	143		117,738
Maryland	21,447	22,996	24,200	25,004	3,120	3,187	436	451	49,204	51,637
North Carolina	46,187	49,415	40,369	41,163	22,437	22,973	3	6	108,996	113,558
South Carolina	24,603	26,165	18,332	18,993	22,548	22,398	0	0	65,483	67,556
Virginia	36,102	37,837	41,871	41,225	14,047	14,938 10,746	149	156	·	94,156
West Virginia East South Central	8,444 94,943	9,353 101,564	6,299 74,934	6,567 79,419	11,203 83,065	84,021	0	0	25,946 252,942	26,666 265,005
Alabama	25,606	27,514	19,054	20,119	27,754	27,236	0	0	72,415	74,868
Kentucky	20,703	22,290	15,825	16,882	23,213	23,568	0	0	59,741	62,740
Mississippi	15,150	15,913	11,729	12,346	13,765	13,443	0	0	40,645	41,702
Tennessee	33,483	35,847	28,326	30,073	18,332	19,775	0	0	80,141	85,695
West South Central	181,553	187,493	161,782	166,504	150,903	153,714	162	161	494,401	507,872
Arkansas	14,584	15,280	10,096	10,312	14,099	13,584	0	0	38,779	39,176
Louisiana	25,290	26,457	20,704	21,026	28,810	30,179	11	10		77,672
Oklahoma	18,893	19,530	16,969	17,443	14,465	15,057	0	0	50,327	52,030
Texas	122,787	126,227	114,013	117,723	93,530	94,894	151	150	·	338,994
Mountain	84,441	82,504	81,834	80,485	68,766	70,458	119	113	235,160	233,561
Arizona	30,236	29,519	25,378	25,213	11,431	12,690	6	6	67,051	67,428
Colorado	15,814	15,801	17,060	17,433	13,017	12,570	58	54	45,949	45,857
Idaho	7,022	6,497	5,300	5,198	7,593	7,622	0	0	19,916	19,317
Montana	4,219	3,932	4,174	4,018	3,643	3,681	0	0	12,036	11,630
Nevada	11,326	11,034	9,581	8,365	10,549	11,571	7	7	31,464	30,976
New Mexico	5,633	5,627	7,533	7,408	6,303	6,341	0	0	19,469	19,376
Utah	7,947	7,883	9,712	9,721	7,706	·	48	47	25,412	25,291
Wyoming	2,242	2,213	3,097	3,129	8,524	8,343	0	0	13,863	13,685
Pacific Contiguous	123,237	116,765	136,245	134,999	70,468	75,296	722	675	·	327,735
California	77,556	74,815	97,531	97,744	40,411	43,140	696	650	·	216,349
Oregon	16,018	14,802	13,771	13,276	9,918		21	20		38,738
Washington	29,663	27,148	24,943	23,979	20,139	21,516	5	5	74,750	72,648
Pacific Noncontiguous	3,866			4,857			0	0	,	
Alaska	1,670	NM	2,267	2,247	1,149		0	0	5,086	4,993
Hawaii	2,196			2,610	3,043		0	0	7,823	7,898
U.S. Total	1,157,094	1,196,533	1,131,265	1,151,959	792,957	819,677	6,264	6,252	3,087,579	3,174,422

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.

See Technical Notes for a discussion of the sample design for the Form EIA-826.

Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule.

Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.

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

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

Table 5.5.A. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector,

by State, October 2017 and 2016 (Million Dollars)

Census Division	Reside	ential	Comme	ercial	Indu	strial	Transpo	ortation	All Sec	ctors
and State	October 2017	October 2016								
New England	664	604	706	653	181	178	4	3	1,555	1,438
Connecticut	179	164	168	158	35	34	2	1	385	357
Maine	52	53	39	38	25	21	0	0	116	113
Massachusetts	305	259	376	338	81	82	1	1	763	681
New Hampshire	62	60	54	52	20	21	0	0	136	133
Rhode Island	40	41	44	41	9	8	0	0	93	91
Vermont	26	26	24	24	11	12	0	0	61	63
Middle Atlantic	1,505	1,473	1,599	1,599	412	414	35	33	3,552	3,518
New Jersey	280	287	346	364	55	58	2	2	683	712
New York	693	679	945	913	89	83	29	26	1,756	1,701
Pennsylvania	532	506	309	321	268	272	4	5	1,113	1,105
East North Central	1,651	1,648	1,513	1,525	1,071	1,129	3	3	4,238	4,305
Illinois	374	387	375	371	220	241	3	3	972	1,002
Indiana	264	268	203	205	246	272	0	0	713	745
Michigan	368	372	345	351	174	169	0	0	888	892
Ohio	425	406	380	393	273	295	0	0	1,078	1,095
Wisconsin	219	215	209	205	158	151	0	0	586	571
					506		0	0		
West North Central	827 117	802	784	774		512	0	0	2,118	2,089
lowa		107 118	90	88	105	99	0	0	312	294
Kansas	120		138	138	67	69	0	0	324	324
Minnesota	202	198	193	188	136	135	0	0	532	521
Missouri	243	237	215	210	66	77	0	0	524	525
Nebraska	72	70	65	64	59	63	0	0	195	197
North Dakota	35	36	46	49	56	52	0	0	137	137
South Dakota	39	37	37	36	18	18	0	0	94	92
South Atlantic	3,233	2,977	2,459	2,348	752	746	8	9	6,452	6,080
Delaware	45	48	35	36	12	17	0	0	92	101
District of Columbia	23	22	80	79	1	1	2	3	106	106
Florida	1,279	1,141	800	725	108	107	1	1	2,188	1,973
Georgia	482	455	387	379	148	155	1	1	1,018	990
Maryland	240	242	248	266	26	24	3	3	516	536
North Carolina	436	421	340	336	137	143	0	0	913	900
South Carolina	277	255	182	169	138	134	0	0	597	557
Virginia	367	315	326	299	103	94	2	1	797	710
West Virginia	85	78	62	59	79	71	0	0	225	208
East South Central	950	952	782	811	477	504	0	0	2,209	2,267
Alabama	293	283	218	222	170	168	0	0	681	674
Kentucky	183	187	151	157	126	137	0	0	460	480
Mississippi	167	161	126	127	81	80	0	0	374	369
Tennessee	307	321	287	305	101	118	0	0	694	744
West South Central	1,942	1,915	1,407	1,433	836	847	1	1	4,186	4,197
Arkansas	140	139	88	88	84	81	0	0	312	309
Louisiana	254	257	195	191	165	160	0	0	613	608
Oklahoma	181	181	139	141	72	77	0	0	392	399
Texas	1,368	1,338	985	1,013	515	530	1	1	2,870	2,882
Mountain	851	804	789	775	421	451	1	1	2,062	2,031
Arizona	329	314	273	264	74	81	0	0	675	659
Colorado	166	162	166	171	96	94	1	1	429	428
Idaho	61	56	42	39	34	35	0	0	138	131
Montana	41	38	41	41	19	18	0	0	100	97
Nevada	102	86	79	75	58	77	0	0	240	237
New Mexico	60	59	75	70	38	36	0	0	174	165
Utah	68	67	82	83	42	47	0	1	192	198
Wyoming	24	22	31	31	60	62	0	0	115	115
Pacific Contiguous	1,494	1,375	2,075	1,889	776	622	7	8	4,352	3,894
California	1,098	989	1,740	1,563	620	461	7	8	3,465	3,022
Oregon	145	147	122	123	61	65	, 0	0	328	335
Washington	251	239	213	203	95	95	0	٥	559	537
Pacific Noncontiguous	104	97	115	107	92		0	0		293
Alaska	35	NM	42	39	18		0	0	96	92
Hawaii	68	63	73	68	73	69	0	0	215	201
			12,230				0	59		
U.S. Total	13,220	12,648	12,230	11,914	5,524	5,491	60	59	31,034	30,111

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 5.5.B. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector,

by State, Year-to-Date through October 2017 and 2016 (Million Dollars)

Concus Blade	Reside		Comme		Indus		Transpo		All Se	
Census Division	October 2017	October 2016	October 2017	October 2016						
and State	YTD	YTD								
New England	7,395	7,393	6,661	6,791	1,725	1,838	38	38	15,820	16,060
Connecticut	2,085	2,157	1,661	1,696	348	364	16	17	4,110	4,233
Maine	613	603	408	404	206	214	0	0	1,228	1,221
Massachusetts	3,252	3,164	3,354	3,441	765	843	17	17	7,388	7,465
New Hampshire	698	685	538	544	201	208	0	0	1,438	1,437
Rhode Island	455	490	458	460	89	86	4	4	1,007	1,040
Vermont	292	295	241	246	117	123	0	0	650	663
Middle Atlantic	17,294	17,819	16,547	16,816	4,131	4,257	363	352	38,334	39,244
New Jersey	3,706	3,947	3,946	4,041	600	627	23	22	8,275	8,637
New York	7,473	7,603	9,389	9,391	847	886	294	278	18,003	18,158
Pennsylvania	6,115	6,269	3,211	3,384	2,684	2,745	46	51	12,056	12,449
East North Central	19,567	20,598	15,416	15,547	10,799	11,352	32	33	45,814	47,530
Illinois	4,596	4,879	3,725	3,864	2,213	2,399	27	29	10,561	11,171
Indiana	3,074	3,241	2,050	2,029	2,503	2,699	2	2	7,630	7,972
Michigan	4,247	4,417	3,580	3,481	1,816	1,789	1	0	9,644	9,688
Ohio	5,065	5,505	3,862	4,004	2,682	2,942	2	3	11,611	12,453
Wisconsin	2,585	2,555	2,199	2,169	1,584	1,523	0	0	6,369	6,247
West North Central	10,255	10,246	8,435	8,293	5,394	5,385	4	4	24,087	23,928
Iowa	1,460	1,425	989	954	1,214	1,142	0	0	3,662	3,521
Kansas	1,473	1,517	1,377	1,417	688	716	0	0	3,538	3,651
Minnesota	2,352	2,293	2,062	1,947	1,360	1,309	2	2	5,776	5,552
Missouri	3,214	3,293	2,421	2,430	705	817	2	2	6,341	6,541
Nebraska	909	892	721	690	689	732	0	0	2,319	2,315
North Dakota	401	389	477	477	557	490	0	0	1,435	1,356
South Dakota	447	436	388	376	181	179	0	0	1,016	992
South Atlantic	35,101	35,768	24,680	24,512	7,487	7,612	84	89	67,351	67,981
Delaware	524	547	350	362	136	155	0	0	1,010	1,064
District of Columbia	260	266	782	829	12	15	25	27	1,080	1,136
Florida	12,149	11,684	7,654	7,177	1,087	1,079	6	7	20,896	19,946
Georgia	5,570	5,791	3,927	3,983	1,543	1,593	8	7	11,048	11,374
Maryland	3,032	3,276	2,603	2,741	260	251	33	35	5,928	6,303
North Carolina	5,179	5,490	3,474	3,570	1,388	1,463	0	0	10,041	10,523
South Carolina	3,161	3,320	1,923	1,950	1,376	1,373	0	0	6,460	6,643
Virginia	4,240	4,324	3,363	3,289	938	981	12	12	8,553	8,606
West Virginia	985	1,071	603	612	746	703	0	0	2,335	2,386
East South Central	10,713	10,982	7,925	8,056	4,982	4,857	0	0	23,620	23,895
Alabama	3,252	3,295	2,216	2,224	1,739	1,639	0	0	7,206	7,158
Kentucky	2,203	2,325	1,533	1,610	1,294	1,330	0	0	5,030	5,265
Mississippi	1,696	1,658	1,204	1,173	847	773	0	0	3,747	3,604
Tennessee	3,562	3,705	2,971	3,048	1,104	1,116	0	0	7,637	7,869
West South Central	19,625	19,889	13,550	13,723	8,339	8,152	13	13	41,527	41,777
Arkansas	1,497	1,521	854	851	841	828	0	0	3,192	3,199
Louisiana	2,422	2,469	1,848	1,796	1,567	1,515	1	1	5,838	5,781
Oklahoma	1,996	2,409	1,367	1,790	767	756	<u> </u>	1	4,130	4,122
Texas	13,710	13,883	9,481	9,726	5,164	5,053	12	12	28,367	28,674
Mountain	10,122	9,666	7,981	7,699	4,532	4,553	12	11	22,647	21,929
Arizona	3,789	3,619	2,712	2,662	749	777	12	1	7,251	7,059
Colorado	1,926	1,908	1,707	1,674	955	920	6	5	4,595	4,508
	710		427		517		0	0		
Idaho Montana	470	652 432	427	404 410	188	508 187	0	U	1,655 1,084	1,564 1,029
							0	0		
Nevada	1,350	1,257	762	670	667	718	1	1	2,780	2,645
New Mexico	733	677	782	724	384	369	0	0	1,899	1,771
Utah	886	874	862	861	480	494	5	5	2,233	2,233
Wyoming	257	248	303	294	592	579	0	0	1,152	1,120
Pacific Contiguous	18,657	17,082	19,044	18,128	6,793	6,783	63	66	44,557	42,060
California	14,095	12,923	15,704	14,929	5,243	5,185	60	64	35,102	33,101
Oregon	1,719	1,578	1,224	1,181	613	645	2	2	3,558	3,406
Washington	2,843	2,580	2,116	2,018	938	953	0	0	5,897	5,553
Pacific Noncontiguous	1,002	917	1,127	1,032	878		0	0	3,007	2,760
Alaska	360	NM	443	394	190	173	0	0	993	891
Hawaii	643	593	684	637	687	639	0	0	2,015	1,869
U.S. Total	149,730	150,360	121,366	120,596	55,060	55,601	609	605	326,766	327,163

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, October 2017 and 2016 (Cents per Kilowatthour)

Census Division	Reside	ential	Comme	ercial	Indus	strial	Transpo	rtation	All Sec	tors
and State	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016
New England	19.54	18.81	15.40	15.39	12.22	12.07	7.67	7.55	16.34	16.03
Connecticut	21.30	19.95	16.83	15.95	13.48	12.73	10.07	10.03	18.14	17.07
Maine	16.20	16.26	12.25	12.37	8.63	8.50			12.51	12.72
Massachusetts	19.35	18.82	15.29	15.87	13.54	13.45	5.36	5.30	16.39	16.43
New Hampshire	19.90	18.86	15.17	14.56	12.49	12.27			16.41	15.71
Rhode Island	19.53	18.87	15.51	14.48	14.82	13.21	17.87	19.08	16.93	16.06
Vermont	17.95	17.82	14.70	14.86	9.76	10.16			14.44	14.58
Middle Atlantic	16.32	16.12	12.52	12.54	6.86	6.89	11.24	10.63	12.54	12.47
New Jersey	14.70	15.26	11.37	11.70	9.58	9.10	8.48	8.09	12.32	12.57
New York	18.76	18.26	15.03	14.85	6.18	5.95	12.57	11.84	15.07	14.81
Pennsylvania	14.69	14.32	8.95	9.22	6.72	6.86	7.15	7.53	10.01	10.00
East North Central	13.43	13.52	10.06	10.14	6.97	7.04	6.85	7.03	9.92	9.94
Illinois	12.88	13.03	8.97	9.17	6.33	6.67	6.62	6.79	9.17	9.39
Indiana	12.40	12.69	10.32	10.32	7.46	7.42	10.17	10.39	9.65	9.59
Michigan	15.20	15.67	10.82	10.86	7.16	7.00	13.66	11.91	11.03	11.12
Ohio	12.58	12.52	10.19	10.22	6.71	6.93	7.62	8.18	9.65	9.64
Wisconsin	15.09	14.40	10.67	10.63	7.54	7.31	14.38	15.33	10.64	10.41
West North Central	12.00	11.82	9.54	9.28	6.94	6.88	8.18	8.49	9.45	9.25
Iowa	12.08	11.86	8.73	8.59	5.41	5.34			7.92	7.78
Kansas	13.32	13.25	10.59	10.57	7.52	7.48			10.50	10.43
Minnesota	13.53	13.11	10.73	9.90	7.73	7.44	9.19	9.75	10.51	9.97
Missouri	10.79	10.76	8.77	8.57	6.67	6.83	7.17	7.20	9.21	9.06
Nebraska	10.95	10.73	8.61	8.54	7.05	7.20		7.20	8.72	8.65
North Dakota	11.07	10.80	9.19	9.29	8.53	8.21			9.30	9.17
South Dakota	12.43	12.17	9.73	9.77	7.84	7.66			10.16	10.02
South Atlantic	12.16	11.60	9.63	9.23	6.41	6.43	7.22	7.99	10.08	9.68
Delaware	14.30	15.44	9.94	10.78	7.52	8.38	1.22	1.55	11.12	11.93
							7.50	0.27		12.07
District of Columbia Florida	13.44 12.12	12.93 10.98	12.04 9.87	12.05 8.94	8.21 7.94	8.67 7.82	7.50 9.20	9.37 8.54	12.09 10.92	9.93
	11.42	11.14	9.87	9.75	5.52	5.76	5.01	4.80	9.40	9.93
Georgia Maryland	14.40	15.17	10.65	11.22	8.49	7.77	6.99	8.01	11.90	12.40
North Carolina	11.69	11.63	8.77	8.78	6.20	6.32	8.34	7.77	9.30	9.27
South Carolina	12.73	12.64	10.08	9.94	5.92	6.07	0.34	1.11	9.46	9.41
	12.73	11.17	8.43	7.60	7.01	6.44	8.28	7.71	9.49	8.61
Virginia	11.96		9.67	9.61	6.59		0.20	7.71		
West Virginia East South Central	11.33	11.90 11.24	10.48	10.39	5.88	6.52 5.97			8.85 9.22	8.83 9.17
Alabama	12.73	12.51	11.64	11.49	6.15	6.31			9.22	9.17
	10.94		9.66	9.73	5.46	5.72			8.30	
Kentucky		11.06								8.44
Mississippi	11.20	10.58	10.27	9.78	6.00	5.97			9.20	8.84
Tennessee	10.53	10.71	10.26	10.30	5.90	5.84		7.00	9.36	9.32
West South Central	10.91	10.72	8.29	8.34	5.51	5.39	8.05	7.88	8.38	8.26
Arkansas	10.11	9.88	8.31	8.19	5.72	6.09	11.66	10.67	7.97	8.08
Louisiana	9.72	9.52	8.91	8.55	5.60	5.33	9.82	8.34	7.92	7.66
Oklahoma	11.01	11.18	8.11	8.12	5.19	5.20			8.26	8.26
Texas	11.24	11.02	8.20	8.35	5.49	5.34	7.93	7.85	8.55	8.42
Mountain	12.16	11.78	9.96	9.61	6.39	6.52	9.57	10.04	9.58	9.31
Arizona	12.85	12.10	10.97	10.55	6.54	6.39	10.50	10.35	10.94	10.35
Colorado	12.03	12.10	10.22	9.92	7.37	7.40	8.96	10.41	9.94	9.85
Idaho	10.34	10.24	8.20	7.80	5.99	6.10			8.20	8.02
Montana	11.42	11.21	10.49	10.32	5.31	5.17			9.13	8.94
Nevada	12.81	12.04	8.59	7.87	5.90	6.70	9.29	7.91	8.85	8.45
New Mexico	13.01	12.57	10.10	9.89	5.85	5.56			9.32	9.04
Utah	10.60	10.63	8.76	8.85	5.59	6.22	10.57	9.90	8.26	8.48
Wyoming	11.61	11.50	10.00	9.37	7.10	7.00			8.45	8.16
Pacific Contiguous	13.56	12.56	14.79	13.87	10.73	8.29	9.34	10.87	13.45	12.11
California	15.37	13.93	16.98	15.78	14.61	10.65	9.34	10.93	15.96	14.12
Oregon	10.97	10.98	9.07	9.05	6.22	6.20	9.49	9.34	8.99	8.94
Washington	9.84	9.52	8.74	8.61	4.73	4.50	9.03	8.88	7.99	7.69
Pacific Noncontiguous	26.37	24.70	23.36	21.69	20.97	19.49			23.47	21.83
Alaska	22.07	20.73	19.20	17.68	15.76	15.96			19.32	18.26
Hawaii	29.29	27.54	26.71	24.90	22.86	20.79			25.95	23.99
U.S. Total	12.84	12.46	10.82	10.55	6.95	6.73	9.57	9.62	10.48	10.15

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 5.6.B. Average Price of Electricity to Ultimate Customers by End-Use Sector,

by State, Year-to-Date through October 2017 and 2016 (Cents per Kilowatthour)

	Reside		Comme		Indus		Transpo		All Sed	
Census Division and State	October 2017 YTD	October 2016 YTD								
New England	19.36	18.84	15.32	15.25	12.42	12.20	8.27	8.29	16.48	16.18
Connecticut	20.35	20.13	16.13	15.78	13.30	12.84	10.78	11.14	17.64	17.32
Maine	16.03	15.82	12.18	12.07	9.11	8.92			13.01	12.77
Massachusetts	19.93	19.01	15.60	15.73	13.62	13.37	6.07	5.91	16.90	16.55
New Hampshire	19.13	18.30	14.72	14.40	12.29	12.31			16.08	15.60
Rhode Island	18.15	18.68	15.18	14.96	14.53	13.49	19.46	18.69	16.34	16.36
Vermont	17.67	17.33	14.59	14.53	10.09	10.25			14.56	14.45
Middle Atlantic	16.11	15.71	12.72	12.57	6.91	7.05	11.34	10.96	12.76	12.63
New Jersey	15.72	15.80	12.45	12.38	10.24	10.23	8.95	8.78	13.48	13.49
New York	18.16	17.60	14.97	14.56	5.95	5.99	12.76	12.15	14.95	14.55
Pennsylvania	14.34	13.86	9.01	9.25	6.77	6.94	7.19	7.68	10.17	10.20
East North Central	13.25	13.06	10.10	9.94	7.02	6.92	6.72	6.91	10.08	9.93
Illinois	12.65	12.55	8.91	9.03	6.38	6.55	6.42	6.68	9.33	9.41
Indiana	12.00	11.71	10.29	9.92	7.39	6.90	11.18	9.59	9.61	9.13
Michigan	15.52	15.22	11.02	10.58	7.33	6.89	12.12	11.55	11.40	11.02
Ohio	12.40	12.50	9.99	9.96	6.68	6.98	7.59	7.96	9.70	9.85
Wisconsin	14.75	14.15	11.11	10.82	7.81	7.54	14.27	14.54	11.05	10.71
West North Central	12.22	11.92	9.92	9.63	7.40	7.20	9.17	9.40	9.96	9.69
Iowa	12.78	12.16	9.79	9.34	6.47	6.24			9.09	8.76
Kansas	13.32	13.13	10.57	10.55	7.55	7.52			10.66	10.58
Minnesota	13.28	12.73	10.74	9.89	7.84	7.40	9.60	10.11	10.64	10.02
Missouri	11.50	11.36	9.48	9.37	7.15	7.16	8.72	8.61	10.01	9.86
Nebraska	11.11	10.99	9.05	8.87	7.64	7.82			9.21	9.16
North Dakota	10.63	10.31	9.29	9.20	8.64	7.94			9.35	8.96
South Dakota	11.75	11.54	9.59	9.60	7.78	7.60			9.98	9.86
South Atlantic	12.02	11.61	9.48	9.25	6.49	6.47	7.81	7.95	10.07	9.83
Delaware	13.46	13.44	9.98	10.12	7.72	8.20			11.02	11.15
District of Columbia	12.81	12.28	11.62	11.72	8.27	8.84	9.01	9.51	11.75	11.73
Florida	11.83	10.98	9.59	8.89	7.91	7.68	8.60	8.32	10.64	9.91
Georgia	11.98	11.64	9.99	9.81	5.87	5.85	5.46	5.14	9.85	9.66
Maryland	14.14	14.25	10.76	10.96	8.32	7.89	7.64	7.86	12.05	12.21
North Carolina	11.21	11.11	8.61	8.67	6.19	6.37	8.58	7.79	9.21	9.27
South Carolina	12.85	12.69	10.49	10.27	6.10	6.13			9.87	9.83
Virginia	11.75	11.43	8.03	7.98	6.68	6.57	7.89	7.75	9.28	9.14
West Virginia	11.67	11.45	9.58	9.32	6.66	6.54			9.00	8.95
East South Central	11.28	10.81	10.58	10.14	6.00	5.78			9.34	9.02
Alabama	12.70	11.97	11.63	11.05	6.26	6.02			9.95	9.56
Kentucky	10.64	10.43	9.69	9.54	5.57	5.64			8.42	8.39
Mississippi	11.20	10.42	10.27	9.50	6.15	5.75			9.22	8.64
Tennessee	10.64	10.34	10.49	10.13	6.02	5.64			9.53	9.18
West South Central	10.81	10.61	8.38	8.24	5.53	5.30	8.28	7.95	8.40	8.23
Arkansas	10.26	9.95	8.46	8.25	5.96	6.09	12.09	10.07	8.23	8.17
Louisiana	9.58	9.33	8.92	8.54	5.44	5.02	9.94	8.95	7.80	7.44
Oklahoma	10.56	10.32	8.05	7.74	5.30	5.02			8.21	7.92
Texas	11.17	11.00	8.32	8.26	5.52	5.32	8.16	7.87	8.58	8.46
Mountain	11.99	11.72	9.75	9.57	6.59	6.46	9.97	9.72	9.63	9.39
Arizona	12.53	12.26	10.69	10.56	6.55	6.12	9.82	10.07	10.81	10.47
Colorado	12.18	12.08	10.01	9.60	7.34	7.32	9.96	9.73	10.00	9.83
Idaho	10.12	10.03	8.06	7.78	6.81	6.66			8.31	8.09
Montana	11.13	10.99	10.21	10.20	5.16	5.09		7.04	9.00	8.85
Nevada	11.92	11.39	7.96	8.00	6.32	6.20	8.65	7.91	8.83	8.54
New Mexico	13.01	12.03	10.38	9.78	6.09	5.83			9.75	9.14
Utah Wyoming	11.15	11.08	8.87	8.85	6.23	6.47	10.20	9.94	8.79	8.83
Wyoming Pacific Continuous	11.47	11.19	9.78	9.40	6.94	6.94			8.31	8.19
Pacific Contiguous	15.14	14.63	13.98	13.43	9.64	9.01	8.66	9.82	13.47	12.83
California	18.17	17.27	16.10	15.27	12.97	12.02	8.64	9.84	16.24	15.30
Oregon Weshington	10.73	10.66	8.89	8.90	6.18	6.06	9.34	9.26	8.96	8.79
Washington	9.59	9.50	8.48	8.42	4.66	4.43	8.95	8.87	7.89	7.64
Pacific Noncontiguous	25.93	24.34	23.24	21.24	20.94	19.03			23.30	21.41
Alaska	21.53	NM	19.54	17.55	16.55	15.07			19.52	17.84
Hawaii U.S. Total	29.27	27.35	26.49	24.41	22.59	20.48			25.75	23.67
U.S. TUIAI	12.94	12.57	10.73	10.47	6.94	6.78	9.73	9.68	10.58	10.31

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 - October 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	150,055,19°
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	149,835,12
Year 2016	L			L.	
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	150,428,97
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	150,936,43
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	151,580,600
October	133,098,368	18,424,450	829,164	85	152,352,06
Rolling 12 Months Ending in Octo		-, := :, :••	, / • ·		<i>></i> _,==_, 0 •
2016	130,851,373	18,124,139	838,657	82	149,814,252
2017	132,306,887	18,290,189	823,683	88	151,420,848

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;

Table 5.8. Number of Ultimate Customers Served by Sector by State: October 2017 and 2016

Census Division	Reside	ential	Comme	ercial	Indus	trial	Transpo	rtation	All Sec	ctors
and State	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016
New England	6,319,702	6,268,697	883,907	871,083	26,772	26,261	6	7	7,230,387	7,166,048
Connecticut	1,497,825	1,489,430	153,426	152,651	4,387	4,405	3	4	1,655,641	1,646,490
Maine	714,969	685,754	100,741	95,945	3,165	2,942	0	0	818,875	784,641
Massachusetts	2,749,050	2,724,471	407,777	399,909	13,990	13,601	2	2	3,170,819	3,137,983
New Hampshire	619,743	615,438	107,583	107,294	3,247	3,267	0	0	730,573	725,999
Rhode Island	423,135	440,966	58,036	59,189	1,760	1,817	1	1	482,932	501,973
Vermont	314,980	312,638	56,344	56,095	223	229	0	0	371,547	368,962
Middle Atlantic	16,069,884	15,968,599	2,311,207	2,287,705	41,963	42,702	20	19	18,423,074	18,299,025
New Jersey	3,547,734	3,510,077	516,855	516,524	11,660	11,868	6	6	4,076,255	4,038,475
New York	7,154,183	7,116,500	1,095,573	1,074,077	7,569	7,564	8	7	8,257,333	8,198,148
Pennsylvania	5,367,967	5,342,022	698,779	697,104	22,734	23,270	6	6	6,089,486	6,062,402
East North Central	20,163,010	19,975,361	2,493,070	2,477,129	53,204	54,878	9	8	22,709,293	22,507,376
Illinois	5,283,260	5,241,940	610,891	607,678	5,726	6,072	3	3	5,899,880	5,855,693
Indiana	2,836,662	2,827,675	351,027	351,476	17,735	18,078	1	1	3,205,425	3,197,230
Michigan	4,376,950	4,324,530	549,702	541,594	NM	6,156	2	1	4,932,614	4,872,281
Ohio	4,963,866	4,916,309	626,621	625,579	18,985	19,011	2	2	5,609,474	5,560,901
Wisconsin	2,702,272	2,664,907	354,829	350,802	NM	5,561	1	1	3,061,900	3,021,271
West North Central	9,487,329	9,364,289	1,457,992	1,436,807	111,652	124,487	3	3	11,056,976	10,925,586
lowa	1,388,487	1,361,765	243,727	236,816	NM	7,724	0	0	1,638,984	1,606,305
Kansas	1,269,091	1,252,705	235,426	233,576	25,430	23,514	0	0	1,529,947	1,509,795
Minnesota	2,399,110	2,385,566	289,639	293,293	NM	9,001	1	1	2,696,754	2,687,861
Missouri	2,792,340	2,754,446	380,645	377,220	8,378	10,121	2	2	3,181,365	3,141,789
Nebraska	858,387	837,132	161,728	150,700	52,089	61,570	0	0	1,072,204	1,049,402
North Dakota	379,136	379,069	73,442	74,155	7,957	8,702	0	0	460,535	461,926
South Dakota	400,778	393,606	73,385	71,047	NM	3,855	0	0	477,187	468,508
South Atlantic	27,639,768	27,246,867	3,785,364	3,721,746	79,494	82,125	13	13	31,504,639	31,050,751
Delaware	424,649	420,452	54,089	53,621	1,190	871	0	0	479,928	474,944
District of Columbia	268,280	261,266	26,120	25,933	1	1	3	3	294,404	287,203
Florida	9,227,364	9,125,868	1,226,444	1,200,821	20,566	21,199	2	2	10,474,376	10,347,890
Georgia	4,341,879	4,257,051	582,409	569,115	19,446	21,769	1	1	4,943,735	4,847,936
Maryland	2,318,798	2,293,762	252,346	251,157	8,841	8,843	5	5	2,579,990	2,553,767
North Carolina	4,517,437	4,440,423	704,696	675,596	9,908	9,997	1	1	5,232,042	5,126,017
South Carolina	2,270,226	2,218,446	365,515	370,683	4,255	4,049	0	0	2,639,996	2,593,178
Virginia	3,413,160	3,371,342	429,282	431,713	3,763	3,701	1	1	3,846,206	3,806,757
West Virginia	857,975	858,257	144,463	143,107	11,524	11,695	0	0	1,013,962	1,013,059
East South Central	8,417,213	8,276,580	1,395,373	1,387,474	23,597	25,779	0	0	9,836,183	9,689,833
Alabama	2,245,271	2,206,324	370,265	368,031	8,173	7,263	0	0	2,623,709	2,581,618
Kentucky	1,989,470	1,961,261	301,326	303,016	7,676	7,201	0	0	2,298,472	2,271,478
Mississippi	1,310,452	1,281,735	239,519	233,593	6,348	10,150	0	0	1,556,319	1,525,478
Tennessee	2,872,020	2,827,260	484,263	482,834	1,400	1,165	0	0	3,357,683	3,311,259
West South Central	15,985,955	15,770,648	2,249,993	2,214,877	193,532	180,099	6	6	18,429,486	18,165,630
Arkansas	1,387,562	1,372,050	192,077	191,004	39,900	38,600	2	2	1,619,541	1,601,656
Louisiana	2,088,198	2,064,810	292,548	290,157	18,600	19,186	1	1	2,399,347	2,374,154
Oklahoma	1,773,194	1,740,657	284,517	278,822	17,896	19,040	0	0	2,075,607	2,038,519
Texas	10,737,001	10,593,131	1,480,851	1,454,894	117,136	103,273	3	3	12,334,991	12,151,301
Mountain	9,689,096	9,554,312	1,386,686	1,389,462	89,217	96,171	5	5	11,165,004	11,039,950
Arizona	2,760,682 2,298,695	2,730,517	322,787 361,297	318,928	6,804	8,189	2		3,090,275	3,057,636
Colorado		2,268,539	· · · · · · · · · · · · · · · · · · ·	369,408	14,207	16,144	1	1	2,674,200	2,654,092
Idaho Montana	731,575 508,237	717,983 498,925	109,162 109,313	107,907 106,369	28,420 8,745	28,028 10,676	0	0	869,157 626,295	853,918 615,970
Nevada	1,164,145		163,217	161,751	6,745 NM	· · · · · · · · · · · · · · · · · · ·	0	0	1,330,593	
	· · ·	1,144,320		•		3,531	1	1		1,309,603
New Mexico Utah	896,871 1,056,761	877,902 1,046,321	138,811 123,304	142,074 125,534	8,519 9,537	9,342 9,568	0	U 4	1,044,201 1,189,603	1,029,318 1,181,424
	272,130	269,805	58,795	57,491	9,537	10,693	1	1	340,680	337,989
Wyoming Pacific Contiguous	18,604,433	18,177,681	2,346,115	2,302,807	207,567	203,738	23	23	21,158,138	20,684,249
California	13,804,668	13,467,834	1,713,653	1,695,324	153,003	149,082	15	15	15,671,339	15,312,255
	1,744,926	1,711,939	239,425	233,051	26,127	25,633	10	10	2,010,480	1,970,625
Oregon Washington	3,054,839	2,997,908	393,037	374,432	28,437	25,633	2	2	3,476,319	3,401,369
Pacific Noncontiguous	721,978	715,865	114,743	114,296	26,437 NM	29,023 NM	0	0	838,887	832,314
Alaska	288,524	7 15,665 NM	53,662	114,296 NM	NM	NM	0	0	343,569	032,314 NM
Hawaii	433,454	431,605	61,081	60,917	783	802	0	٥	495,318	493,324
U.S. Total	133,098,368	131,318,899	18,424,450	18,203,386	829,164	838,393	85	84	152,352,067	150,360,762
J.J. I Jiai	133,080,300	131,310,099	10,424,430	10,203,300	029,104	050,595	00	04	102,002,007	150,500,762

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.

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 6.1. Electric Generating Summer Capacity Changes (MW), September 2017 to October 2017

	Ity Changes (MW), September 2	As of End of September 2017	Activity During	<i>(</i>	As of End of October 2017	Net Change in	Capacity - Curr Prior Periods	ent Month and				et Summer Capac		_		
		Lotalin	Actual	A otuol	Lotalin			•	Planned Capac	ity Additions	Planned Capac	ity Reductions	Planned N	et Change	Planned Total	Net Summer
Tachmalami	Compositu Compos	I otal In- Service	Actual Capacity	Actual Capacity	l otal In- Service	Commond Mondh	Vanuta Bata	Doot 40 Month	Next Month	Next 12 Months	Next Month	Next 12 Months	Nove Month	Next 12 Months	At End of Next	At End of Next
Technology	Capacity Source	Capacity	Additions	Reductions	Capacity	Current Month		Past 12 Months					Next Month		Month	
Onshore Wind (Summer Capacity)	Utility Scale Facilities	84,139.1	244.5	0.0	84,383.6	244.5	3,126.3		637.8	6,645.3	0.0	17.0	637.8	6,628.3	85,021.4	91,011.9
Offshore Wind (Summer Capacity)	Utility Scale Facilities	29.3	0.0	0.0	29.3	0.0	0.0			0.0	0.0	0.0	0.0	0.0	29.3	29.3
Wind (Summer Capacity)	Utility Scale Facilities	84,168.4	244.5		84,412.9	244.5	3,126.3			6,645.3	0.0	17.0	637.8	6,628.3	85,050.7	91,041.2
Solar Photovoltaic	Utility Scale Facilities	22,545.1	366.4	0.5	22,911.0	365.9	2,718.1	6,433.8		4,230.4	0.0	0.5	363.9	4,229.9	23,274.9	27,140.9
Solar Thermal without Energy Storage	Utility Scale Facilities	1,352.5	0.0	0.0	1,352.5	0.0	0.0			0.0	0.0	0.0	0.0		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		405.4	405.4
Solar Subtotal	Utility Scale Facilities	24,303.0	366.4	0.5	24,668.9	365.9	2,718.1	6,433.8		4,230.4	0.0	0.5	363.9	4,229.9	25,032.8	28,898.8
Conventional Hydroelectric	Utility Scale Facilities	80,015.2	4.0	0.0	80,019.2	4.0				228.3	0.0	6.2	2.6		80,021.8	80,241.3
Wood/Wood Waste Biomass	Utility Scale Facilities	9,016.8	0.0	0.0	9,016.8	0.0	80.7			94.4	0.0	0.0	0.0	94.4	9,016.8	9,111.2
Landfill Gas	Utility Scale Facilities	2,108.8	4.0	0.0	2,112.8	4.0	23.3			0.0	0.0	2.3	0.0		2,112.8	2,110.5
Municipal Solid Waste	Utility Scale Facilities	2,246.8	0.0	0.0	2,246.8	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			57.2	0.0	0.0	0.0		788.5	845.7
Biomass Sources Subtotal	Utility Scale Facilities	14,160.9	4.0	0.0	14,164.9					151.6	0.0	2.3	0.0	149.3	14,164.9	14,314.2
Geothermal	Utility Scale Facilities	2,456.6	0.0	0.0	2,456.6	0.0				37.0	0.0	0.0	0.0	37.0	2,456.6	2,493.6
Renewable Sources Subtotal	Utility Scale Facilities	205,104.1	618.9	0.5	205,722.5	618.4	6,030.7		•	11,292.6	0.0	26.0	1,004.3	11,266.6	206,726.8	216,989.1
Natural Gas Fired Combined Cycle	Utility Scale Facilities	245,086.9	40.0	0.0	245, 126.9	40.0	6,644.8	6,824.2	365.0	15,562.1	0.0	0.0	365.0	15,562.1	245,491.9	260,689.0
Natural Gas Fired Combustion Turbine	Utility Scale Facilities	126,860.3	200.2	0.5	127,060.0	199.7	502.3	1,241.3	74.0	3,513.2	0.0	186.3	74.0	3,326.9	127,134.0	130,386.9
Natural Gas Steam Turbine	Utility Scale Facilities	75,357.5	0.0	2.0	75,355.5	-2.0	-2,207.5	-4,242.9	0.0	0.0	98.4	1,902.4	-98.4	-1,902.4	75,257.1	73,453.1
Natural Gas Internal Combustion Engine	Utility Scale Facilities	4,305.0	0.0	0.0	4,305.0	0.0	316.0	537.8	10.0	167.2	0.9	0.9	9.1	166.3	4,314.1	4,471.3
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	3.7	5.1	0.0	0.0	3.7	5.1	125.5	126.9
Natural Gas Subtotal	Utility Scale Facilities	451,841.5	240.2	2.5	452,079.2	237.7	5,256.0	4,364.4	452.7	19,247.6	99.3	2,089.6	353.4	17,158.0	452,432.6	469,237.2
Conventional Steam Coal	Utility Scale Facilities	261,953.4	0.0	0.0	261,953.4	0.0	-3,851.5	-4,650.5	0.0	0.0	0.0	12,223.0	0.0	-12,223.0	261,953.4	249,730.4
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	0.0	262,768.4	0.0	-3,851.5	-4,650.5	0.0	0.0	0.0	12,223.0	0.0	-12,223.0	262,768.4	250,545.4
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	32,280.1	8.1	0.6	32,287.6	7.5	-628.1	-1,221.8	6.3	23.2	53.8	180.3	-47.5	-157.1	32,240.1	32,130.5
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	750,813.6	248.3	3.1	751,058.8	245.2	776.4	-1,507.9	459.0	19,270.8	153.1	14,492.9	305.9	4,777.9	751,364.7	755,836.7
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	42.0	42.0
Batteries	Utility Scale Facilities	690.8	2.0	0.0	692.8	2.0	133.7	212.7	2.5	71.3	0.0	0.0	2.5	71.3	695.3	764.1
Energy Storage Subtotal	Utility Scale Facilities	23,541.5	2.0		23,543.5	2.0				128.3	0.0	0.0	2.5		23,546.0	23,671.8
Nuclear	Utility Scale Facilities	99,581.8	0.0		99,581.8	0.0				22.0	0.0	0.0	0.0			99,603.8
All Other	Utility Scale Facilities	1,414.0	0.0							54.8	0.0	0.0	0.0		1,414.0	1,468.8
TOTAL	UTILITY SCALE FACILITIES	1,080,455.0	869.2	3.6	•					30,768.5	153.1	14,518.9	1,312.7	16,249.6	1,082,633.3	1,097,570.2
		1,200,10010	33312	3.0	-,,	223.0	2,22.10	,	.,	25,. 2316		.,	.,	,310	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	15,332.7			15,609.4	276.7	2,844.3	3,453.0								
Estimated Total Solar Photovoltaic	All Facilities	37,877.8			38,520.4	642.6	•									
Estimated Total Solar	All Facilities	39,635.7			40,278.3		5,562.4									

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 - October 2017

5	Utility Solar	Estimated Small Scale	Estimated Total Solar
Period	Photovoltaic	Solar Photovoltaic	Photovoltaic
Annual Totals	70.0	NI/A	NI/A
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	0.070.0	7,000,4	40.040.0
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

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 - October 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	<u> </u>			
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		<u>.</u>		
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

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 Sur Census Division	nmer Capaci Renev		Scale Units For	_		State, Octob			watts)		1		1	
and State	Soul		Fu		_	Storage	Sto	Energy rage	Nuc	lear	All Other	Sources	All So	ources
	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016	October 2017	October 2016
New England	5,589.5	5,158.2	21,299.8	22,671.1	1,797.4	1,797.4	22.3	2.0	4,015.9	4,015.9	48.0	48.0	32,772.9	33,692.6
Connecticut	358.0	342.0	6,339.7	6,311.4	29.4	29.4	1.6					26.0		,
Maine	2,419.7	2,189.0	2,442.5	2,442.5	0.0	0.0	16.2					22.0		·
Massachusetts	1,188.5	1,059.2	8,351.2	9,765.7	1,768.0	1,768.0	2.5		1			0.0		
New Hampshire	928.9	928.9	2,262.9	2,266.0	0.0	0.0			-	-		0.0		4,445.8
Rhode Island	104.8 589.6	70.8 568.3	1,805.6 97.9	1,787.6 97.9		0.0	0.0 2.0				-	0.0		
Vermont Middle Atlantic	10,963.9	10,821.7	68,276.0	69,344.0	3,409.1	3,409.1	71.4					11.2		
New Jersey	890.6	834.4	12,323.9	13,515.1	420.0	420.0	1.0					11.2		
New York	7,190.8	7,125.3	26,133.3	26,102.6	1,406.1	1,406.1	20.0					0.0		
Pennsylvania	2,882.5	2,862.0	29,818.8	29,726.3	1,583.0	1,583.0	50.4					0.0		·
East North Central	11,031.1	10,211.2	114,033.5	113,433.6	2,133.0	2,103.0	187.4	187.4	19,019.3	19,019.3	110.1	110.1	146,514.4	145,064.6
Illinois	4,172.4	3,974.6	28,972.0	28,928.6	0.0	0.0	112.4	112.4	11,587.3	11,587.3	0.0	0.0	44,844.1	44,602.9
Indiana	2,308.8	2,181.6	23,121.0	23,353.4	0.0	0.0			0.0	0.0	89.0	89.0	25,540.8	25,646.0
Michigan	2,469.8	2,216.2	20,781.1	20,818.7	2,133.0	2,103.0	0.0					0.0		
Ohio	856.2	724.7	26,659.6	25,810.5		0.0	53.0					0.0		
Wisconsin	1,223.9	1,114.1	14,499.8	14,522.4	0.0	0.0	0.0					21.1		
West North Central	25,616.7 6,971.6	21,952.2 6,503.6	60,920.6 9,956.3	60,532.5 9,507.5	657.0 0.0	657.0 0.0	2.0			· ·		24.5		·
lowa Kansas	5,136.4	3,863.9	9,930.3	9,698.0	0.0	0.0	0.0		<u> </u>			0.0		
Minnesota	4,606.4	3,984.3	10,087.6	10,035.8		0.0	1.0		<u> </u>	· ·		18.4	,	
Missouri	1,250.2	1,043.6	18,578.4	18,767.4	657.0	657.0	1.0					0.0		
Nebraska	1,622.5	1,123.5	6,215.5	6,215.5	0.0	0.0	0.0					0.0		
North Dakota	3,592.8	2,744.5	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	7,371.0
South Dakota	2,436.8	2,688.8	1,687.1	1,687.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,123.9	4,375.9
South Atlantic	17,431.2	15,497.6	159,848.0	158,704.3	7,905.2	7,905.2	80.5					446.7	,	·
Delaware	46.4	44.9	ŕ			0.0			<u> </u>					·
District of Columbia	12.0	12.0	9.0			0.0	0.0		ļ			0.0		
Florida	1,736.2	1,434.8	53,297.9	53,393.5	0.0	0.0	0.0					348.7	58,954.8	
Georgia Maryland	3,965.6 1,071.4	3,704.5 1,058.7	26,968.8 10,287.3	26,973.2 9,553.5	1,862.2 0.0	1,862.2 0.0	1.0 13.0					44.0 0.0		
North Carolina	5,714.0	4,577.2	21,646.9	21,824.9	86.0	86.0	1.0					54.0		· · · · · · · · · · · · · · · · · · ·
South Carolina	1,954.5	1,894.9	11,422.3	11,472.3	2,716.0	2,716.0	0.0					0.0		
Virginia	1,895.3	1,837.8	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	27,427.3	
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	8,631.7	8,101.6	65,687.2	65,821.4	1,616.3	1,616.3	0.0	0.0	10,984.1	10,984.1	1.4	1.4	86,920.7	86,524.8
Alabama	4,091.7	3,789.2	20,227.7	20,227.7	0.0	0.0	0.0			5,060.4		0.0	· · · · · · · · · · · · · · · · · · ·	
Kentucky	1,226.5	1,148.6	18,874.3	19,004.3		0.0	0.0					0.0		
Mississippi	383.3	274.7	14,278.0	14,278.0	0.0	0.0	0.0					1.4		15,955.1
Tennessee West South Central	2,930.2 33,568.5	2,889.1 29,115.8	12,307.2 144,222.4	12,311.4 142,102.3	1,616.3 286.0	1,616.3 286.0	0.0 71.0			4,522.7 8,910.7	0.0 512.9	0.0 512.9		·
Arkansas	1,620.1	1,620.1	11,245.2	11,245.2	28.0	28.0	0.0		· · · · · ·			0.0	,	·
Louisiana	615.7	615.7	21,019.6	21,266.0	0.0	0.0	0.0			· ·		288.9	,	24,303.5
Oklahoma	7,683.5	6,390.9	18,347.7	18,175.5		258.0	0.0			-	-	0.0	· '	
Texas	23,649.2	20,489.1	93,609.9	91,415.6	0.0	0.0	71.0	41.0	4,960.0	4,960.0	224.0	224.0		
Mountain	25,625.7	23,954.4	63,213.1	63,869.3	778.8	778.8	43.6				126.3	126.3	93,724.5	•
Arizona	5,015.3	4,592.8	19,407.3	19,407.3	216.3	216.3	40.0					0.0		
Colorado	4,173.9	4,047.1	11,161.2	11,355.0	562.5	562.5	1.0					9.3		,
Idaho	4,013.3	3,813.3	1,148.1	1,158.5	0.0	0.0	0.0		ļ			14.8		· ·
Montana	3,446.3	3,429.3	2,740.4	2,740.4	0.0	0.0	0.0				<u> </u>	44.0		6,213.7
Nevada New Mexico	3,534.0	3,199.4	7,791.6 6,828.3	8,248.6 6,828.3	0.0	0.0	0.0 2.6					6.5 0.0		11,454.5
Utah	2,061.0 1,587.5	1,649.3 1,428.8	7,348.2	7,343.2	0.0	0.0						40.2		
Wyoming	1,794.4	1,794.4	6,788.0	6,788.0	0.0	0.0	0.0		-	-		11.5		
Pacific Contiguous	66,136.1	64,314.9	49,341.7	51,928.7	4,225.9	4,225.9	172.1	65.7	3,417.0			106.3	,	124,041.5
California	29,220.2	27,582.3	40,267.8	42,866.9	3,911.9	3,911.9	159.5					106.3	,	76,762.9
Oregon	12,117.2	11,958.9	4,318.1	4,318.1	0.0	0.0	5.0					0.0		
Washington	24,798.7	24,773.7	4,755.8	4,743.7	314.0	314.0	7.6		1	· · · · · · · · · · · · · · · · · · ·		0.0	1	
Pacific Noncontiguous	1,128.1	1,116.6												
Alaska	538.0	538.0	2,159.3	2,102.3		0.0								
Hawaii	590.1	578.6	·	2,057.2		0.0								
U.S. Total	205,722.5	190,244.2	751,058.8	752,566.7	22,808.7	22,778.7	734.8	522.1	99,581.8	99,564.8	1,414.0	1,414.0	1,081,320.6	1,067,090.5

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 Sur	mmer Capaci	ty Using Pri	marily Renewa	ible Energ	gy Sources a	ind by State,	October 20	117 and 2016 ((Megawatts)											
						Summer	· Canacity at	Utility Scale Fac	rilitias						Small Scale	Canacity	Canacity	From Utility an	nd Small Scale	a Facilities
						Juliller			,iiiiies							•		·	u Siliali Scal	e i aciiilles
Census Division and State	Wi	nd	Solar Photovolt	taic	Solar T	hermal		entional electric	Biomass So	ources	Geoth	ermal		enewable urces	Estimated Photovo			Total Solar voltaic	Estimated	l Total Solar
	October 2017	October 2016	October 2017 Oc	etober 2016	October 2017	October 2016	•		October 2017 Oc	stober 2016	October 2017	October 2016	October 2017	7 October 2016	October 2017 O	october 2016	October 2017	October 2016	October 2017	7 October 2016
New England	1,347.9	1,072.6	659.1	483.7	0.0	0.0	1,957.4		1,625.1	1,644.5		0.0	5,589.5		1,694.8	1,324.5	2,353.9	1,808.2	2,353.9	
Connecticut	1.1	1.1	31.2	15.2			122.2		203.5	203.5		0.0	358.0		315.3	251.3		266.5	346.5	
Maine	898.8	652.7	5.6	0.0		0.0	732.4		782.9	803.9		0.0	2,419.7		31.1	21.5				
Massachusetts New Hampshire	92.9 183.1	94.5 183.1	546.4 0.0	415.5 0.0		0.0	265.9 504.8		283.3 241.0	283.3 241.0	0.0	0.0	1,188.5 928.9	· ·	1,152.3 67.7	927.7 45.2	1,698.7 67.7	1,343.2 45.2	1,698.7 67.7	·
Rhode Island	51.8	21.0	10.2	10.2			2.7		40.1	36.9		0.0	104.8			20.9			51.4	
Vermont	120.2	120.2	65.7	42.8			329.4		74.3	75.9		0.0	589.6		87.2	58.0			152.9	
Middle Atlantic	3,204.1	3,088.1	817.4	736.3			5,630.7	5,630.7	1,311.7	1,366.6	0.0	0.0	10,963.9		2,447.3	1,904.8		2,641.1	3,264.7	The state of the s
New Jersey	7.6	7.6	643.4	587.2	0.0	0.0	12.3		227.3	227.3		0.0	890.6		1,234.1	1,009.9	1,877.5	1,597.1	1,877.5	
New York Pennsylvania	1,824.7 1,371.8	1,747.0 1,333.5	123.2 50.8	98.3 50.8			4,718.8 899.6	· ·	524.1 560.3	561.2 578.1	0.0	0.0	7,190.8 2,882.5	· ·	942.8 270.4	691.0 203.9	· ·	789.3 254.7	1,066.0 321.2	
East North Central	8,525.2	7,838.9	353.6	244.7	0.0		853.1		1,299.2	1,274.5		0.0	11,031.1			178.8		423.5	624.7	
Illinois	3,983.8	3,799.8	32.8	32.8			34.1		121.7	107.9		0.0	4,172.4	· ·	45.7	25.8		58.6	78.5	5 58.6
Indiana	1,989.7	1,889.7	175.9	155.1	0.0		60.4		82.8	76.4		0.0	2,308.8	· ·	26.3	11.9			202.2	
Michigan	1,583.8	1,384.8	62.5	7.9			263.0		560.5	560.5	0.0	0.0	2,469.8	· ·	61.7	39.6			124.2	
Ohio Wisconsin	538.4 429.5	433.1 331.5	67.5 14.9	45.8 3.1	0.0	0.0	101.9 393.7		148.4 385.8	143.9 385.8	0.0	0.0	856.2 1,223.9		96.8 40.6	76.0 25.5			164.3 55.5	
West North Central	21,306.8	18,073.0	467.4	36.7			3,289.4		553.1	553.1	0.0	0.0	25,616.7	The state of the s	251.6	183.3			719.0	
Iowa	6,798.9	6,337.3	6.4	0.0			144.9	· ·	21.4	21.4		0.0	6,971.6	· ·	64.6	41.1			71.0	
Kansas	5,117.2	3,846.7	3.2	1.2		0.0	7.0		9.0	9.0		0.0	5,136.4		10.9	5.5		6.7	14.1	
Minnesota	3,506.5	3,290.1	413.3	7.6			205.9		480.7	480.7		0.0	4,606.4	-	42.7	27.9		35.5		
Missouri Nebraska	654.3 1,319.1	458.5 927.9	33.7 9.8	22.9 4.0		0.0	545.7 277.9		16.5 15.7	16.5 15.7		0.0	1,250.2 1,622.5	The state of the s	129.0 3.6	106.3 1.8			162.7 13.4	
North Dakota	3,073.0	2,224.7	0.0	0.0			510.0		9.8	9.8			3,592.8			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		0.5	0.5			1.5	
South Atlantic	1,086.3	775.3	4,682.5	2,902.4	0.0		7,270.8	7,498.7	4,391.6	4,321.2		0.0	17,431.2		1,324.9	941.0	· · · · · · · · · · · · · · · · · · ·	3,843.4	6,007.4	· ·
Delaware	2.0	2.0	32.2	30.7	0.0	0.0	0.0	-	12.2	12.2	+	0.0	46.4		67.2	49.0		79.7	99.4	
District of Columbia Florida	0.0	0.0	0.0 391.5	0.0 98.5	0.0	0.0	0.0 54.5		12.0 1,290.2	12.0 1,281.8	0.0	0.0	12.0 1,736.2		37.5 184.0	24.5 126.3		24.5 224.8	37.5 575.5	_
Georgia	0.0	0.0	970.5	536.5	0.0	0.0	2,047.2		947.9	892.9		0.0	3,965.6		NM	NM			NM	
Maryland	190.0	190.0	149.4	136.7	0.0	0.0	590.0	590.0	142.0	142.0	0.0	0.0	1,071.4		604.8	452.4	754.2	589.1	754.2	2 589.
North Carolina	208.0	0.0	2,939.9	2,016.3	0.0	0.0	2,002.0	2,002.0	564.1	558.9	0.0	0.0	5,714.0	· ·	124.6	105.9		2,122.2	3,064.5	
South Carolina	0.0	0.0	62.1 136.9	2.5 81.2		0.0	1,361.6 866.0	·	530.8 892.4	530.8 890.6	0.0	0.0	1,954.5 1,895.3	·	112.7 44.5	36.7 27.9		39.2 109.1	174.8 181.4	
Virginia West Virginia	686.3	583.3	0.0	0.0	0.0	0.0	349.5		0.0	0.0		0.0	1,095.8	· ·	5.7	4.0	.		5.7	
East South Central	29.1	29.1	297.9	130.2	0.0	0.0	7,033.1	6,727.3	1,271.6	1,215.0	0.0	0.0	8,631.7	_	83.3	74.9			381.2	
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	7 3,789.2	NM	4.6	NM	79.6	NM	
Kentucky	0.0	0.0	10.0	10.0		0.0	1,144.3	,	72.2	72.2		0.0	1,226.5	· ·	17.6	13.2			27.6	
Mississippi	0.0 29.1	0.0	108.6 86.3	0.0 45.2	0.0	0.0	0.0 2,618.6	0.0	274.7 196.2	274.7 196.2	0.0	0.0	383.3 2,930.2		6.5 54.2	4.0 53.1		4.0 98.3	115.1 140.5	
Tennessee West South Central	28,269.1	29.1 24,422.9	1,040.3	434.4	0.0		2,990.3	·	1,268.8	1,270.2		0.0	33,568.5		579.3	378.4		812.8	1,619.6	
Arkansas	0.0	0.0	13.0	13.0		0.0	1,266.7	1,266.7	340.4	340.4		0.0	1,620.	,	7.2	4.6	<u> </u>	17.6	20.2	
Louisiana	0.0	0.0	0.0	0.0	0.0	0.0	192.0		423.7	423.7	0.0	0.0	615.7		124.9	117.0		117.0	124.9	
Oklahoma	6,743.2	5,451.2	2.5	2.5		0.0	861.6		76.2	77.6		0.0	7,683.5	· ·	3.8	2.4		4.9	6.3	
Texas Mountain	21,525.9 8,434.4	18,971.7 8,019.4	1,024.8 5,435.8	418.9 4,180.3	0.0 473.9	0.0 473.9	670.0 10,562.8		428.5 174.5	428.5 176.1	5 0.0	0.0 544.3	23,649.2 25,625.7		443.4 1,814.5	254.5 1,539.2	1,468.2 7,250.3	673.4 5,719.5	1,468.2 7,724.2	
Mountain Arizona	267.3	267.3	1,701.0	1,278.5	295.4	295.4	2,720.9	2,720.9	30.7	30.7	0.0	0.0	5,015.3		962.7	849.4	2,663.7	2,127.9	2,959.1	1 2,423.3
Colorado	3,026.1	2,965.3	431.7	368.1	0.0	0.0	687.4	685.0	28.7	28.7		0.0	4,173.9	· ·	320.9	275.6		643.7	752.6	
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		11.7	6.7			251.7	
Montana	678.5	678.5	17.0	0.0	0.0	0.0	2,747.8		3.0	3.0		0.0	3,446.3		10.5	7.7		7.7	27.5	
Nevada New Mexico	150.0 1,466.5	150.0 1,112.3	1,684.6 504.4	1,350.0 446.9	178.5 0.0	178.5 0.0	1,051.4 82.9	1,051.4	9.8 5.6	9.8 5.6		459.7 1.6	3,534.0 2,061.0	· ·	214.8 111.5	207.8 84.4	· · · · · · · · · · · · · · · · · · ·	1,557.8 531.3	2,077.9 615.9	•
Utah	388.2	388.2	857.1	696.8		0.0	256.4		12.8	14.4		73.0	1,587.5	·	171.5	105.5		802.3	1,036.4	
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	1,794.4		3.1	2.2	·	2.2	3.1	_
Pacific Contiguous	11,943.8	11,891.9	9,058.7	7,277.8	1,284.0	1,284.0	39,935.3	39,909.3	2,045.0	2,022.6	1,869.3	1,929.3	66,136.	1 64,314.9	6,575.2	5,177.3	15,633.9	12,455.1	16,917.9	9 13,739.
California	5,660.5	5,658.6	8,902.3	7,229.7			10,197.7		1,325.9	1,309.8			29,220.2		6,347.7	4,990.0			16,534.0	
Oregon Washington	3,210.2	3,160.2	155.9	47.6			8,423.2		308.4	308.4			12,117.2		132.4	113.5 73.8			288.3	
Washington Pacific Noncontiguous	3,073.1 266.2	3,073.1 266.2	98.3	0.5 50.7			21,314.4 496.3		410.7 224.3	404.4 260.4			24,798.7 1,128.			73.8 454.1				
Alaska	60.6	60.6	0.0	0.0			470.4		7.0	7.0		0.0	538.0		2.0	1.3			2.0	
Hawaii	205.6	205.6	98.3	50.7			25.9		217.3	253.4		43.0	590.			452.8				
U.S. Total	84,412.9	75,477.4	22,911.0	16,477.2	1,757.9	1,757.9	80,019.2	79,910.9	14,164.9	14,104.2	2,456.6	2,516.6	205,722.5	5 190,244.2	15,609.4	12,156.4	38,520.4	28,633.6	40,278.3	30,391.

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.

National	Census Division and State	Mer Capacity Natural Ga Combined	s Fired	Scale Units Natural C Combustic	as Fired	rily Fossil F Other Na		State, Octobe Coa		Petro	awatts) bleum bke	Petro Liqu		Other	Gases	To Fossil	
New England 1,20766 1,39816 1,09816	c			October 2017	October 2016	October 2017	October 2016			October 2017	October 2016 C	Ī		October 2017	October 2016		
March 1,760 2,720 297 297 297 426 448 50 30 00 00 00 2014 301 00 00 00 00 00 00 0																21,299.8	22,671.1
Nanochanders	nnecticut	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
Non-temperature 1,257.0 1,257.0 3.8 400.2 4.00.2 5.05.0 5.05.0 5.00.0 0.0	ine	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
Procession 1,7772 1,7900 0.0 0.0 1.0 1.0 0.0	ssachusetts	5,237.0	5,193.3	330.8	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	8,351.2	9,765.7
Venore	w 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
Model	ode Island	1,777.2	1,759.2	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	1,787.6
New Jersew 6.10.37 3.10.21 2.867.5 2.867.5 482.2 10.024 6.10.5 1.265.0 11.0 11.0 22.22 22.22 22.4 22.4 22.5	rmont	0.0		0.0									97.9			97.9	97.9
New York			•	·	,		·	·				·				68,276.0	69,344.0
Promptopring 10,192 10,0067 1,6795 1,6795 3,5911 3,491 1,7793 1,7793 1,7793 2,779 2,770 2,666 2,660 2,7607 1,650 1,6	·	·	,	·					•							12,323.9	13,515.1
Eas Nation Cented 16.662 17,0601 26,442 22,655 3,5851 4,185 5,1501 61,802 24.76 24.76 24.86 24.665 11.655 11.6		·		·		•		·	,			·				26,133.3	26,102.6
Hindes	•	·	•	,	, and the second		•	·	·			,	•			29,818.8	29,726.3
Indiama		·	•	·	,			·				·	<u> </u>	·	•	114,033.5	113,433.6
Michigan		·	•	·	,			·	·							28,972.0	28,928.6
One 4,9224 4,477-8 5,54317 5,4317 134-8 1533 15,181-6 1530 15,181-6 142.0 640.0 640.0 640.0 187.1 187.1 286. Wiscorson 2,27419 5,308.0 13.000 5,300.0 557.5 87.5 7,711-7 7,712-7 5,545.5 54 6,644 604.4 677.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		·	•		, and the second			·	·							23,121.0	23,353.4
Waterwine 2,7419 2,7419 3,3600 3,3800 3,3800 597.5 597.5 597.6 597.5 7,167 7,167 7,167 594.6 594.6 694.4 617.0 0.0 0.0 144.6 0.0 0	_	·	•		,			,	•							20,781.1	20,818.7
View Non-Central 6 e41.9		·	•	·	,			·	·						-	26,659.6 14,499.8	25,810.5 14,522.4
Day		·	•	,	, and the second			,	·							60,920.6	60,532.5
Kanese 266.0 266.0 2,169.0 2,169.0 2,113.6 2,075.5 4,683.2 4,672.2 0.0 0.0 5.99.3 573.3 0.0 0.0 0.9 Mineacita 2,172.0 2,172.0 2,172.0 2,173.0 3,247.9 3,75.1 322.3 4,385.8 4,385.8 0.0 0.0 0.0 1,134.2 1,134.2 0.0 0.0 18.1 Mineacita 3,42.0 3,42.0 3,420.5 501.0 504.0 11,726.1 11,912.1 0.0 0.0 0.1,134.2 1,134.2 0.0 0.0 18.1 Notribalkon 30.0 0.0 408.0 3,20.0 111.6 502.1 502.1 502.1 3,817.3 3,817.3 0.0 0.0 0.13.2 312.7 31.7 0.0 0.0 18.5 Notribalkon 290.0 290.0 694.6 684.6 8.7 8.7 47.4 47.40 0.0 0.0 0.13.2 812.8 80.0 0.0 0.0 1.0 South Davidon 526.0 290.0 332.403 31.963.7 7,245.3 7.00.4 96.870.7 67.309.7 83.8 83.8 10,441.0 11,121.4 135.0 135.0 136.2 83.5 3.15.2 83.5 2.835.2 877.7 470.0 410.0 410.0 0.0 0.0 11.1 111.1 135.0 135.0 135.2 83.5 2.835.2 83.5 83.5 83.8 10,441.0 11,121.4 135.0 33.0 136.2 83.5			•	-	·	·	-	·				·	•			9,956.3	9,507.5
Minnesoria		,		·	,			·	·							9,930.3	9,698.0
Mascouri				·	,	·		·	•							10,087.6	10,035.8
Nebraska 342.6 342.6 1.150.8 1.150.8 592.1 592.1 3.87.3 3.81.73 0.0 0.0 312.7 312.7 0.0 0.0 0.0 62. North Deletion 4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0		·	•	,	,			·	·							18,578.4	18,767.4
North Diabotals 0 0 0 0 0 600 8328 0 111.6 0 0 4.035.3 4.222.5 0 0 0 0 0 61.3 62.3 8.4 8.4 8.4 8.4 8.5 8.5 0.0 0 0 0 0 219.8 219.8 0 0 0 0 1.5 8.5 8.5 8.5 0.0 0 0 0 0 219.8 219.8 0 0 0 0 1.5 8.5 8.5 8.5 0.0 0 0 0 0 219.8 219.8 0 0 0 0 1.5 8.5 8.5 8.5 8.5 0.0 0 0 0 0 219.8 219.8 0 0 0 0 1.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8		·	•	,				·	·			·				6,215.5	6,215.5
South Delavors					·			·	·							4,624.6	4,621.2
Delaware 1,512.0 1,512.0 315.2 315.2 315.2 315.2 843.2 877.7 410.0 410.0 0.0 0.0 1.14.1 114.1 135.0 135.0 3.3. District of Columbia 0.0 0.0 0.0 9.0 0.0 0.0 0.0 0.0 0.0 0.0		290.0						·	·							1,687.1	1,687.1
District of Columbia 0.0 0.0 9.0 9.0 0.0	uth 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
Fordia	laware	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
Georgia 7,957.7 7,957.7 7,957.7 7,823.8 7,823.8 7,96.4 7,96.4 9,360.5 9,360.5 83.8 83.8 94.6 94.6 951.0 0.0 0.0 26.8 Mayland 976.0 250.0 1,96.2 1,960.0 1,414.2 1,414.2 4,712.0 4,712.0 0.0 0.0 0.0 1,218.9 1,217.3 0.0 0.0 10.0 North Carolina 7,239.0 1,239.	strict 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
Manyland 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 0.0 1,000.	orida	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
North Carolina	-	-	·	,	,			·	,						0.0	26,968.8	26,973.2
South Caroline 2,399.0 2,399.0 2,801.9 2,801.9 546.0 546.0 5,212.0 5,212.0 0.0 0.0 483.4 513.4 0.0 0.0 0.0 11.4	,				· ·	·	,	,	·			· ·	•			10,287.3	9,553.5
Verginia 7,6341 6,880.1 3,894.3 1,045.8 1,045.8 1,045.8 3,800.4 3,804.4 0.0 0.0 2,348.4 2,350.0 0.0 0.0 14.7 Most Virginia 0.0 0.0 1,071.3 1,071.3 120.0 12.3 12.958.0 12.958.0 0.0 0.0 0.0 11.0 11.0 0.0 0.0 14.7 East South Central 20,197.9 19,097.9 13,008.2 13,002.4 5,338.8 5,338.8 25,880.5 28,210.5 0.0 0.0 0.0 142.0 152.0 19.8 19.8 19.8 65.6 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 0.0 42.6 42.6 19.8 19.8 19.8 20.2 Most Virginia 1,000.0 19.8 Mississipi 7,763.0 663.0 487.6 4,766.6 260.0 260.0 18.8 18.8 20.9 19.0 0.0 0.0 11.9 11.9 0.0 0.0 18.8 Mississipi 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 0.0 44.3 44.3 0.0 0.0 0.0 14.2 153.2 0.0 0		·	·	,	,			·	·							21,646.9	21,824.9
West Virginia 0.0 0.0 1.0713 1.0715 123.0 12.968.0 12.958.0 0.0 0.0 11.0 11.0 0.0 0.0 14.1 East South Central 20,197.9 19,097.9 13,008.2 13,002.4 6,338.8 5,338.8 26,980.5 28,210.5 0.0 0.0 142.0 152.0 19.8 19.8 65.6 Alabama 9,441.4 9,441.4 2,532.2 2,532.2 1,908.3 1,908.3 6,283.4 0.0 0.0 42.6 19.8 19.8 80.6 65.0 4,976.6 260.0 260.0 1,820.0 0.0 0.0 11.9 11.9 0.0 0.0 11.9 11.9 0.0 0.0 11.9 11.9 0.0 0.0 11.8 11.9 11.9 0.0 0.0 11.8 11.9 11.9 0.0 0.0 11.2 11.9 11.9 0.0 0.0 11.2 11.2 11.9 0.0 0.0 11.2 11.2 12.2 <		-	-					·	·							11,422.3	11,472.3
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 0.0 142.0 152.0 19.8 19.8 65.6 Alabama 9,441.4 9,441.4 2,532.2 2,532.2 1,908.3 1,908.3 1,908.3 6,283.4 0.0 0.0 0.0 42.6 42.6 19.8 19.8 19.8 20.2 (2.50.4 1) 1,769.0 19.8 19.8 19.8 20.2 (2.50.4 1) 1,769.0 19.8 19.8 19.8 20.2 (2.50.4 1) 1,769.0 19.8 19.8 19.8 20.2 (2.50.4 1) 1,769.0 19.8 19.8 19.8 19.8 19.8 19.8 19.8 19.8		·	•	,	,	,	, ,	·	·			·				18,723.0	17,950.6
Alabama 9,441,4 9,441,4 2,532,2 2,532,2 1,908,3 1,908,3 6,283,4 0,0 0,0 42,6 42,6 19,8 19,8 20,2 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 0,0 44,3 44,3 0,0 0,0 0,0 44,3 44,3 0,0 0,0 0,0 44,3 44,3 0,0 0,0 0,0 44,3 44,3 0,0 0,0 14,43 0,0 0,0 14,43 44,3 0,0 0,0 14,43 4,40 0,0 0,0 14,43 0,0 0,0 44,43 0,0 0,0 14,2 8,60 0,0 0,0 14,2 18,32 53,2 0,0 0,0 12,2 18,32 8,32 18,32 8,32 18,32 8,32,52 18,33 8,61,53 14,42 1,43,42 18,32 1,43,42 1,43,4				,	,			·	·							14,163.3	14,163.3
		·	·		· ·	·	•	·	·							65,687.2	65,821.4 20,227.7
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		·	-			-	, ,	·	· · · · · · · · · · · · · · · · · · ·							18,874.3	19,004.3
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 53.2 0.0 0.0 12.3 West South Central 60,192.2 58,389.5 13,761.5 13,425.8 32,052.7 32,071.0 36,423.7 36,423.7 955.7 955.7 181.3 181.3 655.3 655.3 144.2 Arkansas 4,420.5 702.8 702.8 793.7 793.7 5,116.0 5,116.0 0.0 0.0 12.2 12.2 0.0 0.0 112. Louisiana 7,552.8 7,552.8 2,372.8 2,372.8 6,896.3 7,142.7 2,852.9 2,852.9 891.9 891.9 45.5 45.5 407.4 407.4 21,0 0 0.1 12.3 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2	•	·		, ,	·			·	· · · · · · · · · · · · · · · · · · ·							14,278.0	14,278.0
West South Central 60,192.2 58,389.5 13,761.5 13,425.8 32,052.7 32,071.0 36,423.7 36,423.7 955.7 181.3 181.3 655.3 655.3 144.2 Arkansas 4,620.5 4,620.5 702.8 702.8 793.7 793.7 5,116.0 0.0 0.0 12.2 12.2 0.0 0.0 11.2 Louislana 7,552.8 7,552.8 2,372.8 2,372.8 6,886.3 7,142.7 2,682.9 2,819.9 891.9 845.5 45.5 407.4 407.4 21.0 0.0 11.2 12.2 0.0 0.0 11.2 12.2 0.0 0.0 0.0 74.4 74.4 407.4 407.4 21.0 0.0 11.2 12.2 12.2 0.0 0.0 0.0 0.0 74.4 74.4 407.4 407.4 407.4 407.4 407.4 247.9 247.9 247.9 247.9 93.6 0.0 0.0 0.0 70.4 407.4 247.9		·		·		,	,	,	,							12,307.2	12,311.4
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 11,2 Louisiana 7,552,8 7,552,8 2,372,8 6,996,3 7,142,7 2,852,9 2,852,9 891,9 891,9 45,5 45,5 407,4 407,4 21,0 Oklahoma 6,783,7 1,458,9 1,295,2 5,164,9 5,156,4 4,865,8 0,0 0,0 0,74,4 74,4 0,0 0,0 18,3 Texas 41,235,2 39,432,5 9,227,0 9,055,0 19,197,8 18,978,2 23,589,0 63,8 63,8 49,2 49,2 247,9 247,9 93,6 Mountain 22,494,2 22,504,6 8,659,0 8,819,0 3,341,9 3,336,9 28,183,6 28,674,4 52,0 52,0 370,8 111,6 111,6 63,2 Arizona 9,891,6 9,891,6 2,367,6 1,303,6 1,303,6 <t< td=""><td></td><td>-</td><td>·</td><td>,</td><td>,</td><td></td><td></td><td>·</td><td>·</td><td></td><td></td><td></td><td></td><td></td><td></td><td>144,222.4</td><td>142,102.3</td></t<>		-	·	,	,			·	·							144,222.4	142,102.3
Louisiana 7,552.8 7,552.8 2,372.8 2,372.8 2,372.8 6,896.3 7,142.7 2,852.9 2,852.9 891.9 891.9 45.5 45.5 407.4 407.4 21,0		-	*			-	, ,	·	·							11,245.2	11,245.2
Oklahoma 6,783.7 6,783.7 1,458.9 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 18.3 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 93.6 Mountain 22,494.2 22,504.6 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 63.2 67.0 0.0 0.0 0.0 90.5 90.5 0.0 0.0 19.4 72.2 72.4 72.4 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.2<		·	·					· · · · · · · · · · · · · · · · · · ·	,							21,019.6	21,266.0
Mountain 22,494.2 22,504.6 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 63,2 Arizona 9,891.6 9,891.6 2,367.6 2,367.6 1,303.6 1,303.6 5,754.0 0.0 0.0 90.5 90.5 0.0 0.0 19,4 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 11,4 Idaho 558.1 568.5 562.1 562.1 14.0 14.0 8.5 8.5 0.0 0.0 5.4 5.4 0.0 0.0 1,1 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 2,7 Nevada 5,415.0 1,465.0 976.0 976.0 849.4	lahoma	·	•	,	,	·	,	·				74.4	74.4	0.0	0.0	18,347.7	18,175.5
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 19.4 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 0.0 168.4 168.4 0.0 0.0 0.0 11.1 Idaho 558.1 568.5 562.1 562.1 14.0 14.0 8.5 8.5 0.0 0.0 0.0 5.4 5.4 5.4 0.0 0.0 0.0 1.1 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 0.0 1.5 1.5 1.5 2,7 New Mexico 1,465.0 5,415.0 1,185.6 1,385.6 444.6 444.6 740.4 997.4 0.0 0.0 0.0 6.0 6.0 0.0 0.0 7.7 New Mexico 1,465.0 976.0 976.0 976.0 849.4 849.4 3,471.0 3,471.0 0.0 0.0 66.9 66.9 0.0 0.0 0.0 7.3 Wyoming 94.0 94.0 153.6 153.6 12.9 12.9 6,411.6 6,411.6 0.0 0.0 0.0 5.8 5.8 110.1 110.1 6,7 Pacific Contiguous 25,987.3 25,891.2 11,763.8 11,514.7 8,877.0 11,872.2 1,982.0 1,982.0 17.0 17.0 485.3 422.3 229.3 229.3 229.3 49,3 California 19,962.8 19,878.8 10,910.6 10,661.5 8,621.0 11,616.2 57.0 57.0 17.0 17.0 470.1 407.1 229.3 229.3 49,3 Washington 2,649.6 2,637.5 719.4 719.4 31.6 31.6 11,340.0 1,340.0 0.0 0.0 0.0 2,595.8 2,572.0 6.4 6.4 4.2 Pacific Noncontiguous 479.2 418.0 626.3 654.3 175.0 175.0 333.8 333.8 0.0 0.0 0.0 2,595.8 2,572.0 6.4 6.4 4.2	xas	41,235.2	39,432.5	9,227.0		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
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 11,1 Idaho 558.1 568.5 562.1 562.1 14.0 14.0 8.5 8.5 0.0 0.0 5.4 5.4 0.0 0.0 0.0 1,1 Montana 0.0 0.0 321.6 321.6 72.2 72.2 2,293.1 52.0 52.0 0.0 0.0 1.5 1.5 2,7 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 0.0 0.0 7,7 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 60.9 0.0 0.0 6.8 Utah 1,830.0 1,830.0 520.2 520.2 316.2 31	ountain	22,494.2	22,504.6	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	63,869.3
Idaho 558.1 568.5 562.1 14.0 14.0 8.5 8.5 0.0 0.0 5.4 5.4 0.0 0.0 1,1 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 2,7 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 7,7 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 6.8 Utah 1,830.0 1,830.0 520.2 316.2 311.2 4,654.0 4,654.0 0.0 0.0 27.8 27.8 0.0 0.0 0.0 7,3 Wyoming 94.0 94.0 153.6 15.6 12.9 12.9	zona	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
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 2,7 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 0.0 0.0 0.0 7,7 New Mexico 1,465.0 1,465.0 976.0 849.4 849.4 3,471.0 3,471.0 0.0 0.0 66.9 0.0 0.0 6,6 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 7,3 Wyoming 94.0 94.0 153.6 12.9 12.9 6,411.6 6,411.6 0.0 0.0 5.8 5.8 110.1 10.1 6,7 Pacific Contiguous 25,987.3 25,891.2 11,763.8 11,514.7 8,877.0 11,872.2		·	·	·				·	·			168.4			0.0	11,161.2	11,355.0
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 6.0 6.0 0.0 0.0 6.0 6.0 0.0 0.0																1,148.1	1,158.5
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 0.0 6,8 Utah 1,830.0 1,830.0 520.2 520.2 316.2 311.2 4,654.0 0.0 0.0 27.8 27.8 0.0 0.0 7,3 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 6,7 Pacific Contiguous 25,987.3 25,891.2 11,763.8 11,514.7 8,877.0 11,872.2 1,982.0 17.0 17.0 485.3 422.3 229.3 229.3 49,3 California 19,962.8 19,878.8 10,910.6 10,661.5 8,621.0 11,616.2 57.0 57.0 17.0 17.0 470.1 407.1 229.3 229.3 40,2 Oregon 3,374.9 3,374.9 133.8 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>·</td> <td>·</td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td>-</td> <td>2,740.4</td> <td>2,740.4</td>								·	·					_	-	2,740.4	2,740.4
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 7.3 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 6,7 Pacific Contiguous 25,987.3 25,891.2 11,763.8 11,514.7 8,877.0 11,872.2 1,982.0 17.0 17.0 485.3 422.3 229.3 229.3 29.3 49,3 California 19,962.8 19,878.8 10,910.6 10,661.5 8,621.0 11,616.2 57.0 57.0 17.0 17.0 470.1 407.1 229.3 229.3 40,2 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 0.0 4,6 Washington 2,649.6		·	,	,	,											7,791.6	8,248.6
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 6,7 Pacific Contiguous 25,987.3 25,891.2 11,763.8 11,514.7 8,877.0 11,872.2 1,982.0 1,982.0 17.0 17.0 485.3 422.3 229.3 229.3 49,3 California 19,962.8 19,878.8 10,910.6 10,661.5 8,621.0 11,616.2 57.0 57.0 17.0 17.0 470.1 407.1 229.3 229.3 40,2 Oregon 3,374.9 3,374.9 133.8 133.8 224.4 224.4 585.0 585.0 0		·	·					· · · · · · · · · · · · · · · · · · ·	,							6,828.3	6,828.3
Pacific Contiguous 25,987.3 25,891.2 11,763.8 11,514.7 8,877.0 11,872.2 1,982.0 1,982.0 17.0 17.0 17.0 485.3 422.3 229.3 229.3 49.3 California 19,962.8 19,878.8 10,910.6 10,661.5 8,621.0 11,616.2 57.0 57.0 17.0 17.0 470.1 407.1 229.3 229.3 40,2 Oregon 3,374.9 3,374.9 133.8 133.8 224.4 224.4 585.0 585.0 0			·					· · · · · · · · · · · · · · · · · · ·	,							7,348.2	7,343.2
California 19,962.8 19,878.8 10,910.6 10,661.5 8,621.0 11,616.2 57.0 57.0 17.0 17.0 470.1 407.1 229.3 229.3 40,2 Oregon 3,374.9 3,374.9 133.8 133.8 224.4 224.4 585.0 585.0 0.0								·	,							6,788.0	6,788.0
Oregon 3,374.9 3,374.9 133.8 133.8 224.4 224.4 585.0 585.0 0.0 </td <td>_</td> <td></td> <td>*</td> <td>,</td> <td>,</td> <td>,</td> <td>,</td> <td>·</td> <td>·</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>49,341.7 40,267.8</td> <td>51,928.7 42,866.9</td>	_		*	,	,	,	,	·	·							49,341.7 40,267.8	51,928.7 42,866.9
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 4,7 Pacific Noncontiguous 479.2 418.0 626.3 654.3 175.0 175.0 333.8 333.8 0.0 0.0 2,595.8 2,572.0 6.4 6.4 4,2		-	-	,	,		,									4,318.1	4,318.1
Pacific Noncontiguous 479.2 418.0 626.3 654.3 175.0 175.0 333.8 333.8 0.0 0.0 2,595.8 2,572.0 6.4 6.4 4,2	•	·	·													4,755.8	4,743.7
	•	•	•					,	,							4,216.5	4,159.5
the transfer of the transfer that the transfer transfer the transfer transf																2,159.3	2,102.3
																2,057.2	2,057.2
													-			751,058.8	752,566.7

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.'

								Energy	Prim
		Plant Producer		Plant		_	Net Summer	Source	
	Entity ID Entity Name	Type	Plant Name	State	Plant ID		Capacity (MW) Technology	Code	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 57881	12	9.3 Natural Gas Internal Combustion Engine 9.3 Natural Gas Internal Combustion Engine	NG	IC IC
2017 1 2017 1	1307 Basin Electric Power Coop 1307 Basin Electric Power Coop	Electric Utility Electric Utility	Pioneer Generating Station Pioneer Generating Station	ND ND	57881	13	9.3 Natural Gas Internal Combustion Engine 9.3 Natural Gas Internal Combustion Engine	NG 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	
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
.017 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
017 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
017 1	58549 County of Alameda GSA	Electric CHP	Santa Rita Jail	CA	58625	SRPV3	0.5 Solar Photovoltaic	SUN	PV
017 1	60370 DG AMP Solar, LLC	IPP	DG AMP Solar Bowling Green	ОН	60622	AMPBG	20.0 Solar Photovoltaic	SUN	PV
017 1	61024 Deep Branch Farm, LLC	IPP	Deep Branch Farm	NC	61403	1	5.0 Solar Photovoltaic	SUN	PV
017 1	15470 Duke Energy Indiana, LLC	Electric Utility	Crane Solar Facility	IN	60435	XXXXX	7.1 Solar Photovoltaic	SUN	PV
017 1	60793 EE Waianae Solar Project LLC	IPP	EE Waianae Solar Project	HI	61172	WAIAN	27.6 Solar Photovoltaic	SUN	PV
017 1	61077 IGS ORIX Solar I, LLC	IPP	IOS - MEW Phase 1	ME	61460	MEW1	4.1 Solar Photovoltaic	SUN	PV
017 1	9234 Indiana Municipal Power Agency	Electric Utility	IMPA Anderson Solar Park	IN	60253	SANDE	5.0 Solar Photovoltaic	SUN	PV
017 1	60304 Innovative Solar 31, LLC	IPP	Innovative Solar 31	NC	60540	IS031	35.0 Solar Photovoltaic	SUN	PV
)17 1	49893 Invenergy Services LLC	IPP	Bethel Wind Farm LLC	TX	60414	GEN1	276.0 Onshore Wind Turbine	WND	W
)17 1	59973 Marshall Solar Energy Project	IPP	Marshall Solar Energy Project	MN	59875	PV1	62.3 Solar Photovoltaic	SUN	PV
017 1	59483 Metropolitan Airports Commission	IPP	St. Paul Intl Airport Red & Blue Parking	MN	59709	PV2	0.9 Solar Photovoltaic	SUN	PV
017 1	60471 Mt. Tom Solar, LLC	IPP	Mt. Tom Solar Project	MA	60906	PV1	4.5 Solar Photovoltaic	SUN	PV
017 1	13683 North Carolina El Member Corp	Electric Utility	Ocracoke	NC	6377	BAT	1.0 Batteries	MWH	BA
017 1	60562 Oliver Wind III, LLC	IPP IPP	Oliver Wind III, LLC Orion Community Solar	ND	60905 60716	WT1	99.3 Onshore Wind Turbine	WND	W ⁻ PV
017 1 017 1	60439 Orion Community Solar 60439 Orion Community Solar	IPP	Orion Community Solar Orion Community Solar	MN MN	60716	OCS1 OCS2	0.9 Solar Photovoltaic 0.9 Solar Photovoltaic	SUN SUN	PV
017 1	60439 Orion Community Solar	IPP	Orion Community Solar	MN	60716	OCS2	0.9 Solar Photovoltaic	SUN	PV
017 1	60438 Paynesville Community Solar	IPP	Paynesville Community Solar	MN	60715	PCS5	0.9 Solar Photovoltaic	SUN	PV
017 1	60834 Pima Energy Storage System	IPP	Pima Energy Storage System	AZ	61197	PIMA	10.0 Batteries	MWH	BA
017 1	57440 SABIC IP Mt. Vernon, LLC	Industrial	SABIC Innovative Plastics Mt. Vernon	IN	58063	COGN1	78.6 Natural Gas Fired Combustion Turbine	NG	G1
017 1	60520 SoCore Energy LLC	IPP	Mt. Hope DPC Solar	WI	60893	PV1	1.0 Solar Photovoltaic	SUN	PV
017 1	60520 SoCore Energy LLC	IPP	Sauk DPC Solar	WI	60887	PV1	1.0 Solar Photovoltaic	SUN	PV
017 1	60970 SunShare Management	IPP	WakeSun, LLC CSG	MN	60694	MLC27	1.0 Solar Photovoltaic	SUN	P\
)17 1	60970 SunShare Management	IPP	WakeSun, LLC CSG	MN	60694	MLC28	1.0 Solar Photovoltaic	SUN	PV
)17 1	60970 SunShare Management	IPP	WakeSun, LLC CSG	MN	60694	MLC29	1.0 Solar Photovoltaic	SUN	PV
)17 1	60046 TPE Alta Luna, LLC	IPP	Alta Luna	NM	60258	ALPV1	28.1 Solar Photovoltaic	SUN	P\
)17 1	18454 Tampa Electric Co	Electric Utility	Polk	FL	7242	2CC	459.0 Natural Gas Fired Combined Cycle	NG	C/
017 1	60947 Tesla Inc.	IPP	Weber State University - Davis Campus Solar	UT	60821	PV1	1.3 Solar Photovoltaic	SUN	P۷
)17 1	24211 Tucson Electric Power Co	Electric Utility	Demoss Petrie	AZ	124	BA1	10.0 Batteries	MWH	BA
)17 1	24211 Tucson Electric Power Co	Electric Utility	Fort Huachuca Solar PV Project	AZ	58972	FHUA2	4.1 Solar Photovoltaic	SUN	P∖
)17 1	60435 Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS1	0.9 Solar Photovoltaic	SUN	P∖
17 1	60435 Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS2	0.9 Solar Photovoltaic	SUN	P۱
17 1	60435 Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS3	0.9 Solar Photovoltaic	SUN	P۱
17 1	60435 Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS4	0.9 Solar Photovoltaic	SUN	P'
17 1	60435 Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS5	0.9 Solar Photovoltaic	SUN	P'
17 1	40211 Wabash Valley Power Assn, Inc	Electric Utility	Liberty I & II LFGTE	IN	56465	1-III	1.6 Landfill Gas	LFG	IC
17 1	40211 Wabash Valley Power Assn, Inc	Electric Utility	Liberty I & II LFGTE	IN	56465	2-111	1.6 Landfill Gas	LFG	IC
17 1	40211 Wabash Valley Power Assn, Inc	Electric Utility	Liberty I & II LFGTE	IN	56465	3-111	1.6 Landfill Gas	LFG	IC
17 1	40211 Wabash Valley Power Assn, Inc	Electric Utility	Liberty I & II LFGTE	IN	56465	4-111	1.6 Landfill Gas	LFG	IC
17 1	58918 West Siler Farm LLC	IPP	West Siler Farm LLC	NC	59112	1	5.0 Solar Photovoltaic	SUN	P'
)17 1	60607 Wildwood Solar II, LLC	IPP	Wildwood Solar II	CA	59253	PV1	14.7 Solar Photovoltaic	SUN	P۱
)17 2	55918 Acciona Wind Energy USA LLC	IPP	San Roman Wind I, LLC	TX	59712	SRWI	95.3 Onshore Wind Turbine	WND	W
)17 2	59050 Algonquin Power Co	IPP	Luning Energy	NV	61084	LNING	50.0 Solar Photovoltaic	SUN	P۱
017 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	СТ
17 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
)17 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	C

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

Year Month	Entity ID Entity Name	Plant Produce		Plant State	Plant ID	Generator ID	Net Summer Capacity (MW) Technology	Energy Source Code	Prii Mo
2017 2	803 Arizona Public Service Co	Type Electric Utility	Red Rock	AZ	60467	PV1	40.0 Solar Photovoltaic	SUN	P\/
2017 2	60865 CD Global Solar Holdings, LLC	IPP		NC	61258	ISS35	1.9 Solar Photovoltaic	SUN	PV
2017 2	60865 CD Global Solar Holdings, LLC	IPP	·	NC	61259	ISS59	1.9 Solar Photovoltaic	SUN	PV
2017 2	60865 CD Global Solar Holdings, LLC	IPP	·	NC	61260	ISS60	1.9 Solar Photovoltaic	SUN	PV
2017 2	56031 CPV Maryland LLC	IPP		MD	56846	GTG1	205.0 Natural Gas Fired Combined Cycle	NG	СТ
2017 2	56031 CPV Maryland LLC	IPP		MD	56846	GTG2	205.0 Natural Gas Fired Combined Cycle	NG	СТ
2017 2	56031 CPV Maryland LLC	IPP		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	<u> </u>	MN	60832	FARMI	5.0 Solar Photovoltaic	SUN	PV
2017 2	60507 Fresh Air Energy XXXV, LLC	IPP	•	NC	60000	TRKCK	13.5 Solar Photovoltaic	SUN	PV
2017 2	60888 GCL New Energy, Inc.	IPP		NC	61275	WILS2	3.8 Solar Photovoltaic	SUN	PV
017 2	61077 IGS ORIX Solar I, LLC	IPP		MD	61465	BWI2	1.4 Solar Photovoltaic	SUN	PV
017 2	4361 Ingredion Inc - Stockton	Industrial		CA	52115	GEN2	6.5 Natural Gas Fired Combustion Turbine	NG	GT
017 2	60618 Lindberg Field Solar 2, LLC	IPP		CA	60984	PV1	1.9 Solar Photovoltaic	SUN	PV
017 2	58887 Michelangelo Wind 3 LLC	IPP	Michelangelo Wind 3 LLC	IA	59053	WT1	3.0 Onshore Wind Turbine	WND	W
017 2	12667 Minnesota Municipal Power Agny	Electric Utility		MN	60647	SQA01	9.3 Natural Gas Internal Combustion Engine	NG	IC
017 2	12667 Minnesota Municipal Power Agny	Electric Utility	1 03	MN	60647	SQA02	9.3 Natural Gas Internal Combustion Engine	NG	
017 2	12667 Minnesota Municipal Power Agny 12667 Minnesota Municipal Power Agny	Electric Utility Electric Utility	1 07	MN MN	60647 60647	SQA03 SQA04	9.3 Natural Gas Internal Combustion Engine 9.3 Natural Gas Internal Combustion Engine	NG NG	IC.
017 2	12667 Minnesota Municipal Power Agny	Electric Utility	. 57	MN	60647	SQA04 SQA05	9.3 Natural Gas Internal Combustion Engine	NG	10
017 2	58159 Penn State University	Commercial	1 07	PA	58194	WC 4	0.6 Natural Gas Steam Turbine	NG	97
017 2	58159 Penn State University	Commercial	•	PA	58194	WC 5	0.6 Natural Gas Steam Turbine	NG	- 0
017 2	60490 Pine Island Holdco, LLC	IPP	<u>'</u>	MN	60835	PINEI	3.9 Solar Photovoltaic	SUN	P
017 2	60412 Portal Ridge Solar, LLC	IPP		CA	60310	GEN01	20.0 Solar Photovoltaic	SUN	- P.
)17 2	60412 Portal Ridge Solar, LLC	IPP	j ,	CA	60311	GEN01	11.4 Solar Photovoltaic	SUN	
)17 2	60336 SDGE Batteries	Electric Utility		CA	60569	SES	7.5 Batteries	MWH	В
17 2	58544 Sierra Nevada Brewing Co	Industrial		CA	58585	BESS	0.5 Batteries	MWH	E
)17 2	60520 SoCore Energy LLC	IPP	Bandera Electric Coop PV	TX	61205	PV1	1.5 Solar Photovoltaic	SUN	Р
)17 2	60520 SoCore Energy LLC	IPP	Downsville DPC Solar	WI	60892	PV1	1.0 Solar Photovoltaic	SUN	P'
)17 2	60520 SoCore Energy LLC	IPP	Medford DPC Solar	WI	60894	PV1	2.0 Solar Photovoltaic	SUN	P۱
017 2	18454 Tampa Electric Co	Electric Utility	Big Bend	FL	645	1	19.0 Solar Photovoltaic	SUN	P۱
017 2	60947 Tesla Inc.	IPP	CMEEC - Rogers Rd Solar	СТ	60605	PV1	1.5 Solar Photovoltaic	SUN	P۱
017 2	57081 WGL Energy Systems, Inc	IPP	Lind Solar CSG	MN	60966	S0222	4.9 Solar Photovoltaic	SUN	P۱
017 3	60571 AEP Onsite Partners	IPP	Canandaigua Westbrook Solar Array	NY	61042	PV1	2.0 Solar Photovoltaic	SUN	P'
017 3	60281 Altus Power America Manageme	it, LLC IPP	Aloha Solar Energy Fund 1 PK1	HI	58659	PK-1	5.0 Solar Photovoltaic	SUN	Р
017 3	60281 Altus Power America Manageme		'	NJ	60755	PV1	8.3 Solar Photovoltaic	SUN	Р
017 3	59758 American Falls Solar II, LLC	IPP	American Falls Solar II	ID	60012	IPAF2	20.0 Solar Photovoltaic	SUN	Р
)17 3	59757 American Falls Solar LLC	IPP	American Falls Solar	ID	60011	IPAF	20.0 Solar Photovoltaic	SUN	Р
017 3	59308 Bearford Farm, LLC	IPP	Bearford Farm Solar Project	NC	59567	PV1	5.0 Solar Photovoltaic	SUN	P
017 3	59861 Benson Creek	IPP	Benson Creek Windfarm	OR	59491	BCW	10.0 Onshore Wind Turbine	WND	W
017 3	60429 Chicago Bridge & Iron Company	IPP	9 97	FL	60701	00603	1.4 Landfill Gas	LFG	IC
017 3	60429 Chicago Bridge & Iron Company	IPP	2 2 2 3 3 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3	FL	60701	00696	1.4 Landfill Gas	LFG	10
017 3	60429 Chicago Bridge & Iron Company	IPP	JED Solid Waste Mgmt Renewable LFG Energy	FL -	60701	00697	1.4 Landfill Gas	LFG	IC
017 3	60429 Chicago Bridge & Iron Company	IPP IPP	JED Solid Waste Mgmt Renewable LFG Energy	FL	60701	00698	1.4 Landfill Gas	LFG	10
017 3	60429 Chicago Bridge & Iron Company	IPP	JED Solid Waste Mgmt Renewable LFG Energy	FL	60701	00699	1.4 Landfill Gas	LFG	10
017 3 017 3	60429 Chicago Bridge & Iron Company		g,	FL KS	60701 60688	00700	1.4 Landfill Gas 200.0 Onshore Wind Turbine	LFG WND	10
017 3	60407 Cimarron Bend Wind Project II, L 14203 City of Osawatomie - (KS)	Electric Utility	, ,	KS	60750	CAT4	2.0 Petroleum Liquids	DFO	- V\
)17 3	14203 City of Osawatomie - (KS)	Electric Utility		KS	60750	CAT4 CAT5	2.0 Petroleum Liquids 2.0 Petroleum Liquids	DFO	10
017 3	14203 City of Osawatomie - (KS)	Electric Utility		KS	60750	CATS CAT6	2.0 Petroleum Liquids 2.0 Petroleum Liquids	DFO	1
017 3	59979 Cotton Plains Wind I, LLC	IPP	Cotton Plains Wind Farm	TY	60210	CPWF	50.4 Onshore Wind Turbine	WND	V
)17 3	61060 Cypress Creek Renewables	IPP		NC	59708	5MWPV	5.0 Solar Photovoltaic	SUN	╁
17 3	60814 Drop 5 Hydro LLC	IPP		CO	61191	GEN1	2.4 Conventional Hydroelectric	WAT	i.
17 3	5416 Duke Energy Carolinas, LLC	Electric Utility	•	NC	60383	MONPV	27.6 Solar Photovoltaic	SUN	#
17 3	59862 Durbin Creek	IPP	Durbin Creek Windfarm	OR	59492	DCW	10.0 Onshore Wind Turbine	WND	V
17 3	59380 Enel Green Power NA, Inc.	IPP		ND	59684	LWP01	150.0 Onshore Wind Turbine	WND	۷
17 3	60888 GCL New Energy, Inc.	IPP	•	NC	61292	JAKSN	8.6 Solar Photovoltaic	SUN	T _F
17 3	55932 Georgia-Pacific Brewton LLC	Industrial	0 1 5 10 5 1 100	AL	54789	4TG		BLQ	5
17 3	60343 Hector Farm, LLC	IPP		NC	60577	1	5.0 Solar Photovoltaic	SUN	F
17 3	59977 Hemlock Solar LLC	IPP		NC	60207	HEMLK	5.0 Solar Photovoltaic	SUN	F
17 3	59860 Jett Creek	IPP	Jett Creek Windfarm	OR	59490	JCW	10.0 Onshore Wind Turbine	WND	٧
17 3	11208 Los Angeles Department of Water	* & Power Electric Utility		CA	61249	W5531	2.9 Solar Photovoltaic	SUN	F
17 3	58822 MC Power Companies Inc	IPP		МО	61092	IPL1	3.0 Solar Photovoltaic	SUN	F
17 3	59026 Michelangelo Wind 1 LLC	IPP	Michelangelo Wind 1 LLC	IA	59231	WT1	3.0 Onshore Wind Turbine	WND	٧
17 3	58689 Milan Energy LLC	IPP	Milan	PA	58818		6.8 Natural Gas Internal Combustion Engine	NG	10

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

	New Utility Scale Generating Units by Operating Company, Plant, and Mon	,						Energy	y Prime
Vaar Mara	the Facility ID Facility Name	Plant Producer	Digut Nama	Plant	Diam's ID	O a manustan ID	Net Summer	Source	e Move
	hth Entity ID Entity Name	Type	Plant Name	State	Plant ID	Generator ID	Capacity (MW) Technology	Code	Code
2017 2017	3 58689 Milan Energy LLC 3 58689 Milan Energy LLC	IPP	Milan Milan	PA PA	58818 58818		6.8 Natural Gas Internal Combustion Engine 6.8 Natural Gas Internal Combustion Engine	NG 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		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 Di	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 Western Plains Wind Farm	MN	60838 60689	WABAS	3.0 Solar Photovoltaic 280.0 Onshore Wind Turbine	SUN WND	PV WT
2017 2017	3 22500 Westar Energy Inc 3 60614 Westside Solar, LLC	Electric Utility	NextEra Westside PV	KS CA	60981	WS526	20.0 Solar Photovoltaic		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	ВА
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	СТ
2017	4 58848 Green Energy Partners LLC	IPP	Stonewall	VA	59004	GEN2	230.0 Natural Gas Fired Combined Cycle	NG	СТ
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 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 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 I A -	58236	STG1	230.1 Natural Gas Fired Combined Cycle	NG MANA/LI	CA BA
2017	4 60633 Iron Horse Battery Storage, LLC	IPP	Iron Horse Battery Storage	AZ	60996	BA1	10.0 Batteries	HWM	
2017	4 60633 Iron Horse Battery Storage, LLC	IPP	Iron Horse Battery Storage	AZ	60996	PV1	2.0 Solar Photovoltaic 4.9 Solar Photovoltaic	SUN	PV PV
2017 2017	4 60198 Kennedy Solar, LLC	Electric Utility	Kennedy Solar, LLC	NC CA	60397 57308	FLS1	2.2 Solar Photovoltaic	SUN	PV
2017	 4 11208 Los Angeles Department of Water & Power 4 60592 Morgan Community Solar 	IPP	Maclay Solar Project Morgan Community Solar	CA 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	P\/
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
	4 60584 Onyx Asset Services Group	IPP	Onyx - Allen Harim	DE	61206	10021	1.5 Solar Photovoltaic	SUN	PV
2017	·	IPP	Peterson Road Solar	MA	61307	02076		SUN	PV
2017 2017	4 60920 Peterson Road Solar, LLC			TX	60774	GEN1	15.4 Solar Photovoltaic	SUN	PV
	4 60920 Peterson Road Solar, LLC 4 60400 Phantom Solar, LLC	IPP	Phantom Solar	1173			10.4[Oolal 1 Hotovoltalo		
2017			Ramona Solar Energy	CA	60995	1	3.8 Solar Photovoltaic	SUN	PV
2017 2017	4 60400 Phantom Solar, LLC	IPP				1 PV1			PV PV
2017 2017 2017	4 60400 Phantom Solar, LLC 4 16609 San Diego Gas & Electric Co	IPP Electric Utility	Ramona Solar Energy	CA	60995	1	3.8 Solar Photovoltaic	SUN	
2017 2017 2017 2017	4 60400 Phantom Solar, LLC 4 16609 San Diego Gas & Electric Co 4 60636 SolaireHolman 1, LLC	IPP Electric Utility IPP	Ramona Solar Energy SolaireHolman Solar Project	CA TX	60995 60989	1	3.8 Solar Photovoltaic 50.0 Solar Photovoltaic	SUN SUN	PV
2017 2017 2017 2017 2017	4 60400 Phantom Solar, LLC 4 16609 San Diego Gas & Electric Co 4 60636 SolaireHolman 1, LLC 4 17650 Southern Power Co	IPP Electric Utility IPP IPP	Ramona Solar Energy SolaireHolman Solar Project East Pecos Solar	CA TX TX	60995 60989 60436	1 PV1 1	3.8 Solar Photovoltaic 50.0 Solar Photovoltaic 118.5 Solar Photovoltaic	SUN SUN SUN	PV PV

ear Month	Entity ID Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW) Technology	Energy Source Code	
017 4	60197 St. Pauls Solar 1, LLC	IPP	St. Pauls Solar 1, LLC	NC	60396	FLS1	4.9 Solar Photovoltaic	SUN	PV
017 4	58375 Sterling Municipal Light Department	Electric Utility	Chocksett Rd Energy Storage Project	MA	60959	BA1	2.0 Batteries	MWH	BA
017 4	58661 Sustainable Power Group, LLC	IPP	Hecate Energy Beacon Solar 1	CA	59315	BEAC1	56.0 Solar Photovoltaic	SUN	PV
017 4	58661 Sustainable Power Group, LLC	IPP	Lancaster WAD B	CA	59739	LWADB	5.0 Solar Photovoltaic	SUN	PV
017 4	18642 Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	CTG1	211.0 Natural Gas Fired Combined Cycle	NG	СТ
017 4	18642 Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	CTG2	211.0 Natural Gas Fired Combined Cycle	NG	СТ
017 4	18642 Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	CTG3	211.0 Natural Gas Fired Combined Cycle	NG	СТ
017 4	18642 Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	STG1	467.0 Natural Gas Fired Combined Cycle	NG	CA
017 4	24211 Tucson Electric Power Co	Electric Utility	UASTP II	AZ	57717	UABA	10.0 Batteries	MWH	BA
017 5	60019 96WI 8ME, LLC	IPP	Midway Solar Farm II	CA	60237	MSF2	30.0 Solar Photovoltaic	SUN	PV
017 5	60571 AEP Onsite Partners	IPP	AEP Jacksonville Solar Project	FL	61388	PV1	7.1 Solar Photovoltaic	SUN	PV
017 5	61012 AES Distributed Energy	IPP	Amazon - Patterson PV	CA	61377	PATT1	2.5 Solar Photovoltaic	SUN	PV
017 5	60281 Altus Power America Management, LLC	IPP	Shirley Landfill	MA	60753	PV1	1.0 Solar Photovoltaic	SUN	PV
017 5	60515 Astra Wind LLC	IPP	Astra Wind Farm	TX	60856	ASTRA	163.0 Onshore Wind Turbine	WND	WT
017 5	1307 Basin Electric Power Coop	Electric Utility	Lonesome Creek Station	ND	57943	04	40.0 Natural Gas Fired Combustion Turbine	NG	GT
017 5	1307 Basin Electric Power Coop	Electric Utility	Lonesome Creek Station	ND	57943	05	40.0 Natural Gas Fired Combustion Turbine	NG	GT
017 5	60369 City of Worcester DPW	IPP	Worcester Landfill	MA	60621	WL	6.5 Solar Photovoltaic	SUN	PV
017 5	58519 Clean Energy Collective LLC	IPP	Fairhaven C	MA	60423	FCPV	1.6 Solar Photovoltaic	SUN	PV
017 5	60370 DG AMP Solar, LLC	IPP	DG AMP Solar Front Royal	VA	61055	AMPFR	2.5 Solar Photovoltaic	SUN	PV
017 5	5109 DTE Electric Company 5109 DTE Electric Company	Electric Utility	Demille Solar Farm Turrill Solar Farm	MI	60346 60347	1	28.4 Solar Photovoltaic 19.6 Solar Photovoltaic	SUN	PV PV
017 5	1 2	Electric Utility		IVII		IMD\/4		SUN	PV
017 5 017 5	5701 El Paso Electric Co 60888 GCL New Energy, Inc.	Electric Utility	Montana Solar Facility Wilson Solar Farm 5	TX NC	60300 61278	IMPV1 WILS5	3.0 Solar Photovoltaic 9.5 Solar Photovoltaic	SUN SUN	PV
017 5	60888 GCL New Energy, Inc.	IPP	Wilson Solar Farm 6	NC NC	61279	WILSS	9.7 Solar Photovoltaic	SUN	PV
017 5	7049 General Electric Aircraft Engines	Industrial	General Electric Aircraft Engines	MA	10029	PV	2.1 Solar Photovoltaic	SUN	PV
017 5	61077 IGS ORIX Solar I, LLC	IPP	City of Lexington	NE	61467	LXNE1	3.5 Solar Photovoltaic	SUN	PV
017 5	59435 Innovative Solar 37, LLC	IPP	Innovative Solar 37	NC	59665	IS037	100.0 Solar Photovoltaic	SUN	PV
017 5	60879 NGI-Kayenta Solar Lessor I, LLC	IPP	Kayenta Solar Project	AZ	61268	PV1	27.3 Solar Photovoltaic	SUN	PV
017 5	61061 Panasonic Battery Project	Electric Utility	Panasonic Carport Solar	CO	61439	PANPV	1.3 Solar Photovoltaic	SUN	PV
017 5	60962 Saluda Solar II, LLC	IPP	Saluda Solar II	SC	61323	PGRB5	3.4 Solar Photovoltaic	SUN	PV
017 5	60520 SoCore Energy LLC	IPP	Liberty Pole DPC Solar	WI	60891	PV1	1.1 Solar Photovoltaic	SUN	PV
017 5	60520 SoCore Energy LLC	IPP	T0588 Phoenix - AZ	AZ	61199	PV1	1.2 Solar Photovoltaic	SUN	PV
017 5	60520 SoCore Energy LLC	IPP	Warren DPC Solar	WI	60890	PV1	2.2 Solar Photovoltaic	SUN	PV
017 5	60947 Tesla Inc.	IPP	Garrett County - DPU Treatment Plant	MD	60847	PV1	1.2 Solar Photovoltaic	SUN	PV
017 5	60947 Tesla Inc.	IPP	Genentech Vacaville Meter #1	CA	60844	PV1	3.8 Solar Photovoltaic	SUN	PV
017 5	60947 Tesla Inc.	IPP	Genentech Vacaville Meter #1	CA	60844	PV2	2.3 Solar Photovoltaic	SUN	PV
017 5	60947 Tesla Inc.	IPP	Hampshire College	MA	60815	BA1	0.5 Batteries	MWH	BA
017 5	60947 Tesla Inc.	IPP	Hampshire College	MA	60815	PV1	1.7 Solar Photovoltaic	SUN	PV
017 5	60947 Tesla Inc.	IPP	KIUC Kapaia PV and BA Storage Project	HI	60546	BA1	11.0 Batteries	MWH	BA
017 5	60947 Tesla Inc.	IPP	KIUC Kapaia PV and BA Storage Project	HI	60546	PV1	15.0 Solar Photovoltaic	SUN	PV
017 5	60947 Tesla Inc.	IPP	Orange County Solar Farm (NY)	NY	60229	PV1	1.5 Solar Photovoltaic	SUN	PV
017 5	60947 Tesla Inc.	IPP	Sullivan County - Adult Care Solar	NY	60817	PV1	2.0 Solar Photovoltaic	SUN	PV
017 5	60947 Tesla Inc.	IPP	Town of Lexington Solar	MA	60816	PV1	1.6 Solar Photovoltaic	SUN	PV
)17 5	57081 WGL Energy Systems, Inc	IPP	Gulfport Naval Base CSG PV System	MS	61208	PV1	3.5 Solar Photovoltaic	SUN	P۷
017 5	54842 WM Renewable Energy LLC	IPP	Waste Mangement Redwood LFGTE	CA	59299	RED1	2.0 Landfill Gas	LFG	IC
017 5	54842 WM Renewable Energy LLC	IPP	Waste Mangement Redwood LFGTE	CA	59299	RED2	2.0 Landfill Gas	LFG	IC
017 6	60571 AEP Onsite Partners	IPP	Letchworth Solar Project	NY	61389	PV1	1.2 Solar Photovoltaic	SUN	PV
17 6	61012 AES Distributed Energy	IPP	Cedar Creek PV	NY	61376	CEDR1	1.8 Solar Photovoltaic	SUN	P۱
017 6	57369 Apple, Inc	Industrial	Apple Campus 2 Fuel Cell	CA	59557	AC2FC	4.0 Other Waste Biomass	OBG	FC
)17 6	57369 Apple, Inc	Industrial	Apple Campus 2 PV	CA	59473	AC2PV	14.4 Solar Photovoltaic	SUN	PV
017 6	60966 Barnwell Solar, LLC	IPP	Barnwell Solar	SC	61327	PGRB1	5.4 Solar Photovoltaic	SUN	PV
017 6	59365 Capital Power Corporation	IPP	CP Bloom Wind LLC	KS	59888	GEN	178.2 Onshore Wind Turbine	WND	W
017 6	8723 City of Holland	Electric Utility	Holland Energy Park	MI	59093	10	43.1 Natural Gas Fired Combined Cycle	NG	СТ
)17 6	8723 City of Holland	Electric Utility	Holland Energy Park	MI	59093	11	43.1 Natural Gas Fired Combined Cycle	NG	C7
)17 6	8723 City of Holland	Electric Utility	Holland Energy Park	MI	59093	12	40.9 Natural Gas Fired Combined Cycle	NG	C/
17 6	58519 Clean Energy Collective LLC	IPP	West Bridgewater AB	MA	60424	WBAB	1.7 Solar Photovoltaic	SUN	P۱
17 6	55858 Energy Developments Inc	IPP	Brown County LFGTE Power Station	ОН	61145	GM01	1.5 Landfill Gas	LFG	IC
17 6	55858 Energy Developments Inc	IPP	Brown County LFGTE Power Station	ОН	61145	GM02	1.5 Landfill Gas	LFG	IC
17 6	55858 Energy Developments Inc	IPP	Brown County LFGTE Power Station	ОН	61145	GM03	1.5 Landfill Gas	LFG	IC
17 6	6035 Exelon Power	IPP	Colorado Bend II	TX	60122	CT7	-	NG	C.
)17 6	6035 Exelon Power	IPP	Colorado Bend II	TX	60122	CT8	·	NG	C-
017 6	6035 Exelon Power	IPP	Colorado Bend II	TX	60122	STG9	461.4 Natural Gas Fired Combined Cycle	NG	C/
017 6	6035 Exelon Power	IPP	Wolf Hollow II	TX	59812	CGT4	307.2 Natural Gas Fired Combined Cycle	NG	C
017 6	6035 Exelon Power	IPP	Wolf Hollow II	TX	59812	CGT5	307.2 Natural Gas Fired Combined Cycle	NG	C
017 6	6035 Exelon Power	IPP	Wolf Hollow II	TX	59812	STG6	·	NG	C
017 6	60670 Floyd Road Solar Farm, LLC	IPP	Floyd Road Solar Farm	NC	61031	PV1	5.0 Solar Photovoltaic	SUN	P۱
17 6	25438 Friant Power Authority	IPP	Friant Hydro Facility	CA	50393	RO2	7.3 Conventional Hydroelectric	WAT	

		Plant Producer	Diagram Name	Plant	Diam's ID	0	Net Summer	Energy Source	e M
	h Entity ID Entity Name	Туре	Plant Name	State	Plant ID		Capacity (MW) Technology	Code	
7	6 59257 Giffen Solar Park, LLC	IPP	Giffen Solar Park	CA	59522	FRGSP	20.0 Solar Photovoltaic	SUN	P'
7	6 60738 Gulf Coast Solar Center I (CA)	IPP	Gulf Coast Solar Center I	FL	59689	GCSC1	30.0 Solar Photovoltaic	SUN	P'
7	6 19547 Hawaiian Electric Co Inc 6 19547 Hawaiian Electric Co Inc	Electric Utility Electric Utility	HNL Emergency Power Facility	HI	58469	AP1 AP2	2.5 Other Waste Biomass 2.5 Other Waste Biomass	OBL	IC IC
7 7	6 19547 Hawaiian Electric Co Inc	Electric Utility	HNL Emergency Power Facility HNL Emergency Power Facility		58469 58469	AP2 AP3	2.5 Other Waste Biomass 2.5 Other Waste Biomass	OBL OBL	IC
7	6 19547 Hawaiian Electric Co Inc	Electric Utility	HNL Emergency Power Facility	HI	58469	AP4	2.5 Other Waste Biomass	OBL	IC
7	6 60479 Iron Horse Solar 4, LLC	IPP	Iron Horse Solar 4, LLC	MA	60799	PV1	4.5 Solar Photovoltaic	SUN	P'
7	6 60695 Lemond Solar Center LLC	IPP	Lemond Solar	MN	61072	LEMND	5.0 Solar Photovoltaic	SUN	P'
7	6 60098 MS Solar 2, LLC	IPP	Sumrall I Solar Farm	MS	60306	SUM1	52.0 Solar Photovoltaic	SUN	P'
7	6 60591 Mapleton Community Solar	IPP	Mapleton Community Solar	MN	60941	DMCS1	0.9 Solar Photovoltaic	SUN	P'
7	6 60591 Mapleton Community Solar	IPP	Mapleton Community Solar	MN	60941	DMCS2	0.9 Solar Photovoltaic	SUN	P'
7	6 60591 Mapleton Community Solar	IPP	Mapleton Community Solar	MN	60941	DMCS3	0.9 Solar Photovoltaic	SUN	P'
7	6 56990 NJR Clean Energy Ventures Corporation	IPP	Pemberton Road I	NJ	61073	PEMB1	9.9 Solar Photovoltaic	SUN	Р
7	6 56990 NJR Clean Energy Ventures Corporation	IPP	Pemberton Road II	NJ	61074	PEMB2	9.9 Solar Photovoltaic	SUN	P
7	6 60365 NRG Renew Canal 1 LLC	IPP	NRG Renew Canal 1 CSG LLC	MA	60625	CANAL	1.2 Solar Photovoltaic	SUN	P'
7	6 60455 PVN Milliken, LLC	IPP	PVN Milliken, LLC	CA	60790	PV	3.0 Solar Photovoltaic	SUN	Р
7	6 60393 Ridgeland Solar Farm I, LLC	IPP	Ridgeland Solar Project	SC	60659	PV1	10.0 Solar Photovoltaic	SUN	Р
7	6 60520 SoCore Energy LLC	IPP	Conrath DPC Solar	WI	60889	PV1	1.0 Solar Photovoltaic	SUN	F
7	6 60520 SoCore Energy LLC	IPP	Lafayette DPC Solar	WI	60888	PV1	1.0 Solar Photovoltaic	SUN	F
7	6 60520 SoCore Energy LLC	IPP	Whistling Winds DPC Solar	WI	60895	PV1	1.5 Solar Photovoltaic	SUN	F
7	6 60246 Sunray Energy 2, LLC	IPP	Sunray 2	CA	10437	SUN2	20.0 Solar Photovoltaic	SUN	F
7	6 60247 Sunray Energy 3 LLC	IPP	Sunray 3	CA	10438	SUN3	13.8 Solar Photovoltaic	SUN	F
7	6 60947 Tesla Inc.	IPP	CMEEC - Navy NE Trident	СТ	60608	PV1	1.0 Solar Photovoltaic	SUN	F
7	6 60947 Tesla Inc.	IPP	Hewlett-Packard (HP) - Andover, MA	MA	60099	PV1	1.7 Solar Photovoltaic	SUN	l
7	6 60947 Tesla Inc.	IPP	Town of Halfmoon	NY	60115	PV1	1.0 Solar Photovoltaic	SUN	I
7	6 60723 VRF Battery Plant	Electric Utility	Vanadium Redox Flow Battery Plant	CA	61107	VRF	2.0 Batteries	MWH	
7	6 19876 Virginia Electric & Power Co	Electric Utility	Merck	VA	59905	1	0.8 Solar Photovoltaic	SUN	
7	7 60634 AEM Wind LLC	IPP	Sterling I Wind Farm	NM	60991	STER1	29.9 Onshore Wind Turbine	WND	
7	7 195 Alabama Power Co	Electric Utility	ANAD Solar Array	AL	60680	1	7.4 Solar Photovoltaic	SUN	
7	7 221 Alaska Village Elec Coop, Inc	Electric Utility	Noorvik	AK	6330	2B	0.5 Petroleum Liquids	DFO	
7	7 60130 Albany Green Energy, LLC	Electric CHP	Albany Green Energy	GA	60340	1	50.0 Wood/Wood Waste Biomass	WDS	
7	7 60281 Altus Power America Management, LLC	IPP	Cedarville	MA	60757	PV1	0.5 Solar Photovoltaic	SUN	
7	7 60281 Altus Power America Management, LLC	IPP	Cedarville	MA	60757	PV2	1.0 Solar Photovoltaic	SUN	
7	7 60281 Altus Power America Management, LLC	IPP	Cedarville	MA	60757	PV3	1.0 Solar Photovoltaic	SUN	
7	7 40577 American Mun Power-Ohio, Inc	Electric Utility	Smithland Hydroelectric Plant	KY	57400	SG1	25.3 Conventional Hydroelectric	WAT	
7	7 40577 American Mun Power-Ohio, Inc	Electric Utility	Smithland Hydroelectric Plant	KY	57400	SG2	25.3 Conventional Hydroelectric	WAT	
7	7 60500 Bluesphere Corporate	IPP	Orbit Energy RI	RI	60831	1	3.2 Other Waste Biomass	OBG	
7	7 60518 California PV Energy 2, LLC	IPP	Dept of General Services -FTB	CA	60861	PV1	2.7 Solar Photovoltaic	SUN	
1	7 60965 Cameron Solar II, LLC	IPP	Cameron Solar II	SC	61326	PGRB2	4.1 Solar Photovoltaic	SUN	
	7 57319 Constellation Solar Massachusetts LLC	IPP	Smith & Wesson at Springfield MA PV	MA	61367	PV1	1.9 Solar Photovoltaic	SUN	
<u> </u>	7 5109 DTE Electric Company	Electric Utility	O'Shea Solar Farm	MI	60348	1	2.0 Solar Photovoltaic	SUN	
<u> </u>	7 60543 Dermott Wind, LLC	IPP	Dermott Wind	TX	60902	DERM	253.0 Onshore Wind Turbine	WND	
7	7 60485 Dodge Holdco LLC	IPP	Dodge Holdco Solar	MN	60833	DODGE	5.0 Solar Photovoltaic	SUN	
1	7 3046 Duke Energy Progress - (NC)	Electric Utility	L V Sutton Combined Cycle	NC	58697	CT004	45.0 Natural Gas Fired Combustion Turbine	NG	
7	7 3046 Duke Energy Progress - (NC)	Electric Utility	L V Sutton Combined Cycle	NC	58697	CT005	45.0 Natural Gas Fired Combustion Turbine	NG	
7	7 60491 Forest Lake Holdco LLC	IPP	Forest Lake Solar	MN	60837	FORES	5.0 Solar Photovoltaic	SUN	
7 7	7 6909 Gainesville Regional Utilities	Electric Utility	South Energy Center	FL	56518	REG1	7.4 Natural Gas Internal Combustion Engine	NG	
1	7 61021 Hecate Energy Clarke County, LLC	Electric Utility	Clarke Solar Power Facility	VA	61374	PV1	10.0 Solar Photovoltaic	SUN	
	7 60488 Hwy 14 Holdco, LLC	IPP IPP	Hwy 14 Holdco Solar	MN	60834	HWY14	5.0 Solar Photovoltaic	SUN	
	7 60598 Jacumba Solar, LLC	" '	Jacumba Solar Farm	CA	60947	Q644A	20.0 Solar Photovoltaic	SUN	
	7 11208 Los Angeles Department of Water & Power	Electric Utility	Westmont 400A	LCA LCA	61348	W5691	2.3 Solar Photovoltaic	SUN	
,	7 11208 Los Angeles Department of Water & Power	Electric Utility IPP	Westmont 400B Chillicothe Solar Farm	CA MO	61349 61223	W5694	2.2 Solar Photovoltaic 2.5 Solar Photovoltaic	SUN SUN	
	 58822 MC Power Companies Inc 56941 Meadow Lake Wind Farm V LLC 	IPP	Meadow Lake Wind Farm V LLC	IVIO		CHSF1 GEN1	2.5 Solar Photovoltaic 100.0 Onshore Wind Turbine	WND	
		" '	Medical Area Total Energy Plant	IIN NAA	57628 10883	CT3	12.8 Natural Gas Fired Combustion Turbine	NG	
	 7 12258 Medical Area Total Egy Plt Inc 7 59534 Oregon Clean Energy Center 	Commercial IPP	Oregon Clean Energy Center	MA OH	59764	CTG11	256.5 Natural Gas Fired Combustion Turbine 256.5 Natural Gas Fired Combined Cycle	NG	
	7 59534 Oregon Clean Energy Center 7 59534 Oregon Clean Energy Center	IPP	Oregon Clean Energy Center Oregon Clean Energy Center	OH	59764	CTG11	256.5 Natural Gas Fired Combined Cycle 256.5 Natural Gas Fired Combined Cycle	NG	
	7 59534 Oregon Clean Energy Center 7 59534 Oregon Clean Energy Center	IPP	Oregon Clean Energy Center Oregon Clean Energy Center	OH	59764	EDG13	1.5 Natural Gas Fired Combined Cycle 1.5 Natural Gas Internal Combustion Engine	NG	
	7 59534 Oregon Clean Energy Center 7 59534 Oregon Clean Energy Center	IPP	Oregon Clean Energy Center Oregon Clean Energy Center	OH	59764	STG10	334.6 Natural Gas Fired Combined Cycle	NG	
	7 17470 PUD 1 of Snohomish County		MESA 2	WA	60021	MESA2		MWH	
	7 17470 POD 1 of Shonomish County 7 58245 Patua Acquisition Company, LLC	Electric Utility IPP	Patua Geothermal Project Phase 1A	NV	58319	PV-01	2.4 Batteries 10.6 Solar Photovoltaic	SUN	
	7 58245 Patua Acquisition Company, LLC 7 60859 Redbed Plains Wind Farm LLC	IPP	Redbed Plains Wind Farm	OK	61221	WT1	99.1 Onshore Wind Turbine	WND	
	7 00009 Treubeu Fiallis Willu Fallii LLC								
,	7 60520 SoCoro Enorgy I I C	linn	IMactor Citios Solar	LIZE.					
•	7 60520 SoCore Energy LLC	IPP	Westar Cities Solar	KS MA	60956	PV1	1.0 Solar Photovoltaic	SUN	
	7 60947 Tesla Inc.	IPP	BJ's Wholesale Club, Inc- Uxbridge	MA	60116	PV1	1.0 Solar Photovoltaic	SUN	
	<u>.</u>								

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

117 7 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8	60486 60248 60248 40577 60513	Entity Name Webster Holdco LLC Agilon Energy LLC	Туре	Plant Name	State	Plant ID	Generator ID	Capacity (MW)	Technology	Source Code	Mo
8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8	60248 60248 40577 60513		IPP	Webster Holdco Solar	MN	60830	WEBST	. , ,	Solar Photovoltaic	SUN	PV
8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8	60248 40577 60513		IPP	Port Comfort Power LLC	TX	60459	PC1		Natural Gas Fired Combustion Turbine	NG	GT
8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8 117 8	60513	Agilon Energy LLC	IPP	Port Comfort Power LLC	TX	60459	PC2		Natural Gas Fired Combustion Turbine	NG	GT
8 117 8 117		American Mun Power-Ohio, Inc	Electric Utility	Smithland Hydroelectric Plant	KY	57400	SG3	25.3	Conventional Hydroelectric	WAT	HY
8 117 8 117 8 117 8 117 8 117 8	60409	Bird Machine Solar Farm, LLC	IPP	Bird Machine Solar Farm	MA	60854	BRDMA	4.6	Solar Photovoltaic	SUN	PV
8 117 8 117 8 117 8	00.00	Blue Summit Storage, LLC	IPP	Blue Summit Storage, LLC	TX	60690	WBSS	30.0	Batteries	MWH	BA
917 8 917 8 917 8 917 8		Brook Street Solar 1, LLC	IPP	Brook Street Solar 1	MA	61008	BROOK		Solar Photovoltaic	SUN	PV
)17 8)17 8		CD Global Solar Holdings, LLC	IPP	Bizzell Church Solar 2	NC	61158	BIZZE		Solar Photovoltaic	SUN	PV
17 8		CD Global Solar Holdings, LLC	IPP	St. Pauls Solar 2	NC	61156	STPAU		Solar Photovoltaic	SUN	PV
		CD Global Solar Holdings, LLC	IPP	ZV Solar 2, LLC	NC	61257	ZV204		Solar Photovoltaic	SUN	PV
		City of Marquette - (MI)	Electric Utility	Marquette Energy Center	MI	60559	MEC1		Natural Gas Internal Combustion Engine	NG	IC
17 8		City of Marquette - (MI)	Electric Utility	Marquette Energy Center	MI	60559	MEC2		Natural Gas Internal Combustion Engine	NG	IC
17 8 17 8		City of Marquette - (MI) Denver Braswell	Electric Utility IPP	Marquette Energy Center Denver Braswell PV	MI GA	60559 61441	MEC3 GPDB1		Natural Gas Internal Combustion Engine Solar Photovoltaic	NG SUN	PV
17 8		Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens	MN	61363	CSG1		Solar Photovoltaic	SUN	PV
17 8		Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens Equuleus Community Solar Gardens	MN	61363	CSG2		Solar Photovoltaic	SUN	PV
17 8		Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens	MN	61363	CSG3		Solar Photovoltaic	SUN	PV
17 8		Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens	MN	61363	CSG4		Solar Photovoltaic	SUN	PV
17 8		Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens	MN	61363	CSG5		Solar Photovoltaic	SUN	P∖
17 8		Farley Road Solar, LLC	IPP	Farley Road Solar	MA	61294	02419		Solar Photovoltaic	SUN	PV
17 8		First Solar Asset Management	IPP	Playa Solar 2	NV	60261	GEN1		Solar Photovoltaic	SUN	P∖
17 8	60964	Hampton Solar I, LLC	IPP	Hampton Solar I	SC	61325	PGRB3	6.8	Solar Photovoltaic	SUN	P∖
17 8	61077	IGS ORIX Solar I, LLC	IPP	IOS - ERW9	NJ	61466	EWR9	5.3	Solar Photovoltaic	SUN	P۱
17 8	61077	IGS ORIX Solar I, LLC	IPP	Valdosta Prison	GA	61468	GPVP1	1.0	Solar Photovoltaic	SUN	P۱
17 8	12869	Monterey Regional Waste Mgmt	Commercial	Marina Landfill Gas	CA	10748	U3J16	0.9	Landfill Gas	LFG	IC
17 8	13511	New York State Elec & Gas Corp	Electric Utility	Harris Lake	NY	2528	2	2.3	Petroleum Liquids	DFO	IC
17 8	60963	Odyssey Solar, LLC	IPP	Odyssey Solar	SC	61324	PGRB4	8.2	Solar Photovoltaic	SUN	P'
117 8	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	3A	122.0	Conventional Hydroelectric	WAT	Н
17 8		Panasonic Battery Project	Electric Utility	Panasonic Carport Solar	CO	61439	PANBS	1.0	Batteries	MWH	В
17 8		Pegasus Community Solar	IPP	Pegasus Community Solar	MN	61175	CPCS1		Solar Photovoltaic	SUN	P
17 8		Pegasus Community Solar	IPP	Pegasus Community Solar	MN	61175	CPCS2		Solar Photovoltaic	SUN	Р
17 8		SR Kersey, LLC	IPP	SR Kersey	CO	61314	KERS		Solar Photovoltaic	SUN	P
17 8		San Luis Solar Garden LLC	IPP	San Luis Solar Garden	CO	61472	ANTO2		Solar Photovoltaic	SUN	P\
17 8		Soltage LLC	IPP	231 Dixon 74 Solar I, LLC	NC	61195	DIXON		Solar Photovoltaic	SUN	P
17 8		Spica Community Solar	IPP	Spica Community Solar	MN	60943	MSCS1		Solar Photovoltaic	SUN	P
17 8		Spica Community Solar	IPP	Spica Community Solar	MN	60943	MSCS2		Solar Photovoltaic	SUN	IP
17 8		St. Matthews Solar, LLC	IPP	St. Matthews Solar	SC	60293	PV1		Solar Photovoltaic	SUN	부
17 8		Tesla Inc.	IPP	CMEEC - Polaris Park Solar	CI	60607	BA1		Batteries	MWH	ᆤ
17 8		Tesla Inc.	IPP	CMEEC - Polaris Park Solar	C1	60607	PV1		Solar Photovoltaic	SUN	井
17 8		Tesla Inc.	IPP IPP	Pima Community College	AZ	61104	PV1		Solar Photovoltaic	SUN	ᆤ
17 9		ACE-Stanton A, LLC ACE-Stanton, LLC	IPP	ACE-Stanton A PV ACE-Stanton PV	FL	61247 61246	ASA1 ASLF1		Solar Photovoltaic Solar Photovoltaic	SUN SUN	ᆤ
9 117 9		ACE-Stanton, LLC Antlia Community Solar	IPP	Antlia Community Solar	MN	60937	IACS1		Solar Photovoltaic	SUN	4
17 9		Antila Community Solar Antlia Community Solar	IPP	Antlia Community Solar Antlia Community Solar	MN	60937	IACS1		Solar Photovoltaic	SUN	-F
17 9		Aritina Community Solai Arizona Electric Pwr Coop Inc	Electric Utility	SunAnza	CA	60791	ANZA1		Solar Photovoltaic	SUN	4
17 9		Big Lake Holdco LLC	IPP	Big Lake Holdco Solar	MN	60836	BLAKE		Solar Photovoltaic	SUN	+
17 9		CD Global Solar Holdings, LLC	IPP	Ayrshire	NC	58792	PV1		Solar Photovoltaic	SUN	4
17 9		CD Global Solar Holdings, LLC	IPP	Boaz Farm Solar	NC	61157	BOAZF		Solar Photovoltaic	SUN	+
17 9		CD Global Solar Holdings, LLC	IPP	Haywood Farm Solar, LLC	NC	61255	HAY02		Solar Photovoltaic	SUN	T _P
17 9		CD Global Solar Holdings, LLC	IPP	Hood Farm Solar, LLC	NC	61256	HOF05		Solar Photovoltaic	SUN	TF
17 9		Centaurus Community Solar	IPP	Centaurus Community Solar	MN	60939	KCCS1		Solar Photovoltaic	SUN	F
17 9		Centaurus Community Solar	IPP	Centaurus Community Solar	MN	60939	KCCS2	0.9	Solar Photovoltaic	SUN	F
17 9		Clean Energy Collective LLC	IPP	Arapahoe 3 Community Solar Array	СО	60724	ARAP3		Solar Photovoltaic	SUN	TF
17 9	58519	Clean Energy Collective LLC	IPP	Xcel Adams 1 Community Solar Array	СО	60726	ADCO1	1.8	Solar Photovoltaic	SUN	F
7 9	60990	Cline Solar, LLC	IPP	Cline Solar Farm, LLC	NC	59929	NB007	4.9	Solar Photovoltaic	SUN	Ī
7 9	61060	Cypress Creek Renewables	IPP	Ajax Solar	NC	60288	PV1	4.9	Solar Photovoltaic	SUN	
7 9		Cypress Creek Renewables	IPP	Daystar Solar	NC	60179	PV1		Solar Photovoltaic	SUN	╝
7 9		Cypress Creek Renewables	IPP	Long Henry Solar	NC	61347	GEN1		Solar Photovoltaic	SUN	
7 9		Cypress Creek Renewables	IPP	Scarlet Solar	NC	60921	PV1		Solar Photovoltaic	SUN	
7 9		Enerparc Inc.	IPP	Black Eagle Solar, LLC	MT	61336	BESMT		Solar Photovoltaic	SUN	
17 9		Enerparc Inc.	IPP	Great Divide Solar, LLC	MT	61335	GDSMT		Solar Photovoltaic	SUN	I
17 9		Enerparc Inc.	IPP	Magpie Solar, LLC	MT	61337	MSMT		Solar Photovoltaic	SUN	l
17 9		Foundation CA Fund VIII Manager, LLC	IPP	Foundation Scheid Vineyards	CA	61067	WTG1		Onshore Wind Turbine	WND	\
17 9		Gemini Community Solar	IPP	Gemini Community Solar	MN	60940	LGCS1		Solar Photovoltaic	SUN	F
17 9		Gemini Community Solar	IPP	Gemini Community Solar	MN	60940	LGCS2		Solar Photovoltaic	SUN	F
17 9 17 9		Gemini Community Solar Golden Hills Solar, LLC	IPP IPP	Gemini Community Solar Golden Hills Solar	MN MA	60940 61315	LGCS3 02196		Solar Photovoltaic Solar Photovoltaic	SUN SUN	F

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

Year Month			Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)		Energy Source Code	Prime Mover Code
2017 9		Hatfield Renewables, LLC	IPP	Hatfield Renewables	MA	61299	02599		Solar Photovoltaic	SUN	PV
2017 9		Hoosier Energy R E C, Inc	Electric Utility	Decatur Co. Solar RES (IN)	IN	59988	PV1		Solar Photovoltaic	SUN	PV
2017 9		Hoosier Energy R E C, Inc	Electric Utility	Jackson Co. Solar RES	IN	59989	PV1		Solar Photovoltaic	SUN	PV
2017 9		Hoosier Energy R E C, Inc	Electric Utility	Spring Mill Solar RES	IN	59987	PV1		Solar Photovoltaic	SUN	PV
2017 9		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		MC Power Companies Inc	IPP	Lebanon Solar Farm (MO)	MO	61135	LSF1		Solar Photovoltaic	SUN	PV
2017 9		Moorings Farm 2, LLC	IPP	Moorings Farm 2	NC	61405	1		Solar Photovoltaic	SUN	PV
2017 9		NJR Clean Energy Ventures Corporation	IPP	Princeton Solar Project	NJ	61354	STONY		Solar Photovoltaic	SUN	PV
2017 9		NRG Solar Mule, LLC	IPP	NRG Solar Mule, LLC	ME	60640	COLBY		Solar Photovoltaic	SUN	PV
2017 9			Electric Utility	Mustang	OK	2953	GT1		Natural Gas Fired Combustion Turbine	NG	GI D)/
2017 9		One Ten Partner, LLC	IPP IPP	One Ten Partners PV Pleasantdale Road Solar	CA	61419	OTP		Solar Photovoltaic Solar Photovoltaic	SUN	PV
2017 9		Pleasantdale Road Solar, LLC Quilt Block Wind Farm LLC	IPP	Quilt Block Wind Farm LLC	MA	61298	02112 GEN 1		Onshore Wind Turbine	SUN WND	PV
2017 9 2017 9		Rocksprings Val Verde Wind, LLC	IPP		WI TX	57116 60217	RKSP		Onshore Wind Turbine Onshore Wind Turbine	WND	WT WT
2017 9		Sustainable Power Group, LLC	IPP	Rocksprings Aspiration G	CA	59737	ASPRG		Solar Photovoltaic	SUN	D\/
2017 9		Upton Solar, LLC	IPP	Upton Solar	MA	61297	02567		Solar Photovoltaic	SUN	D\/
2017 9		Agilon Energy LLC	IPP	Chamon Power LLC	TX	60460	02567 CH1		Natural Gas Fired Combustion Turbine	NG	GT
2017 10		Agilon Energy LLC Agilon Energy LLC	IPP	Chamon Power LLC	TX	60460	CH1		Natural Gas Fired Combustion Turbine Natural Gas Fired Combustion Turbine	NG	GT
2017 10		Agriori Eriergy EEC Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS1		Solar Photovoltaic	SUN	PV
2017 10		Andromeda Community Solar Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS1		Solar Photovoltaic	SUN	PV
2017 10		Andromeda Community Solar Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS2		Solar Photovoltaic	SUN	PV
2017 10		Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS4		Solar Photovoltaic	SUN	PV
2017 10		Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS5		Solar Photovoltaic	SUN	PV
2017 10		Aries Community Solar	IPP	Aries Community Solar	MN	60938	AACS1		Solar Photovoltaic	SUN	PV
2017 10		Aries Community Solar	IPP	Aries Community Solar	MN	60938	AACS2		Solar Photovoltaic	SUN	PV
2017 10		Aries Community Solar	IPP	Aries Community Solar	MN	60938	AACS3		Solar Photovoltaic	SUN	PV
2017 10		Aries Community Solar	IPP	Aries Community Solar	MN	60938	AACS4		Solar Photovoltaic	SUN	PV
2017 10		Arizona Electric Pwr Coop Inc	Electric Utility	Apache Solar 1	AZ	60964	AEPS1		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		Capella Community Solar	IPP	Capella Community Solar	MN	61178	HCCS5		Solar Photovoltaic	SUN	PV
2017 10		Chapman Ranch Wind LLC	IPP	Chapman Ranch Wind I	TX	59193	CHA1		Onshore Wind Turbine	WND	WT
2017 10		City of Glendale - (CA)	Electric Utility	Glendale Battery Energy Storage System	CA	60974	2BESS		Batteries	MWH	BA
2017 10		Clean Energy Collective LLC	IPP	Logan 1 Community Solar Array	CO	60722	LOGA1		Solar Photovoltaic	SUN	PV
2017 10		Clean Energy Collective LLC	IPP	Weld 1 Community Solar Array	CO	60720	WELD1		Solar Photovoltaic	SUN	PV
2017 10		Cypress Creek Renewables	IPP	Bear Creek Solar	NC	61351	GEN1		Solar Photovoltaic	SUN	PV
2017 10		Cypress Creek Renewables	IPP	Lillington Solar	NC	59921	5MWPV		Solar Photovoltaic	SUN	PV
2017 10		Cypress Creek Renewables	IPP	Ruskin Solar	NC	60922	PV1		Solar Photovoltaic	SUN	PV
2017 10		Cypress Creek Renewables	IPP	Viper Solar	NC NC	60920	PV1		Solar Photovoltaic	SUN	IPV
2017 10		Ecoplexus, Inc	IPP IPP	Flat Meeks PV 1	NC NV	59514	FLAT1		Solar Photovoltaic	SUN	LA.
2017 10 2017 10		First Solar Asset Management Hattiesburg Farm, LLC	IPP	Playa Solar Hattiesburg Solar Farm	NV MS	59827 60552	GEN01 HATTI		Solar Photovoltaic Solar Photovoltaic	SUN SUN	LV.
2017 10		Hattlesburg Farm, LLC Homer Electric Assn Inc	Electric Utility	Seldovia	V IV	6283	ΠΑΙΙΙ 7		Petroleum Liquids	DFO	IC IC
2017 10		OCI Solar Power	IPP	Pearl Solar	TX	60682	/ PEARL		Solar Photovoltaic	SUN	D\/
2017 10		OEE XXIII LLC	Industrial	Whirlpool Corporation - Marion Wind Farm	OH	61005	W1		Onshore Wind Turbine	WND	WT
2017 10		OEE XXIII LLC	Industrial	Whirlpool Corporation - Marion Wind Farm Whirlpool Corporation - Marion Wind Farm	ОН	61005	W2		Onshore Wind Turbine Onshore Wind Turbine	WND	\/\/T
2017 10		OEE XXIII LLC	Industrial	Whirlpool Corporation - Marion Wind Farm	ОН	61005	W3		Onshore Wind Turbine	WND	WT
2017 10		OLE AATT LEG Oklahoma Gas & Electric Co	Electric Utility	Mustang	ОК	2953	GT2		Natural Gas Fired Combustion Turbine	NG	GT
2017 10		Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT3		Natural Gas Fired Combustion Turbine	NG	GT
2017 10		Poudre Valley Associated Services, Inc.	Electric Utility	Coyote Ridge Community Solar	CO	61425	COYCS		Solar Photovoltaic	SUN	PV
2017 10		Providence Solar Center, LLC	IPP	Providence Solar	TN	60337	PROV		Solar Photovoltaic	SUN	PV
2017 10		Redbrook Solar 1, LLC	IPP	Redbrook Community Solar 1	MA	61007	REDBR		Solar Photovoltaic	SUN	PV
2017 10		SCDA Solar 1, LLC	IPP	SCDA Solar 1	CA	61006	SCAIR		Solar Photovoltaic	SUN	PV
2017 10		Soltage LLC	IPP	Mill Pond Solar Farm, LLC	NC	61196	MILLL		Solar Photovoltaic	SUN	PV
2017 10		Tesla Inc.	IPP	Oneida County- DPW	NY	60114	PV1		Solar Photovoltaic	SUN	PV
2017 10		Vega Community Solar	IPP	Vega Community Solar	MN	60944	NVCS1		Solar Photovoltaic	SUN	PV
2017 10		Vega Community Solar	IPP	Vega Community Solar	MN	60944	NVCS2		Solar Photovoltaic	SUN	PV
2017 10		Vega Community Solar	IPP	Vega Community Solar	MN	60944	NVCS3		Solar Photovoltaic	SUN	PV
2017 10		Vega Community Solar	IPP	Vega Community Solar	MN	60944	NVCS4		Solar Photovoltaic	SUN	PV
2017 10			IPP	Vega Community Solar	MN	60944	NVCS5		Solar Photovoltaic		PV

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

				Plant Producer		Plant			Net Summer	Energy Source	
Yea	r Moi	nth E	ntity ID Entity Name				Plant ID	Generator ID	Capacity (MW) Technology	Code	Code
2017		10	19876 Virginia Electric & Power Co	Electric Utility	Remington Solar Facility	VA	59685	01	20.0 Solar Photovoltaic	SUN	PV

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		Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)		0,	Prime Move Code
2017 1	,	•	Electric CHP	Bucksport Generation LLC	ME	50243	GEN2		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		··	Electric Utility	R S Nelson	LA	1393	3		Natural Gas Steam Turbine	NG	ST
2017 1			IPP	Pittsburg Power	CA	271	5		Natural Gas Steam Turbine	NG	ST
2017 1			IPP	Pittsburg Power	CA	271	6		Natural Gas Steam Turbine	NG	ST
2017 1			IPP	Pittsburg Power	CA	271	7		Natural Gas Steam Turbine	NG	ST
2017 1		·	Industrial	SABIC Innovative Plastics Mt. Vernon	IN	58063	1		Conventional Steam Coal	BIT	ST
2017 1		.,	IPP	Toyon Power Station	CA	54327	TOY3		Landfill Gas	LFG	IC OT
2017 1			Electric CHP	Viking Energy of Northumberland	PA	50771	GEN1		Wood/Wood Waste Biomass	WDS	SI
2017 2 2017 2		•	Electric CHP Electric CHP	Clear Lake Cogeneration Ltd Clear Lake Cogeneration Ltd	TX TX	10741 10741	G102 G103		Natural Gas Fired Combined Cycle Natural Gas Fired Combined Cycle	NG NG	CT
2017 2		· ·	Electric CHP	Clear Lake Cogeneration Ltd	TX	10741	G103		Natural Gas Fired Combined Cycle	NG	СТ
2017 2		·	Electric CHP	Clear Lake Cogeneration Ltd	TX	10741	S104		Natural Gas Fired Combined Cycle	NG	CA
2017 2		<u> </u>	Electric CHP	Clear Lake Cogeneration Ltd	TX	10741	S101		Natural Gas Fired Combined Cycle	NG	CA
2017 2		·	Electric CHP	Frey Farm Landfill	PA	56510	GEN1		Landfill Gas	LFG	IC
2017 2		••	IPP	Tri Center Naniwa Energy	NV	55494	CT3		Natural Gas Fired Combustion Turbine	NG	GT
2017 2		0,	IPP	Tri Center Naniwa Energy	NV	55494	CT4		Natural Gas Fired Combustion Turbine	NG	GT
2017 2		0,	IPP	Tri Center Naniwa Energy	NV	55494	CT5		Natural Gas Fired Combustion Turbine	NG	GT
2017 2			IPP	Tri Center Naniwa Energy	NV	55494	CT6		Natural Gas Fired Combustion Turbine	NG	GT
2017 2		07	Commercial	SJ/SC WPCP	CA	56080	E2		Other Waste Biomass	OBG	IC
2017 2			Commercial	SJ/SC WPCP	CA	56080	E5		Other Waste Biomass	OBG	IC
2017 2			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		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		0,	Electric Utility	Stanton	ND	2824	1		Conventional Steam Coal	SUB	ST
2017 3		0,7	Electric Utility	Stanton	ND	2824	2		Petroleum Liquids	DFO	IC
2017 3			Electric Utility	Reid Gardner	NV	2324	4		Conventional Steam Coal	BIT	ST
2017 3			Electric Utility	Horseshoe Lake	OK	2951	GT7		Natural Gas Fired Combustion Turbine	NG	GT
2017 3			IPP	Ravenswood	NY	2500	GT7		Natural Gas Fired Combustion Turbine	NG	GT
2017 3			Electric Utility	Juneau	WI	8050	31		Petroleum Liquids	DFO	GT
2017 4			IPP	Encina	CA	302	ST1		Natural Gas Steam Turbine	NG	ST
2017 4		•	Electric Utility	Paradise	KY	1378	1		Conventional Steam Coal	BIT	ST
2017 4		· ·	Electric Utility	Paradise	KY	1378	2		Conventional Steam Coal	BIT	ST
2017 5			Electric Utility	Blooming Prairie	MN	1966	1		Petroleum Liquids	DFO	IC
2017 5			Electric Utility	Blooming Prairie	MN	1966	2		Petroleum Liquids	DFO	IC OT
2017 5			Electric Utility	Arvah B Hopkins	FL	688	GT1		Natural Gas Fired Combustion Turbine	NG	GI
2017 5			Electric Utility	Arvah B Hopkins	FL IA	688	GT2		Natural Gas Fired Combustion Turbine	NG	GT CT
2017 5 2017 5		· ·	Electric Utility Electric Utility	Dubuque Dubuque	IΑ	1046 1046	3		Natural Gas Steam Turbine Natural Gas Steam Turbine	NG NG	OT
2017 5		ů .	Electric Utility	Dubuque	IA IA	1046	IC1		Petroleum Liquids	DFO	10
2017 5		·	Electric Utility	Dubuque	IΔ	1046	IC1		Petroleum Liquids Petroleum Liquids	DFO	10
2017 5		· ·	Electric Utility	Sutherland	ΙΔ	1046	102		Natural Gas Steam Turbine	NG	ST
2017 5		ů .	IPP	McKee Run	DE	599	1		Natural Gas Steam Turbine Natural Gas Steam Turbine	NG	ST
2017 5			IPP	McKee Run	DE	599	2		Natural Gas Steam Turbine Natural Gas Steam Turbine	NG	ST
2017 5			Electric CHP	Wasatch Energy Systems Energy Recovery	UT	55302	1		Municipal Solid Waste	MSW	ST
2017 6		· · · · · · · · · · · · · · · · · · ·	IPP	Brayton Point	MA	1619	1		Conventional Steam Coal	BIT	ST
2017 6			IPP	Brayton Point	MA	1619	2		Conventional Steam Coal	BIT	ST
2017 6			IPP	Brayton Point	MA	1619	3		Conventional Steam Coal	BIT	ST
2017 6		, 0,	IPP	Brayton Point	MA	1619	4		Petroleum Liquids	RFO	ST
2017 6		- 7	Electric Utility	Darlington County	SC	3250	9		Petroleum Liquids	DFO	GT
2017 6		· · · · · · · · · · · · · · · · · · ·	IPP	EXC Wind 1	TX	56557	1		Onshore Wind Turbine	WND	WT
2017 6			IPP	EXC Wind 2	TX	56558	JDW2		Onshore Wind Turbine		WT
2017 6			IPP	EXC Wind 3	TX	56559	JDW3		Onshore Wind Turbine	WND	WT
2017 6			Electric Utility	Sutherland	IA	1077	3		Natural Gas Steam Turbine	NG	ST
2017 6		<u> </u>	IPP	PSEG Hudson Generating Station	NJ	2403	2		Natural Gas Steam Turbine	NG	ST
2017 6			IPP	PSEG Mercer Generating Station	NJ	2408	1		Conventional Steam Coal	BIT	ST
2017 6			IPP	PSEG Mercer Generating Station	NJ	2408	2		Conventional Steam Coal	BIT	ST
2017 6			Commercial	Town of Falmouth WWTP	MA	57654	WIND1	0.8	Onshore Wind Turbine	WND	WT
2017 6			Commercial	Town of Falmouth WWTP	MA	57654	WIND2		Onshore Wind Turbine	WND	WT

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

Year	Month	nth Entity ID Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW) Technology	Energy Source Code	
2017	· -	7 221 Alaska Village Elec Coop, Inc	Electric Utility	Noorvik	AK	6330	2A	0.4 Petroleum Liquids	DFO	IC
2017	7	7 3046 Duke Energy Progress - (NC)	Electric Utility	L V Sutton Steam	NC	2713	GTA	23.0 Petroleum Liquids	DFO	GT
2017	7	7 3046 Duke Energy Progress - (NC)	Electric Utility	L V Sutton Steam	NC	2713	GTB	25.0 Petroleum Liquids	DFO	GT
2017	7	7 21352 Municipal Energy Agency of NE	Electric Utility	MEAN Wind Project	NE	56106	1	10.5 Onshore Wind Turbine	WND	WT
2017	' 8	8 6636 Foss Manufacturing Company LLC	Industrial	Hampton Facility	NH	10108	GEN1	0.5 Petroleum Liquids	DFO	IC
2017	' 8	8 6636 Foss Manufacturing Company LLC	Industrial	Hampton Facility	NH	10108	GEN2	0.5 Petroleum Liquids	DFO	IC
2017	' 8	8 6636 Foss Manufacturing Company LLC	Industrial	Hampton Facility	NH	10108	GEN3	0.7 Petroleum Liquids	DFO	IC
2017	' 8	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	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	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

NOTE

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

Table 6.5. Planned U.	J.S. Electric Generating Unit Additions									
		Plant Producer		Plant		Net Summe	er	Energy Source	Prime Mover	Nameplat
Year Month Entity ID		Туре	Plant Name	State	Plant ID			Code	Code	Status Capacity (MV
	All Altus Power America Management, LLC	IPP IPP	DDR Shoppers World	MA	60754		3 Solar Photovoltaic	SUN	PV PV	(V) Under construction, more than 50 percent complete
	Ameresco BWC Wading River LLC II Ameresco Glendale Road Solar PV LLC	IPP	BWC Wading River One, Two, Three Northampton Landfill Solar PV	MA MA	61069 60908		0 Solar Photovoltaic 4 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete 3. (TS) Construction complete, but not yet in commercial operation 2.
	66 Apple Blossom Wind, LLC	IPP	Apple Blossom Wind Farm	MI	58690		0 Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation 100.
	Argo Navis Community Solar	IPP	Argo Navis Community Solar	MN	61183		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete
2017 11 60831	Argo Navis Community Solar	IPP	Argo Navis Community Solar	MN	61183		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete 0.
	Argo Navis Community Solar	IPP	Argo Navis Community Solar	MN	61183		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete 0.
	P22 Belchertown Renewables, LLC	IPP	Belchertown Renewables	MA	61295	I	0 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation 4
	Bullock Road Solar 1, LLC	IPP IPP	Bullock Road Solar 1	MA	61010		9 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation 3.
	65 CD Global Solar Holdings, LLC 65 CD Global Solar Holdings, LLC	IPP	Beacon Solar Plant Site 2 Beacon Solar Plant Site 5	CA	59309 59308		0 Solar Photovoltaic 0 Solar Photovoltaic	SUN	PV DV	(U) Under construction, less than or equal to 50 percent complete 45. (U) Under construction, less than or equal to 50 percent complete 36.
	74 Canton Mountain Wind LLC	IPP	Canton Mountain Wind	ME	58620		8 Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete 22.
	27 Carina Community Solar	IPP	Carina Community Solar	MN	61179		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete
	27 Carina Community Solar	IPP	Carina Community Solar	MN	61179		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete
	27 Carina Community Solar	IPP	Carina Community Solar	MN	61179		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete 0.
	27 Carina Community Solar	IPP	Carina Community Solar	MN	61179	JCCS4 0.9	9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete 0.
	17 City of Tipton - (IA)	Electric Utility	Tipton	IA	8106		0 Petroleum Liquids	DFO	IC	(U) Under construction, less than or equal to 50 percent complete 2
	19 Clean Energy Collective LLC	IPP	Conejos 1 Community Solar Array	CO	60723		5 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
	9 Clean Energy Collective LLC	IPP	Xcel Adams 2 Community Solar Array	CO	60725		5 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
	07 Clipperton Holdings LLC 05 Columbus Solar Project	IPP	Clipperton Holdings Columbus Solar Project	NM	59213 61165		Solar Photovoltaic Solar Photovoltaic	SUN	PV D\/	(U) Under construction, less than or equal to 50 percent complete (TS) Construction complete, but not yet in commercial operation 1.
	69 Consolidated Edison Development Inc.	IPP	CED Foster	RI	61499		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete 2.
	32 Constellation Solar Georgia 2, LLC	IPP	Georgia Power at Jakin GA PV	GA	61397		5 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
	32 Constellation Solar Georgia 2, LLC	IPP	Georgia Power at Swainsboro	GA	61459		9 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
	2 Cottonwood Wind Project	IPP	Cottonwood Wind Energy Center	NE	61407		7 Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete 89.
	Cypress Creek Renewables	IPP	Highway 56 Solar	TX	61409		3 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete 5.
	Duke Energy Florida, LLC	Electric Utility	Suwannee Solar Facility	FL	60788		8 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete 8.
	59 EDF Renewable Energy	IPP	Rock Falls Wind Farm LLC	OK	61261		5 Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete 154.
	East Kentucky Power Coop, Inc	Electric Utility	Cooperative Solar One	KY	60863		5 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation 8
	34 Elizabeth Mines Solar 1, LLC	IPP IPP	Elizabeth Mines Solar 1	VI	61124		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete 5.
	Fluvanna Wind Energy LLC Responsible Footprint Salem Harbor Development LP	IPP	Salem Harbor Station NGCC	I X	59245 60903		4 Onshore Wind Turbine 5 Natural Gas Fired Combined Cycle	WND NG	CA	(TS) Construction complete, but not yet in commercial operation 155. (V) Under construction, more than 50 percent complete 158.
	28 Footprint Salem Harbor Development LP	IPP	Salem Harbor Station NGCC	MΔ	60903		5 Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete 158. (V) Under construction, more than 50 percent complete 240.
	90 Foundation CA Fund VIII Manager, LLC	IPP	Foundation CDCR LAC	CA	61066		9 Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete
	99 Fremont Farm LLC	IPP	Fremont Farm	NC	59103		0 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation 5.
	11 Golden Hills Interconnection Wind, LLC	IPP	Golden Hills North Wind Energy Center	CA	61222		0 Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete 46.
2017 11 60739	39 Gulf Coast Solar Center II (CA)	IPP	Gulf Coast Solar Center II	FL	59690	GCSC2 40.	0 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation 40.
2017 11 60740	40 Gulf Coast Solar Center III (CA)	IPP	Gulf Coast Solar Center III	FL	59691	GCSC3 50.	0 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation 50.
2017 11 61022	Hecate Energy Cherrydale LLC	Electric Utility	Cherrydale Solar Power Facility	VA	61375	PV1 20.	0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete 20.
	Hog Creek Wind Project LLC	IPP	Hog Creek Wind Project	ОН	61330		0 Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete 66.
	34 Indiana Municipal Power Agency	Electric Utility	Greenfield Solar Park	IN	61053		8 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete 2.
	S1 LSDP 11, LLC	IPP	Deerfield Solar	MA	60775		4 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete 4.
	Uyra Community Solar Uyra Community Solar	IPP IPP	Lyra Community Solar	IMN	61182 61182		9 Solar Photovoltaic 9 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete
	Uyra Community Solar	IPP	Lyra Community Solar Lyra Community Solar	MN	61182		9 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete 0. (V) Under construction, more than 50 percent complete 0.
	22 MC Power Companies Inc	IPP	Higginsville Solar Farm	MO	61316		5 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
	75 Minnesota Solar CSG 19, LLC	IPP	B.R. Corcoran	MN	61453		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
2017 11 61075	75 Minnesota Solar CSG 19, LLC	IPP	B.R. Corcoran	MN	61453	42279 1.	0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete 1.
	75 Minnesota Solar CSG 19, LLC	IPP	B.R. Corcoran	MN	61453	42280 1.0	0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
	75 Minnesota Solar CSG 19, LLC	IPP	B.R. Corcoran	MN	61453		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete 1.
	Minnesota Solar CSG 19, LLC	IPP IPP	B.R. Corcoran	MN	61453		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
	74 Minnesota Solar CSG 21, LLC 74 Minnesota Solar CSG 21, LLC	IPP	B.R. Sartell B.R. Sartell	IMN	61454		0 Solar Photovoltaic 0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
	74 Minnesota Solar CSG 21, LLC	IPP	B.R. Sartell	MN	61454 61454		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete 1. (V) Under construction, more than 50 percent complete
	76 Minnesota Solar CSG 4, LLC	IPP	Montgomery Winsted	MN	61456		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
	76 Minnesota Solar CSG 4, LLC	IPP	Montgomery Winsted	MN	61456		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
2017 11 61076	76 Minnesota Solar CSG 4, LLC	IPP	Montgomery Winsted	MN	61456		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
	73 Minnesota Solar CSG 9, LLC	IPP	B.R. Sauk Rapids	MN	61455	42292 1.0	0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
2017 11 61073	73 Minnesota Solar CSG 9, LLC	IPP	B.R. Sauk Rapids	MN	61455	42294 1.0	0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
	73 Minnesota Solar CSG 9, LLC	IPP	B.R. Sauk Rapids	MN	61455		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete 1.
	73 Minnesota Solar CSG 9, LLC	IPP IPP	B.R. Sauk Rapids	MN	61455		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete 1. (V) Under construction, more than 50 percent complete
	73 Minnesota Solar CSG 9, LLC 38 NRG Texas Power LLC	IPP	B.R. Sauk Rapids NRG Elbow Creek Energy Storage Project	IVIN	61455 61362		0 Solar Photovoltaic 0 Batteries	SUN MWH	PV	(V) Under construction, more than 50 percent complete 1.
	98 Nixa Solar, LLC	IPP	Nixa Solar, LLC	MO	60673		9 Solar Photovoltaic	SUN	P\/	(TS) Construction complete, but not yet in commercial operation (U) Under construction, less than or equal to 50 percent complete 7.
	13 Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378		1 Petroleum Liquids	DFO	IC IC	(V) Under construction, more than 50 percent complete
	3 Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378		1 Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete
	3 Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378		1 Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete
	14 OEE XXIV LLC	Industrial	Whirlpool Corporation - Ottawa Wind Farm	ОН	61004		5 Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete 1.
	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953		0 Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation 66.
	39 Pikeville Farm, LLC	IPP	Pikeville Farm	NC	61404		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete 5.
	09 President & Trustees of Williams College	Commercial	Williams College - Campus CHP	IMA	58160		0 Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation 2. (TS) Construction complete, but not yet in commercial operation.
	09 President & Trustees of Williams College	Commercial	Williams College - Campus CHP	IVIA	58160 61487		Petroleum Liquids Solar Photovoltaic	DFO SUN	D\/	(TS) Construction complete, but not yet in commercial operation 2.
	93 SL Babylon, LLC 81 SR Platte	IPP	SL Babylon SR Platte Solar Farm	CO	61462		9 Solar Photovoltaic 0 Solar Photovoltaic	SUN	P\/	(V) Under construction, more than 50 percent complete 8. (V) Under construction, more than 50 percent complete 16.
	19 Sampson Road Solar, LLC	IPP	Sampson Road Solar	MA	61308		0 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation
2017 11 60919		IPP	GRE Marshan Solar	MN	60935		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
	20 SoCore Energy LLC	ĮIFF		WI	60957		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
2017 11 60520		IPP	Sand Lake DPC Solar	1	60955	PV1 1.:	3 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete
2017 11 60520 2017 11 60520	20 SoCore Energy LLC	" '	Strawberry Point DPC Solar	IA						(v) chase contained in the contract of the con
2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60520	20 SoCore Energy LLC 20 SoCore Energy LLC 20 SoCore Energy LLC 20 SoCore Energy LLC	IPP	Strawberry Point DPC Solar VEC Magee Hill Solar	VT	60954	PV1 1.3	3 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete 1.
2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60163	20 SoCore Energy LLC 20 SoCore Energy LLC 20 SoCore Energy LLC 20 SoCore Energy LLC 33 Soltage LLC	IPP IPP IPP	Strawberry Point DPC Solar VEC Magee Hill Solar Broadridge Solar, LLC	VT NC	60954 61218	PV1 1.3 BROAD 5.4	0 Solar Photovoltaic	SUN SUN	PV PV	(V) Under construction, more than 50 percent complete (TS) Construction complete, but not yet in commercial operation 5.
2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60163 2017 11 60652 2017 11 60652	20 SoCore Energy LLC 20 SoCore Energy LLC 20 SoCore Energy LLC 20 SoCore Energy LLC 30 SoCore Energy LLC 31 Soltage LLC 32 Stafford St Solar 1, LLC	IPP IPP	Strawberry Point DPC Solar VEC Magee Hill Solar Broadridge Solar, LLC Stafford St Solar 1	VT NC MA	60954 61218 61016	PV1 1 BROAD 5 STAF1 2	0 Solar Photovoltaic 0 Solar Photovoltaic	SUN SUN SUN	PV PV PV	(V) Under construction, more than 50 percent complete 1. (TS) Construction complete, but not yet in commercial operation 5. (TS) Construction complete, but not yet in commercial operation 2.
2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60163 2017 11 60652 2017 11 60653	20 SoCore Energy LLC 33 Soltage LLC 54 Stafford St Solar 1, LLC 55 Stafford St Solar 2, LLC	IPP IPP IPP	Strawberry Point DPC Solar VEC Magee Hill Solar Broadridge Solar, LLC Stafford St Solar 1 Stafford St Solar 2	VT NC MA MA	60954 61218 61016 61017	PV1 1 BROAD 5 STAF1 2 STAF2 2	0 Solar Photovoltaic 0 Solar Photovoltaic 0 Solar Photovoltaic	SUN SUN SUN SUN	PV PV PV PV	(V) Under construction, more than 50 percent complete (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation 2 (TS) Construction complete, but not yet in commercial operation 2
2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60163 2017 11 60652 2017 11 60653 2017 11 60654	20 SoCore Energy LLC 20 SoCore Energy LLC 20 SoCore Energy LLC 20 SoCore Energy LLC 30 Soltage LLC 31 Soltage LLC 32 Stafford St Solar 1, LLC 33 Stafford St Solar 2, LLC 34 Stafford St Solar 3, LLC	IPP IPP IPP IPP IPP IPP IPP	Strawberry Point DPC Solar VEC Magee Hill Solar Broadridge Solar, LLC Stafford St Solar 1 Stafford St Solar 2 Stafford St Solar 3	IA VT NC MA MA MA	60954 61218 61016 61017 61018	PV1 1 BROAD 5 STAF1 2 STAF2 2 STAF3 1	0 Solar Photovoltaic 0 Solar Photovoltaic 0 Solar Photovoltaic 0 Solar Photovoltaic	SUN SUN SUN SUN SUN	PV PV PV PV PV	(V) Under construction, more than 50 percent complete (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation 1.
2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60163 2017 11 60652 2017 11 60653 2017 11 60654 2017 11 61016	20 SoCore Energy LLC 20 SoCore Energy LLC 20 SoCore Energy LLC 20 SoCore Energy LLC 30 SoCore Energy LLC 31 Soltage LLC 32 Stafford St Solar 1, LLC 33 Stafford St Solar 2, LLC 34 Stafford St Solar 3, LLC 35 SunE Koppelman 1, LLC	IPP IPP IPP	Strawberry Point DPC Solar VEC Magee Hill Solar Broadridge Solar, LLC Stafford St Solar 1 Stafford St Solar 2 Stafford St Solar 3 Koppelman Sun	IA VT NC MA MA MA MA MN	60954 61218 61016 61017 61018 61381	PV1 1 BROAD 5 STAF1 2 STAF2 2 STAF3 1 KOPP1 1	0 Solar Photovoltaic	SUN SUN SUN SUN SUN SUN	PV PV PV PV PV PV	(V) Under construction, more than 50 percent complete (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation 1.
2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60163 2017 11 60652 2017 11 60653 2017 11 60654 2017 11 61016	20 SoCore Energy LLC 21 Stafford St Solar 1, LLC 22 Stafford St Solar 1, LLC 23 Stafford St Solar 2, LLC 24 Stafford St Solar 3, LLC 25 SunE Koppelman 1, LLC	IPP	Strawberry Point DPC Solar VEC Magee Hill Solar Broadridge Solar, LLC Stafford St Solar 1 Stafford St Solar 2 Stafford St Solar 3 Koppelman Sun Koppelman Sun	IA VT NC MA MA MA MA MN MN	60954 61218 61016 61017 61018 61381	PV1 1.3 BROAD 5.4 STAF1 2.4 STAF2 2.4 STAF3 1.4 KOPP1 1.4 KOPP2 1.4	0 Solar Photovoltaic	SUN SUN SUN SUN SUN SUN	PV PV PV PV PV PV PV PV	(V) Under construction, more than 50 percent complete (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation 1.
2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60163 2017 11 60652 2017 11 60654 2017 11 61016 2017 11 61016 2017 11 61016	20 SoCore Energy LLC 20 SoCore Energy LLC 20 SoCore Energy LLC 20 SoCore Energy LLC 30 SoCore Energy LLC 31 Soltage LLC 32 Stafford St Solar 1, LLC 33 Stafford St Solar 2, LLC 34 Stafford St Solar 3, LLC 35 SunE Koppelman 1, LLC	IPP	Strawberry Point DPC Solar VEC Magee Hill Solar Broadridge Solar, LLC Stafford St Solar 1 Stafford St Solar 2 Stafford St Solar 3 Koppelman Sun	IA VT NC MA MA MA MA MN MN MN	60954 61218 61016 61017 61018 61381	PV1 1 BROAD 5 STAF1 2 STAF2 2 STAF3 1 KOPP1 1 KOPP2 1 KOPP3 1	0 Solar Photovoltaic	SUN SUN SUN SUN SUN SUN	PV	(V) Under construction, more than 50 percent complete (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation
2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60163 2017 11 60652 2017 11 60653 2017 11 61016 2017 11 61016 2017 11 61016 2017 11 61016	SoCore Energy LLC SoCore Energy LC SoCore Energy LLC SoCore Energy	IPP	Strawberry Point DPC Solar VEC Magee Hill Solar Broadridge Solar, LLC Stafford St Solar 1 Stafford St Solar 2 Stafford St Solar 3 Koppelman Sun Koppelman Sun Koppelman Sun	IA VT NC MA MA MA MN MN MN MN MN	60954 61218 61016 61017 61018 61381 61381	PV1 1.3 BROAD 5.0 STAF1 2.4 STAF2 2.4 STAF3 1.4 KOPP1 1.6 KOPP2 1.6 KOPP3 1.6 KOPP4 1.6	0 Solar Photovoltaic	SUN SUN SUN SUN SUN SUN SUN	PV	(V) Under construction, more than 50 percent complete (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation 1.
2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60520 2017 11 60163 2017 11 60653 2017 11 60654 2017 11 61016 2017 11 61016 2017 11 61016 2017 11 61016 2017 11 61016	SoCore Energy LLC SoCORE Energy LC SoCORE Energy LLC SoCORE Energy	IPP	Strawberry Point DPC Solar VEC Magee Hill Solar Broadridge Solar, LLC Stafford St Solar 1 Stafford St Solar 2 Stafford St Solar 3 Koppelman Sun Koppelman Sun Koppelman Sun Koppelman Sun	IA VT NC MA MA MA MA MN MN MN MN MN MN MN	60954 61218 61016 61017 61018 61381 61381 61381	PV1 1.3 BROAD 5.4 STAF1 2.4 STAF2 2.4 STAF3 1.4 KOPP1 1.4 KOPP2 1.4 KOPP3 1.4 KOPP4 1.4 KOPP5 1.4	0 Solar Photovoltaic	SUN SUN SUN SUN SUN SUN SUN SUN	PV	(V) Under construction, more than 50 percent complete (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation 1.

Table 6.5.	Planned U.S.	Flectric	Generating	Unit Additions
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							Energy			
Manth Futitu ID Futitu Nama	Plant Producer	Blant Name	Plant	Diam' ID	Net Summe		Source	Mover	Otatus	Namepla
Month Entity ID Entity Name 11 61018 SunE Rengstorf 1, LLC	Type	Plant Name Rengstorf Solar	State MN	Plant ID 61383	Generator ID Capacity (MW RENG3 1.0	0 Solar Photovoltaic	Code SUN	Code	Status (TS) Construction complete, but not yet in commercial operation	Capacity (MV
11 61018 SunE Rengstorf 1, LLC	IPP	Rengstorf Solar	MN	61383		0 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	
11 61018 SunE Rengstorf 1, LLC	IPP	Rengstorf Solar	MN	61383		0 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	+
11 60403 TRS Fuel Cell, LLC	Electric CHP	TRS Fuel Cell	СТ	60683	MMH1 3.	7 Other Natural Gas	NG	FC	(V) Under construction, more than 50 percent complete	3
11 60947 Tesla Inc.	IPP	Hampshire College	MA	60815		5 Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	С
11 60947 Tesla Inc.	IPP	Hampshire College	MA	60815		7 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1
11 60947 Tesla Inc.	IPP	Montgomery County - Correctional Facility	MD	60820		4 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1
11 60923 Theodore Drive Solar, LLC	IPP	Theodore Drive Solar	MA UT	61296		5 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	
11 24431 Utah Municipal Power Agency 24431 Utah Municipal Power Agency	Electric Utility Electric Utility	Provo Power Plant Provo Power Plant	UT	61508 61508		Natural Gas Internal Combustion Engine Natural Gas Internal Combustion Engine	NG NG	IC	(TS) Construction complete, but not yet in commercial operation	2
11 24431 Utah Municipal Power Agency	Electric Utility	Provo Power Plant	LIT	61508		0 Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation	2
11 24431 Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508		0 Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	2
11 24431 Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508		0 Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	2
11 57341 Veolia Energy	Electric CHP	Univ Minnesota CHP Plant	MN	59197		0 Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	21
11 61072 Waterford Holdco LLC	IPP	Waterford Holdco	MN	61452		7 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2
11 60059 ZGlobal Inc	IPP	Valencia 1 Solar CA	CA	61418		0 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	3
12 60277 54 KR 8me LLC	IPP	Redwood 4 Solar Farm	CA	60490		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20
12 60118 83WI 8ME, LLC	IPP	Midway Solar Farm 1	CA	60336		0 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	50
12 61105 ABEC #2 LLC	IPP	ABEC #2 dba West-Star Dairy	CA	61501		0 Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	1
12 61106 ABEC #3 LLC	IPP	ABEC #3 dba Lakeview Dairy	CA	61502		0 Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	1
12 61107 ABEC #4 LLC	IPP	ABEC #4 dba CE&S Dairy	CA	61503		O Other Waste Biomass	OBG	IC DY	(U) Under construction, less than or equal to 50 percent complete	
12 60571 AEP Onsite Partners	IPP	Porter Way Community Solar Garden	MN	61500		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2
12 61012 AES Distributed Energy	IPP	Call Farms 1	NY	61470		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 61012 AES Distributed Energy 12 61012 AES Distributed Energy	IPP	Call Farms 3 Lichtenthal	NV	61471 61469		0 Solar Photovoltaic 0 Solar Photovoltaic	SUN	P\/	(U) Under construction, less than or equal to 50 percent complete (U) Under construction, less than or equal to 50 percent complete	2
12 61012 AES Distributed Energy 12 61012 AES Distributed Energy	IPP	Monroe County Sites A & B	NY	61509		7 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	
12 61012 AES Distributed Energy 12 61012 AES Distributed Energy	IPP	Monroe County Sites A & B	NY	61509		7 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	
12 61012 AES Distributed Energy	IPP	Monroe County Sites C, D, & E	NY	61510		0 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	
12 61012 AES Distributed Energy	IPP	Monroe County Sites C, D, & E	NY	61510		0 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	
12 61012 AES Distributed Energy	IPP	Monroe County Sites C, D, & E	NY	61510		0 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	
12 60347 AL Solar A, LLC	IPP	LaFayette Solar Farm	AL	60583	PV1 79.:	2 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	79
12 221 Alaska Village Elec Coop, Inc	Electric Utility	Brevig Mission	AK	60260	3A 0.4	4 Petroleum Liquids	DFO	IC	(U) Under construction, less than or equal to 50 percent complete	(
12 221 Alaska Village Elec Coop, Inc	Electric Utility	Kasigluk	AK	57066	1 0.8	8 Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	
12 60824 Antares Community Solar	IPP	Antares Community Solar	MN	61176		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60824 Antares Community Solar	IPP	Antares Community Solar	MN	61176		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	(
12 60824 Antares Community Solar	IPP	Antares Community Solar	MN	61176		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 57003 Arlington Valley Solar Energy LLC	IPP	Arlington Valley Solar Energy I	AZ	57679		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	12
12 15399 Avangrid Renewables LLC	IPP	Deerfield Wind LLC	VT	61039		Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	30
12 15399 Avangrid Renewables LLC	IPP	El Cabo Wind	NM	58098		Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	29
12 15399 Avangrid Renewables LLC 12 15399 Avangrid Renewables LLC	IPP	Tule Wind LLC Twin Buttes II Wind	CA	57913 61040		0 Onshore Wind Turbine 0 Onshore Wind Turbine	WND	VV I	(V) Under construction, more than 50 percent complete	143 75
12 60730 Bakersfield Industrial PV 1, LLC	IPP	Bakersfield Industrial PV 1	CA	61118		0 Solar Photovoltaic	SUN	D\/	(V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete	73
12 60729 Bakersfield PV 1, LLC	IPP	Bakersfield PV 1	CA	61117		3 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	- !
12 60746 Bedford Solar, LLC	IPP	Bedford Solar	VA	61126		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60944 Bluff Point Wind, LLC	IPP	Bluff Point Wind Facility	IN	61303		7 Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	119
12 60617 Buckthorn Wind Project, LLC	IPP	Buckthorn Wind Project	TX	60983		5 Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	100
12 61096 Cameron Solar, LLC	IPP	Cameron Solar	SC	61489		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1:
12 59541 Carroll County Energy LLC	Electric CHP	Carroll County Energy	ОН	59773	CGT1 197.:	3 Natural Gas Fired Combined Cycle	NG	СТ	(TS) Construction complete, but not yet in commercial operation	23
12 59541 Carroll County Energy LLC	Electric CHP	Carroll County Energy	ОН	59773		Natural Gas Fired Combined Cycle	NG	СТ	(TS) Construction complete, but not yet in commercial operation	23
12 59541 Carroll County Energy LLC	Electric CHP	Carroll County Energy	ОН	59773		0 Natural Gas Fired Combined Cycle	NG	CA	(TS) Construction complete, but not yet in commercial operation	36
12 58519 Clean Energy Collective LLC	Electric Utility	SCE&G Curie CSG	SC	61432		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 58519 Clean Energy Collective LLC	Electric Utility	SCE&G Nimitz CSG	SC	61433		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 58519 Clean Energy Collective LLC	Electric Utility	SCE&G Springfield CSG	SC	61434		1 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 56769 Consolidated Edison Development Inc.	IPP IPP	Upton County Solar	I X	60581		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	15
12 60380 Cork Oak Solar LLC 12 58695 Coronal Development Services	IPP	Cork Oak Solar Essex Solar Center	INC IVA	60637 61406		2 Solar Photovoltaic 0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete	2
12 58695 Coronal Development Services	IPP	Martin Solar Center	VA	61458		0 Solar Photovoltaic	SUN	D\/	· · · · · · · · · · · · · · · · · · ·	2
12 58695 Coronal Development Services 12 58695 Coronal Development Services	IPP	Palmer Solar Center	VA	61457		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete	
12 60825 Corvus Community Solar	IPP	Corvus Community Solar	MN	61177		9 Solar Photovoltaic	SUN	PV	(U) Under construction, Hore than 50 percent complete	
12 60825 Corvus Community Solar	IPP	Corvus Community Solar	MN	61177		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60825 Corvus Community Solar	IPP	Corvus Community Solar	MN	61177		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60825 Corvus Community Solar	IPP	Corvus Community Solar	MN	61177		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60825 Corvus Community Solar	IPP	Corvus Community Solar	MN	61177		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60967 Crater Community Solar	IPP	Crater Community Solar	MN	61328		9 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 60967 Crater Community Solar	IPP	Crater Community Solar	MN	61328		9 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 60967 Crater Community Solar	IPP	Crater Community Solar	MN	61328		9 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 61060 Cypress Creek Renewables	IPP	ABD Farms	NC	61525		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 61060 Cypress Creek Renewables	IPP	Auten Road Farm, LLC	NC	60634		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 61060 Cypress Creek Renewables	IPP	Bladen Solar Farm	NC NC	60296		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 61060 Cypress Creek Renewables	IPP IIDD	Bondi Solar II C	NC NC	61352		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 61060 Cypress Creek Renewables 12 61060 Cypress Creek Renewables	IPP	Bullock Solar, LLC Marlin Solar	TV	61512 61513		0 Solar Photovoltaic 3 Solar Photovoltaic	SUN	D\/	(V) Under construction, more than 50 percent complete	
12 61060 Cypress Creek Renewables 12 61060 Cypress Creek Renewables	IPP	Next Generation Solar Farm	\/T	61340		2 Solar Photovoltaic	SUN	P\/	(V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete	
12 61060 Cypress Creek Renewables	IPP	North Gainesville Solar	TX	61514		2 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	_
12 61060 Cypress Creek Renewables	IPP	Shoe Creek Solar, LLC	NC NC	60380		2 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	+
12 61060 Cypress Creek Renewables	IPP	Whitesboro Solar	TX	61410		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 61060 Cypress Creek Renewables	IPP	Whitesboro Solar II	TX	61411		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 61113 DG Camden, LLC	IPP	DG Camden LLC Holtec	NJ	61515		2 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	
12 61111 DG New Jersey Solar, LLC	IPP	DG New Jersey Solar RLS Logistics	NJ	61507		9 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	
12 60728 Delano Land 1, LLC	IPP	Delano Land 1	CA	61116		0 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	
12 60968 Delphinus Community Solar	IPP	Delphinus Community Solar	MN	61329		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60968 Delphinus Community Solar	IPP	Delphinus Community Solar	MN	61329	QDCS2 0.9	9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 5199 Devon Energy Production Co	Industrial	Beaver Creek Gas Plant	WY	55278		9 All Other	WH	ST	(U) Under construction, less than or equal to 50 percent complete	
12 61014 DodgeSun, LLC	IPP	DodgeSun	MN	61379		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
40 0404/5 1 0 1	IPP	DodgeSun	MN	61379		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 61014 DodgeSun, LLC				. —				1		
12 61014 DodgeSun, LLC	IPP	DodgeSun	MN	61379		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 61014 DodgeSun, LLC 12 61014 DodgeSun, LLC	IPP	DodgeSun	MN MN	61379	DODG4 1.0	0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 61014 DodgeSun, LLC		_	MN MN MN		DODG4 1.0					

Table 6.5	Planned U.S.	Electric	Congrating	Linit	Additions
i abie o.b.	Planned U.S.	Electric	Generating	Unit	Additions

Month F	Entity ID Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID		Net Summer apacity (MW) Technology	Energy Source Code	Prime Mover Code	Status	Name Capacity
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	Japacity
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	
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	
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	
12	58468 Dominion Renewable Energy	IPP	Buckingham Solar LLC	VA	60917	PV1	19.8 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
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	
12	58468 Dominion Renewable Energy	IPP	Sappony Solar LLC	VA	60916	PV1	20.0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12	58468 Dominion Renewable Energy	IPP	Scott-II Solar LLC	VA	60968	PV1	2.0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12	58468 Dominion Renewable Energy	IPP	Southampton Solar, LLC	VA	61422	PV1	100.0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
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	
12	5416 Duke Energy Carolinas, LLC	Electric Utility	W S Lee	SC	3264	CT12	230.0 Natural Gas Fired Combined Cycle	NG	СТ	(V) Under construction, more than 50 percent complete	
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	
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	
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	
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	
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	
12	56215 E ON Climate Renewables N America LLC	IPP	Inadale Wind Farm LLC	TX	56984	INABT	9.9 Batteries	MWH	ВА	(U) Under construction, less than or equal to 50 percent complete	
12	56215 E ON Climate Renewables N America LLC	IPP	Pyron Wind Farm LLC	TX	56981	PYRBT	9.9 Batteries	MWH	ВА	(U) Under construction, less than or equal to 50 percent complete	
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	
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	
12	57249 EPP Renewable Energy	IPP	Haworth Water Treatment Plant	N.I	56701	GEN6	3.9 Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	
12	57249 EPP Renewable Energy	IPP	Pennsauken Solar	N.I	56883	GEN10	2.0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12	60853 ET CAP OR HOLDINGS LLC	IPP	OR Solar 3, LLC	OP	61201		10.0 Solar Photovoltaic	SUN	D\/	(TS) Construction complete, but not yet in commercial operation	
12			<u> </u>	OR		ORSR3			DV		
12	60853 ET CAP OR HOLDINGS LLC	IPP	OR Solar 6, LLC	OR OR	61423	PV1	8.0 Solar Photovoltaic	SUN	IL A	(V) Under construction, more than 50 percent complete	
12	60853 ET CAP OR HOLDINGS LLC	" '	OR Solar 8, LLC	011	61430	PV6	10.0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12	60853 ET CAP OR HOLDINGS LLC	IPP	OR Solar 8, LLC	OR	61424	PV1	10.0 Solar Photovoltaic	SUN	LA.	(V) Under construction, more than 50 percent complete	
12	60904 ETCAP NES CS MN 06 LLC	IPP	WasecaSun	MN	61142	0000H	3.4 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12	60904 ETCAP NES CS MN 06 LLC	IPP	WasecaSun	MN	61142	WASE2	1.0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12	60904 ETCAP NES CS MN 06 LLC	IPP	WasecaSun	MN	61142	WASE3	1.0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12	60904 ETCAP NES CS MN 06 LLC	IPP	WasecaSun	MN	61142	WASE4	1.0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12	60904 ETCAP NES CS MN 06 LLC	IPP	WasecaSun	MN	61142	WASE5	1.0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12	61015 ETCAP NES CS MN 08 LLC	IPP	Johnson Solar	MN	61380	JOHN1	1.0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12	61015 ETCAP NES CS MN 08 LLC	IPP	Johnson Solar	MN	61380	JOHN2	1.0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12	61015 ETCAP NES CS MN 08 LLC	IPP	Johnson Solar	MN	61380	JOHN3	1.0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12	61015 ETCAP NES CS MN 08 LLC	IPP	Johnson Solar	MN	61380	JOHN4	1.0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12	61015 ETCAP NES CS MN 08 LLC	IPP	Johnson Solar	MN	61380	JOHN5	1.0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
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	
12	60901 ETCAP NES CS MN 12 LLC	IPP	Kramer Solar	MN	61058	KRAM2	1.0 Solar Photovoltaic	SUN	P\/	(V) Under construction, more than 50 percent complete	
12	60901 ETCAP NES CS MN 12 LLC	IPP	Kramer Solar	MNI	61058	KRAM3	1.0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12		IPP		NC	59516	AMLEG	16.0 Solar Photovoltaic	SUN	D\/		
12	58970 Ecoplexus, Inc	" '	American Legion PV 1	NC NC					PV	(V) Under construction, more than 50 percent complete	
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	
12	59380 Enel Green Power NA, Inc.	IPP	Rock Creek Wind Project	MO	60655	WT1	300.0 Onshore Wind Turbine	WND	W I	(V) Under construction, more than 50 percent complete	
12	61097 Estill Solar I, LLC	IPP	Estill Solar	SC	61490	EST1	19.9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
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	
12	59745 First Solar Asset Management	IPP	CA Flats Solar 130, LLC	CA	60033	GEN01	130.0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12	59745 First Solar Asset Management	IPP	Cuyama Solar, LLC	CA	60043	GEN01	40.0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
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	
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	
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	
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	
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	
12	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	
12	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	
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	
12	7490 Grand River Dam Authority	Electric Utility	-	ОК	165	2CT	324.6 Natural Gas Fired Combined Cycle	NG	CT	· · · · · · · · · · · · · · · · · · ·	
12	•	· · · · · · · · · · · · · · · · · · ·	GREC GREC	OK	105	3CT	•		CA	(TS) Construction complete, but not yet in commercial operation	
12	7490 Grand River Dam Authority	Electric Utility			165	3ST	191.8 Natural Gas Fired Combined Cycle	NG	CA	(TS) Construction complete, but not yet in commercial operation	
12	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	
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	
12	61095 Hampton Solar II, LLC	IPP	Hampton Solar 2	SC	61498	HAM2	19.9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12	61109 Huneke I CSG LLC	IPP	Huneke I CSG	MN	61505	HUNE1	1.0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
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	
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	
12	49893 Invenergy Services LLC	IPP	Shoreham Solar Commons	NY	60045	GEN1	24.9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12	61110 Krause CSG LLC	IPP	Krause CSG	MN	61506	KRAUS	1.0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
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	
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	
12	58822 MC Power Companies Inc	IPP	Farmington Solar Farm	MO	61450	FSF1	2.5 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
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	
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	
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	
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	
12	60392 Moffett Solar 1, LLC	IPP	Moffett Solar Project	ISC.	60658	PV1	69.5 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12	54888 NRG Texas Power LLC	IPP	Bacliff	TY	60264	BCGT1	60.0 Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	
12	54888 NRG Texas Power LLC	IPP	Bacliff		60264	BCGT1	60.0 Natural Gas Fired Combustion Turbine	NG	GT		
12	54888 NRG Texas Power LLC 54888 NRG Texas Power LLC	ILL		17		BCGT2 BCGT3			GT	(TS) Construction complete, but not yet in commercial operation	
12		IPP	Bacliff	I X	60264		60.0 Natural Gas Fired Combustion Turbine	NG	01	(TS) Construction complete, but not yet in commercial operation	
12	54888 NRG Texas Power LLC	IPP	Bacliff	IX	60264	BCGT4	60.0 Natural Gas Fired Combustion Turbine	NG	01	(TS) Construction complete, but not yet in commercial operation	
12	54888 NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT5	60.0 Natural Gas Fired Combustion Turbine	NG	GI	(TS) Construction complete, but not yet in commercial operation	
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	
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	
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	
12	60685 Novel Energy Solutions	IPP	Novel - OYA of Mapleton	MN	61060	00001	3.5 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
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	
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	
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	
12	60685 Novel Energy Solutions	IPP	Novel OYA of Osakis	IVIIN	61059	0000F	5.0 Solar Photovoltaic	SUN	D\/	(U) Under construction, less than or equal to 50 percent complete	-
12		" '		OK					CT		
12	14063 Oklahoma Gas & Electric Co	Electric Utility	Mustang	• • • • • • • • • • • • • • • • • • • •	2953	GT5	57.0 Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	
17	14063 Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT6 GT7	57.0 Natural Gas Fired Combustion Turbine	NG	01	(V) Under construction, more than 50 percent complete	
12	4.40001(Aldebense Car D. Elastria Ca		· · · · · · · · · · · · · · · · · · ·	17.317	ついたつ	(217)	57.0 Natural Gas Fired Combustion Turbine	NG	11 - 1	the tipger construction, more than b() percent complete	
12	14063 Oklahoma Gas & Electric Co 40229 Old Dominion Electric Coop	Electric Utility Electric Utility	Mustang Wildcat Point Generation Facility	OK MD	2953 59220	CT1	310.3 Natural Gas Fired Combined Cycle	NG	01	(V) Under construction, more than 50 percent complete (TS) Construction complete, but not yet in commercial operation	

Table 6.5	Planned U.S.	Flectric	Generating	Unit	Additions
I able 0.5.	i iaililea 0.0.		Ochici atilig	Ollit	Additions

Month Entity ID Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Net Summe Generator ID Capacity (MW		Energy Source Code	Prime Mover Code	Status	Nan Capacit
12 40229 Old Dominion Electric Coop	Electric Utility	Wildcat Point Generation Facility	MD	59220		Natural Gas Fired Combined Cycle	NG	CA	(TS) Construction complete, but not yet in commercial operation	
12 17470 PUD 1 of Snohomish County	Electric Utility	Calligan Creek Hydroelectric Project	WA	60418		O Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	
12 61108 RJC I CSG LLC 12 60882 Red Dirt Wind Project, LLC	IPP IPP	RJC I CSG Red Dirt Wind Project	MN OK	61504 61270		0 Solar Photovoltaic 3 Onshore Wind Turbine	SUN	WT	(U) Under construction, less than or equal to 50 percent complete (U) Under construction, less than or equal to 50 percent complete	
12 60997 Red Pine Wind Project, LLC	IPP	Red Pine Wind Project	MN	61357		0 Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	
12 60978 SP Solar 5, LLC	IPP	Mill Creek Solar (OR)	OR	61338		2 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	+
12 61114 School Sisters CSG LLC	IPP	School Sisters CSG	MN	61516		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60520 SoCore Energy LLC	IPP	Gopher CSG	MN	61426	PV1 5.0	0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60520 SoCore Energy LLC	IPP	Lahr 1, LLC	MN	61203	PV1 5.0	0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 60520 SoCore Energy LLC	IPP	Michael Solar	MN	60971		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 60520 SoCore Energy LLC	IPP	Michael Solar	MN	60971		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 60520 SoCore Energy LLC	IPP IPP	Michael Solar	MN	60971		O Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 60520 SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958		0 Solar Photovoltaic 0 Solar Photovoltaic	SUN	PV PV	(V) Under construction, more than 50 percent complete	
12 60520 SoCore Energy LLC 12 60520 SoCore Energy LLC	IPP	Nesvold Watertown Solar Nesvold Watertown Solar	MN	60958 60958		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete	
12 60520 SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 60520 SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 60520 SoCore Energy LLC	IPP	Richmond CSG	MN	61427	PV1 5.0	0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 60520 SoCore Energy LLC	IPP	Taylors Falls CSG	MN	61428	PV1 5.0	0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60163 Soltage LLC	IPP	Barker Solar, LLC	NC	61194	BARK 5.0	O Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	
12 60163 Soltage LLC	IPP	Kelly Solar, LLC	NC	61219		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60712 South Maui Renewable Resources LLC	IPP	Kihei Solar Farm	HI	61099		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 40580 Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254		7 Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	
12 40580 Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254		7 Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	
 40580 Southern Minnesota Mun P Agny 40580 Southern Minnesota Mun P Agny 	Electric Utility	Owatonna Energy Station	IVIN	60254 60254		7 Natural Gas Internal Combustion Engine 7 Natural Gas Internal Combustion Engine	NG NG	IC IC	(V) Under construction, more than 50 percent complete	
12 40580 Southern Minnesota Mun P Agny 12 60595 Spartan PV 1, LLC	Electric Utility	Owatonna Energy Station Spartan PV 1	IVIIN	60254		5 Solar Photovoltaic	SUN	P\/	(V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete	
12 60871 Stuttgart Solar, LLC	IPP	Stuttgart Solar	AR	61262		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 60381 Sunflower Solar LLC	IPP	Sunflower Solar	NC	60638		9 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 58661 Sustainable Power Group, LLC	IPP	Bayshore Solar A, LLC	CA	60481		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 58661 Sustainable Power Group, LLC	IPP	Bayshore Solar B, LLC	CA	60474	BSHRB 20.0	0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 58661 Sustainable Power Group, LLC	IPP	Bayshore Solar C, LLC	CA	60475	BSHRC 20.0	0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 58661 Sustainable Power Group, LLC	IPP	Marin Clean Energy Solar One	CA	61013	MCES1 10.5	5 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 60822 Taurus Community Solar	IPP	Taurus Community Solar	MN	61174		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60822 Taurus Community Solar	IPP	Taurus Community Solar	MN	61174		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60822 Taurus Community Solar	IPP	Taurus Community Solar	MN	61174		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60822 Taurus Community Solar	IPP	Taurus Community Solar	MN	61174		9 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60947 Tesla Inc.	IPP	Greene County Meter #1	NY AZ	60463		6 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	
12 60947 Tesla Inc. 12 60947 Tesla Inc.	IDD	Intel - Ocotillo Campus Solar Maricopa County Community Colleges- Estr	AZ AZ	60822 60230		8 Solar Photovoltaic 8 Solar Photovoltaic	SUN	D\/	(TS) Construction complete, but not yet in commercial operation (TS) Construction complete, but not yet in commercial operation	
12 60947 Tesla Inc.	IPP	Onondaga County - Oak Orchard WWTP	NY	60098		0 Solar Photovoltaic	SUN	P\/	(TS) Construction complete, but not yet in commercial operation	
12 60947 Tesla Inc.	IPP	Sacramento Regional County Sanitation PV	CA	61209		5 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 60947 Tesla Inc.	IPP	Time Warner Cable - Knowles	NY	60904		0 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	
12 60947 Tesla Inc.	IPP	US GSA - Sacramento	CA	60846		1 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60881 Thunder Ranch Wind Project, LLC	IPP	Thunder Ranch Wind Project	OK	61269	WT1 297.8	8 Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	
12 61082 Vandenberg Solar I, LLC	IPP	Vandenberg Solar Project	CA	61463	VBERG 20.6	6 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 19876 Virginia Electric & Power Co	Electric Utility	Oceana Solar	VA	60584		6 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 60749 Wadesboro Solar, LLC	IPP	Wadesboro Solar	NC	61129		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
12 56927 Wallingford Energy LLC	IPP	Wallingford Energy	CT	55517 55517		0 Natural Gas Fired Combustion Turbine 0 Natural Gas Fired Combustion Turbine	NG NG	GT GT	(V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete	
12 56927 Wallingford Energy LLC 12 60542 Willow Springs Windfarm, LLC	IPP	Wallingford Energy Willow Springs Wind Farm	TX	60901		0 Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	
12 60059 ZGlobal Inc	IPP	Madera 1 PV	CA	61421		5 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
12 60059 ZGlobal Inc	IPP	Merced 1 PV	CA	61420		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	+
1 6175 City of Falls City - (NE)	Electric Utility	Falls City	NE	2237		3 Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	
1 14203 City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant North Sub	KS	60751	CAT1 2.0	0 Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	
1 14203 City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant North Sub	KS	60751	CAT2 2.0	0 Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	
1 14203 City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant North Sub	KS	60751	CAT3 2.0	0 Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	
1 4254 Consumers Energy Co	Electric Utility	Cross Winds Energy Park	MI	58830		Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	
1 56204 Diamond Generating Corp- Ops LLC	IPP	CPV Valley Energy Center	NY	56940		2 Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	
1 56204 Diamond Generating Corp- Ops LLC	IPP	CPV Valley Energy Center	NY	56940		2 Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	
1 56204 Diamond Generating Corp- Ops LLC	IPP Commercial	CPV Valley Energy Center	IN Y	56940 59452		7 Natural Gas Fired Combined Cycle 8 Natural Gas Fired Combustion Turbine	NG NG	CA GT	(U) Under construction, less than or equal to 50 percent complete	
1 59218 East. Michigan Univ. Heating Plant 1 58970 Ecoplexus, Inc	Commercial IPP	East. Michigan Univ. Heating Plant Cottage Grove CSG, LLC	IVII	59452 61483		Natural Gas Fired Combustion Turbine O Solar Photovoltaic	SUN	D\/	(V) Under construction, more than 50 percent complete (U) Under construction, less than or equal to 50 percent complete	
1 58970 Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	+
1 58970 Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	+
1 58970 Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	+
1 58970 Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
1 58970 Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
1 58970 Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
1 58970 Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
1 58970 Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
1 58970 Ecoplexus, Inc	IPP IPP	Fox CSG, LLC	MN	61484		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
1 58970 Ecoplexus, Inc 1 58970 Ecoplexus, Inc	IPP	SunE Feely 1, LLC	IVIIV	61478 61478		0 Solar Photovoltaic 0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
1 58970 Ecoplexus, Inc 1 58970 Ecoplexus, Inc	IPP	SunE Feely 1, LLC SunE Feely 1, LLC	MNI	61478		0 Solar Photovoltaic	SUN	P\/	(V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete	
1 58970 Ecoplexus, Inc	IPP	SunE Feely 1, LLC	MNI	61478		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
1 58970 Ecoplexus, Inc	IPP	SunE Feely 1, LLC	MN	61478		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	+
1 58970 Ecoplexus, Inc	IPP	SunE Stolee, LLC	MN	61485		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
1 58970 Ecoplexus, Inc	IPP	SunE Stolee, LLC	MN	61485		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
1 58970 Ecoplexus, Inc	IPP	SunE Stolee, LLC	MN	61485		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
1 58970 Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486		O Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
1 58970 Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
1 58970 Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
1 58970 Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
1 58970 Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	
1 60252 Friendswood Energy Genco, LLC	IPP	Friendswood Energy	TX	60468		Natural Gas Fired Combustion Turbine	NG	GT D)/	(V) Under construction, more than 50 percent complete	
1 9234 Indiana Municipal Power Agency	Electric Utility	IMPA Anderson Solar Park 2	IN	61054		1 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
1 60996 OEE XXV LLC	Industrial	Valfilm Wind Project	JOH	61356	W1 1.5	5 Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	
1 60996 OEE XXV LLC	Industrial	Valfilm Wind Project	011	61356	W2 1.5	5 Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	

Table 6.5. Planned	U.S. Electric	Generating I	Unit Additions
Table v.s. I latitied	O.O. LICCUITO	Oction atting	Jilli Additions

	Planned U.S. Electric Generating Unit Additions							Energy	Prime		
		Plant Producer		Plant		Net Summe		Source	Mover	. .	Nameplate
Year Mon 2018	onth Entity ID Entity Name 1 60162 Panda Hummel Station LLC	Type	Plant Name Panda Hummel Station LLC	State PA	Plant ID 60368	Generator ID Capacity (MW CTG1 226.3	7) Technology 3 Natural Gas Fired Combined Cycle	Code NG	Code CT	Status (V) Under construction, more than 50 percent complete	Capacity (MW 244.8
2018	1 60162 Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368		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	3 Natural Gas Fired Combined Cycle	NG	СТ	(V) Under construction, more than 50 percent complete	244.8
2018	1 60162 Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368		6 Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	460.0
2018 2018	1 60389 Rabbit Hill Energy Storage Project 1 60433 Sadiebrook Solar, LLC	IPP IPP	Rabbit Hill Energy Storage Project Sadiebrook Solar, LLC	TX	60649 60719		9 Batteries 0 Solar Photovoltaic	MWH SUN	BA	(V) Under construction, more than 50 percent complete (U) Under construction, less than or equal to 50 percent complete	9.9
2018	1 60520 SoCore Energy LLC	IPP	New Auburn DPC Solar	WI	60936		5 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.5
2018	1 59696 Soluga Farms IV	IPP	Soluga Farms IV	NC	59934		9 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.9
2018	1 60947 Tesla Inc.	IPP	Intel - Ocotillo Campus Solar	AZ	60822		4 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.4
2018	1 60472 Tungsten Mountain	IPP	Tungsten Mountain	NV	60785		0 Geothermal	GEO	BT	(TS) Construction complete, but not yet in commercial operation	37.0
2018 2018	2 59474 BQ Energy LLC 2 60772 Big Timber Wind, LLC	IPP IPP	Annapolis Solar Park, LLC Big Timber Wind Farm	MD MT	60681 61155		0 Solar Photovoltaic 0 Onshore Wind Turbine	SUN	WT	(T) Regulatory approvals received. Not under construction (TS) Construction complete, but not yet in commercial operation	12.0 25.0
2018	2 58519 Clean Energy Collective LLC	IPP	BHE Pueblo 2 Community Solar Array	CO	60801		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		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2018	2 60370 DG AMP Solar, LLC	IPP	DG AMP Solar Coldwater	MI	61435	AMPCW 1.3	3 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.3
2018	2 60370 DG AMP Solar, LLC	IPP	DG AMP Solar Jackson Center	ОН	61438		6 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.6
2018 2018	2 60370 DG AMP Solar, LLC 2 60844 Flat Top Wind I, LLC	IPP	DG AMP Solar Versailles Flat Top Wind I	OH TV	61437 61212		8 Solar Photovoltaic 0 Onshore Wind Turbine	SUN	PV	(V) Under construction, more than 50 percent complete	1.8
2018	2 58959 Freeport LNG Development L.P	Industrial	Freeport LP Pretreatment Facility	TX	59145	• • • • • • • • • • • • • • • • • • •	5 Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete (V) Under construction, more than 50 percent complete	200.0 97.0
2018	2 60556 Fusion Solar Centre, L.L.C	IPP	Fusion Solar Center LLC	CT	58876		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2018	2 49893 Invenergy Services LLC	IPP	Lackawanna Energy Center	PA	60357	GEN1 465.0	0 Natural Gas Fired Combined Cycle	NG	cs	(V) Under construction, more than 50 percent complete	555.0
2018	2 60755 Phelps 158 Solar Farm, LLC	IPP	Phelps 158 Solar Farm	NC	61134		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2018	2 60947 Tesla Inc.	IPP	Onondaga County- Jamesville	NY	60232		0 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018 2018	3 60112 97WI 8ME, LLC	IPP IPP	Midway Solar Farm III	CA MA	60315 61429		0 Solar Photovoltaic 0 Solar Photovoltaic	SUN	PV PV	(T) Regulatory approvals received. Not under construction	20.0
2018	3 60281 Altus Power America Management, LLC 3 60750 Bear Poplar Solar, LLC	IPP	Big George PV Bear Poplar Solar	NC	61130		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete (L) Regulatory approvals pending. Not under construction	5.0
2018	3 59247 Bearford Solar II, LLC	IPP	Bearford Solar II	NC	59488		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	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		0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2018	3 61060 Cypress Creek Renewables	IPP	Innovative Solar 55	NC	59676		5 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	6.5
2018 2018	3 60370 DG AMP Solar, LLC 3 5310 Doswell Ltd Partnership	IPP IPP	DG AMP Solar Orrville 3 Doswell Energy Center	OH	61436 52019		3 Solar Photovoltaic 0 Natural Gas Fired Combustion Turbine	SUN NG	GT GT	(U) Under construction, less than or equal to 50 percent complete (U) Under construction, less than or equal to 50 percent complete	187.0
2018	3 5310 Doswell Ltd Partnership	IPP	Doswell Energy Center Doswell Energy Center	VA	52019		0 Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	187.0
2018	3 6452 Florida Power & Light Co	Electric Utility	Barefoot Bay Solar Energy Center	FL	61051		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	5 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2018	3 6452 Florida Power & Light Co	Electric Utility	Loggerhead Solar Energy Center	FL	61052		5 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2018	3 19547 Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328		4 Other Waste Biomass	OBL	IC	(U) Under construction, less than or equal to 50 percent complete	8.4
2018 2018	3 19547 Hawaiian Electric Co Inc 3 19547 Hawaiian Electric Co Inc	Electric Utility Electric Utility	Schofield Generating Station Schofield Generating Station	HI	60328 60328		4 Other Waste Biomass 4 Other Waste Biomass	OBL	IC IC	(U) Under construction, less than or equal to 50 percent complete (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		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		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	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		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		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018 2018	3 61102 Minnesota Solar CSG 8, LLC 3 61080 North Smithfield Solar Power 1, LLC	IPP IPP	Carver Gladden North Smithfield Solar Power 1	RI	61495 61461		0 Solar Photovoltaic 0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete (T) Regulatory approvals received. Not under construction	1.0
2018	3 13781 Northern States Power Co - Minnesota	Electric Utility	Black Dog	MN	1904		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		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		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		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2018 2018	3 60748 Salisbury Solar, LLC 3 57109 St Joseph Energy Center LLC	IPP IPP	Salisbury Solar St Joseph Energy Center	NC IN	61128 57794		0 Solar Photovoltaic 0 Natural Gas Fired Combined Cycle	SUN NG	PV	(L) Regulatory approvals pending. Not under construction	238.0
2018	3 57109 St Joseph Energy Center LLC	IPP	St Joseph Energy Center St Joseph Energy Center	IN	57794		0 Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete (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		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	8 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.8
2018	3 60947 Tesla Inc.	IPP	Broome County	NY	60507		0 Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018	3 60947 Tesla Inc.	IPP	Broome County	NY	60507		O Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018 2018	3 60947 Tesla Inc. 3 60947 Tesla Inc.	IPP	Hamilton College Jefferson-Lewis BOCES Solar	NY	61103 60819		0 Solar Photovoltaic 0 Solar Photovoltaic	SUN	PV PV	(U) Under construction, less than or equal to 50 percent complete (L) Regulatory approvals pending. Not under construction	2.0
2018	4 60571 AEP Onsite Partners	IPP	Ohio Northern University Solar Site	OH	60913		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		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		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		5 Petroleum Liquids	DFO	IC	(T) Regulatory approvals received. Not under construction	0.5
2018	4 59474 BQ Energy LLC 4 59474 BQ Energy LLC	IPP IPP	Kings Park Solar I Kings Park Solar II	NY	59880 59881		0 Solar Photovoltaic 0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction (T) Regulatory approvals received. Not under construction	2.0
2018	4 60905 ETCAP NES CS MN 03 LLC	IPP	Marmas Solar	MN	61139		0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction (T) Regulatory approvals received. Not under construction	5.0
2018	4 60905 ETCAP NES CS MN 03 LLC	IPP	Marmas Solar	MN	61139		0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2018	4 60905 ETCAP NES CS MN 03 LLC	IPP	Marmas Solar	MN	61139		0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2018	4 60905 ETCAP NES CS MN 03 LLC	IPP	Marmas Solar	MN	61139		0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2018	4 60905 ETCAP NES CS MN 03 LLC	IPP	Marmas Solar	MN	61139		0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2018	4 58135 Ecos Energy LLC	IPP	Lake Perris Solar San Jacinto Solar	CA	60973 60972		5 Solar Photovoltaic 5 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated(P) Planned for installation, but regulatory approvals not initiated	1.5
		IPP	Sun susinto osiai	CA	58114		9 Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	1.9
2018 2018	4 58135 Ecos Energy LLC	IPP IPP	Foundation NWNA	ICA			0 Onshore Wind Turbine		WT	(V) Under construction, more than 50 percent complete	300.0
2018		" '	Foundation NWNA Santa Rita Wind Energy	TX	60987	GLIVIT 300.0	o ononoro vima raibino	WND	' ' '		
2018 2018 2018 2018	4 58135 Ecos Energy LLC 4 57484 Foundation CA Fund V Manager, LLC 4 49893 Invenergy Services LLC 4 61017 Lindstrom CSG 1, LLC	IPP IPP		TX MN	61382	LIND1 1.0	0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018 2018 2018 2018 2018	4 58135 Ecos Energy LLC 4 57484 Foundation CA Fund V Manager, LLC 4 49893 Invenergy Services LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC	IPP IPP IPP	Santa Rita Wind Energy Lindstrom Solar Lindstrom Solar	TX MN MN	61382 61382	LIND1 1.0	0 Solar Photovoltaic 0 Solar Photovoltaic	SUN SUN	PV PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018 2018 2018 2018 2018 2018	4 58135 Ecos Energy LLC 4 57484 Foundation CA Fund V Manager, LLC 4 49893 Invenergy Services LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC	IPP IPP IPP IPP	Santa Rita Wind Energy Lindstrom Solar Lindstrom Solar Lindstrom Solar	TX MN MN MN	61382 61382 61382	LIND1 1.0 LIND2 1.0 LIND3 1.0	0 Solar Photovoltaic 0 Solar Photovoltaic 0 Solar Photovoltaic	SUN SUN SUN	PV PV PV	(U) Under construction, less than or equal to 50 percent complete (U) Under construction, less than or equal to 50 percent complete	1.0 1.0 1.0
2018 2018 2018 2018 2018 2018 2018	4 58135 Ecos Energy LLC 4 57484 Foundation CA Fund V Manager, LLC 4 49893 Invenergy Services LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 59124 NTE Ohio LLC	IPP IPP IPP	Santa Rita Wind Energy Lindstrom Solar Lindstrom Solar Lindstrom Solar Middletown Energy Center	TX MN MN MN OH	61382 61382 61382 59326	LIND1 1.0 LIND2 1.0 LIND3 1.0 MEC1 257.0	0 Solar Photovoltaic 0 Solar Photovoltaic 0 Solar Photovoltaic 0 Natural Gas Fired Combined Cycle	SUN SUN SUN NG	PV PV PV CT	(U) Under construction, less than or equal to 50 percent complete (U) Under construction, less than or equal to 50 percent complete (V) Under construction, more than 50 percent complete	1.0 1.0 1.0 310.2
2018 2018 2018 2018 2018 2018	4 58135 Ecos Energy LLC 4 57484 Foundation CA Fund V Manager, LLC 4 49893 Invenergy Services LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC	IPP IPP IPP IPP IPP IPP	Santa Rita Wind Energy Lindstrom Solar Lindstrom Solar Lindstrom Solar	TX MN MN MN OH OH	61382 61382 61382	LIND1 1.0 LIND2 1.0 LIND3 1.0 MEC1 257.0 MEC2 227.0	0 Solar Photovoltaic 0 Solar Photovoltaic 0 Solar Photovoltaic	SUN SUN SUN	PV PV PV	(U) Under construction, less than or equal to 50 percent complete (U) Under construction, less than or equal to 50 percent complete (V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete	1.0 1.0 1.0 310.2 233.7
2018 2018 2018 2018 2018 2018 2018 2018	4 58135 Ecos Energy LLC 4 57484 Foundation CA Fund V Manager, LLC 4 49893 Invenergy Services LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 59124 NTE Ohio LLC 4 59124 NTE Ohio LLC	IPP IPP IPP IPP IPP IPP	Santa Rita Wind Energy Lindstrom Solar Lindstrom Solar Lindstrom Solar Middletown Energy Center Middletown Energy Center	TX MN MN MN OH OH TX MN	61382 61382 61382 59326 59326	LIND1 1.0 LIND2 1.0 LIND3 1.0 MEC1 257.0 MEC2 227.0 WT1 160.0	0 Solar Photovoltaic 0 Solar Photovoltaic 0 Solar Photovoltaic 0 Natural Gas Fired Combined Cycle 0 Natural Gas Fired Combined Cycle	SUN SUN SUN NG NG	PV PV PV CT	(U) Under construction, less than or equal to 50 percent complete (U) Under construction, less than or equal to 50 percent complete (V) Under construction, more than 50 percent complete	1.0 1.0 1.0 310.2 233.7
2018 2018 2018 2018 2018 2018 2018 2018	4 58135 Ecos Energy LLC 4 57484 Foundation CA Fund V Manager, LLC 4 49893 Invenergy Services LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 59124 NTE Ohio LLC 4 59124 NTE Ohio LLC 4 60443 Rattlesnake Power, LLC 4 16181 Rochester Public Utilities	IPP	Santa Rita Wind Energy Lindstrom Solar Lindstrom Solar Lindstrom Solar Middletown Energy Center Middletown Energy Center Rattlesnake Power, LLC Westside Energy Station Westside Energy Station	TX MN MN MN OH OH TX MN	61382 61382 61382 59326 59326 60743 60564 60564	LIND1 1.0 LIND2 1.0 LIND3 1.0 MEC1 257.0 MEC2 227.0 WT1 160.0 WES1 9.0 WES2 9.0	O Solar Photovoltaic O Solar Photovoltaic O Solar Photovoltaic O Natural Gas Fired Combined Cycle O Natural Gas Fired Combined Cycle O Onshore Wind Turbine O Natural Gas Internal Combustion Engine O Natural Gas Internal Combustion Engine	SUN SUN SUN NG NG WND NG	PV PV PV CT	(U) Under construction, less than or equal to 50 percent complete (U) Under construction, less than or equal to 50 percent complete (V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete (U) Under construction, less than or equal to 50 percent complete (L) Regulatory approvals pending. Not under construction (L) Regulatory approvals pending. Not under construction	1.0 1.0 1.0 310.2 233.7
2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018	4 58135 Ecos Energy LLC 4 57484 Foundation CA Fund V Manager, LLC 4 49893 Invenergy Services LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 59124 NTE Ohio LLC 4 59124 NTE Ohio LLC 4 60443 Rattlesnake Power, LLC 4 16181 Rochester Public Utilities 4 16181 Rochester Public Utilities	IPP	Santa Rita Wind Energy Lindstrom Solar Lindstrom Solar Lindstrom Solar Middletown Energy Center Middletown Energy Center Rattlesnake Power, LLC Westside Energy Station Westside Energy Station Westside Energy Station	TX MN MN MN OH OH TX MN MN MN	61382 61382 61382 59326 59326 60743 60564 60564	LIND1 1.0 LIND2 1.0 LIND3 1.0 MEC1 257.0 MEC2 227.0 WT1 160.0 WES1 9.0 WES2 9.0 WES3 9.0	O Solar Photovoltaic O Solar Photovoltaic O Solar Photovoltaic O Natural Gas Fired Combined Cycle O Natural Gas Fired Combined Cycle O Onshore Wind Turbine O Natural Gas Internal Combustion Engine O Natural Gas Internal Combustion Engine O Natural Gas Internal Combustion Engine	SUN SUN SUN NG NG NG WND NG NG NG	PV PV PV CT	(U) Under construction, less than or equal to 50 percent complete (U) Under construction, less than or equal to 50 percent complete (V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete (U) Under construction, less than or equal to 50 percent complete (L) Regulatory approvals pending. Not under construction (L) Regulatory approvals pending. Not under construction (L) Regulatory approvals pending. Not under construction	1.0 1.0 1.0 310.2 233.7
2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018	4 58135 Ecos Energy LLC 4 57484 Foundation CA Fund V Manager, LLC 4 49893 Invenergy Services LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 59124 NTE Ohio LLC 4 59124 NTE Ohio LLC 4 59124 NTE Ohio LLC 4 16181 Rochester Public Utilities	IPP	Santa Rita Wind Energy Lindstrom Solar Lindstrom Solar Lindstrom Solar Middletown Energy Center Middletown Energy Center Rattlesnake Power, LLC Westside Energy Station	TX MN MN MN OH OH TX MN MN MN MN	61382 61382 61382 59326 59326 60743 60564 60564 60564	LIND1 1.0 LIND2 1.0 LIND3 1.0 MEC1 257.0 MEC2 227.0 WT1 160.0 WES1 9.0 WES2 9.0 WES3 9.0 WES4 9.0	O Solar Photovoltaic O Solar Photovoltaic O Solar Photovoltaic O Solar Photovoltaic O Natural Gas Fired Combined Cycle O Natural Gas Fired Combined Cycle O Onshore Wind Turbine O Natural Gas Internal Combustion Engine	SUN SUN SUN NG NG NG WND NG NG NG NG NG	PV PV PV CT	 (U) Under construction, less than or equal to 50 percent complete (U) Under construction, less than or equal to 50 percent complete (V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete (U) Under construction, less than or equal to 50 percent complete (L) Regulatory approvals pending. Not under construction 	1.0 1.0 1.0
2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018	4 58135 Ecos Energy LLC 4 57484 Foundation CA Fund V Manager, LLC 4 49893 Invenergy Services LLC 4 61017 Lindstrom CSG 1, LLC 4 59124 NTE Ohio LLC 4 59124 NTE Ohio LLC 4 59124 NTE Ohio LLC 4 60443 Rattlesnake Power, LLC 4 16181 Rochester Public Utilities	IPP	Santa Rita Wind Energy Lindstrom Solar Lindstrom Solar Lindstrom Solar Middletown Energy Center Middletown Energy Center Rattlesnake Power, LLC Westside Energy Station	TX MN MN MN MN MN	61382 61382 61382 59326 59326 60743 60564 60564 60564 60564	LIND1 1.0 LIND2 1.0 LIND3 1.0 MEC1 257.0 MEC2 227.0 WT1 160.0 WES1 9.0 WES2 9.0 WES3 9.0 WES4 9.0 WES5 9.0	O Solar Photovoltaic O Solar Photovoltaic O Solar Photovoltaic O Natural Gas Fired Combined Cycle O Natural Gas Fired Combined Cycle O Onshore Wind Turbine O Natural Gas Internal Combustion Engine	SUN SUN SUN NG	PV PV CT CA WT IC IC IC IC	(U) Under construction, less than or equal to 50 percent complete (U) Under construction, less than or equal to 50 percent complete (V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete (U) Under construction, less than or equal to 50 percent complete (L) Regulatory approvals pending. Not under construction	1.0 1.0 1.0 310.2 233.7
2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018 2018	4 58135 Ecos Energy LLC 4 57484 Foundation CA Fund V Manager, LLC 4 49893 Invenergy Services LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 59124 NTE Ohio LLC 4 59124 NTE Ohio LLC 4 59124 NTE Ohio LLC 4 16181 Rochester Public Utilities	IPP	Santa Rita Wind Energy Lindstrom Solar Lindstrom Solar Lindstrom Solar Middletown Energy Center Middletown Energy Center Rattlesnake Power, LLC Westside Energy Station	TX MN MN MN OH OH TX MN MN MN MN MN MN	61382 61382 61382 59326 59326 60743 60564 60564 60564	LIND1 1.0 LIND2 1.0 LIND3 1.0 MEC1 257.0 MEC2 227.0 WT1 160.0 WES1 9.0 WES2 9.0 WES3 9.0 WES4 9.0 WES5 9.0 STCL1 1.0	O Solar Photovoltaic O Solar Photovoltaic O Solar Photovoltaic O Solar Photovoltaic O Natural Gas Fired Combined Cycle O Natural Gas Fired Combined Cycle O Onshore Wind Turbine O Natural Gas Internal Combustion Engine	SUN SUN SUN NG NG NG WND NG NG NG NG NG	PV PV PV CT	 (U) Under construction, less than or equal to 50 percent complete (U) Under construction, less than or equal to 50 percent complete (V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete (U) Under construction, less than or equal to 50 percent complete (L) Regulatory approvals pending. Not under construction (L) Regulatory approvals received. Not under construction 	1.0 1.0 1.0 310.2 233.7
2018 2018 2018 2018 2018 2018 2018 2018	4 58135 Ecos Energy LLC 4 57484 Foundation CA Fund V Manager, LLC 4 49893 Invenergy Services LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 59124 NTE Ohio LLC 4 59124 NTE Ohio LLC 4 60443 Rattlesnake Power, LLC 4 16181 Rochester Public Utilities	IPP	Santa Rita Wind Energy Lindstrom Solar Lindstrom Solar Lindstrom Solar Middletown Energy Center Middletown Energy Center Rattlesnake Power, LLC Westside Energy Station St. Cloud Solar	TX MN MN MN MN MN	61382 61382 61382 59326 59326 60743 60564 60564 60564 60564 60564 60564 61384	LIND1 1.0 LIND2 1.0 LIND3 1.0 MEC1 257.0 MEC2 227.0 WT1 160.0 WES1 9.0 WES2 9.0 WES3 9.0 WES4 9.0 WES5 9.0 STCL1 1.0 STCL2 1.0	O Solar Photovoltaic O Solar Photovoltaic O Solar Photovoltaic O Natural Gas Fired Combined Cycle O Natural Gas Fired Combined Cycle O Onshore Wind Turbine O Natural Gas Internal Combustion Engine O Solar Photovoltaic	SUN SUN SUN NG SUN	PV PV CT CA WT IC IC IC IC IC PV	(U) Under construction, less than or equal to 50 percent complete (U) Under construction, less than or equal to 50 percent complete (V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete (U) Under construction, less than or equal to 50 percent complete (L) Regulatory approvals pending. Not under construction	1.0 1.0 1.0 310.2 233.7
2018 2018 2018 2018 2018 2018 2018 2018	4 58135 Ecos Energy LLC 4 57484 Foundation CA Fund V Manager, LLC 4 49893 Invenergy Services LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 61017 Lindstrom CSG 1, LLC 4 59124 NTE Ohio LLC 4 59124 NTE Ohio LLC 4 60443 Rattlesnake Power, LLC 4 16181 Rochester Public Utilities	IPP	Santa Rita Wind Energy Lindstrom Solar Lindstrom Solar Lindstrom Solar Middletown Energy Center Middletown Energy Center Rattlesnake Power, LLC Westside Energy Station St. Cloud Solar St. Cloud Solar	TX MN MN MN MN MN	61382 61382 61382 59326 59326 60743 60564 60564 60564 60564 60564 61384	LIND1 1.0 LIND2 1.0 LIND3 1.0 MEC1 257.0 MEC2 227.0 WT1 160.0 WES1 9.3 WES2 9.3 WES3 9.3 WES4 9.3 WES5 9.3 STCL1 1.0 STCL2 1.0 STCL3 1.0 STCL4 1.0	O Solar Photovoltaic O Solar Photovoltaic O Solar Photovoltaic O Natural Gas Fired Combined Cycle O Natural Gas Fired Combined Cycle O Onshore Wind Turbine O Natural Gas Internal Combustion Engine O Solar Photovoltaic O Solar Photovoltaic	SUN SUN SUN NG NG NG NG NG NG NG SUN SUN	PV PV CT CA WT IC IC IC IC PV PV	 (U) Under construction, less than or equal to 50 percent complete (U) Under construction, less than or equal to 50 percent complete (V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete (U) Under construction, less than or equal to 50 percent complete (L) Regulatory approvals pending. Not under construction (L) Regulatory approvals received. Not under construction (T) Regulatory approvals received. Not under construction 	1.0 1.0 1.0 310.2 233.7

Table 6.5. Planned	U.S. Electric	Generating I	Unit Additions
Table v.s. I latitied	O.O. LICCUITO	Oction atting	Jilli Additions

		Plant Producer		Plant		Net Summe	or.	Energy Source	Prime Mover		Namepla
Year Mor	nth Entity ID Entity Name	Type	Plant Name	State	Plant ID			Code	Code	Status Ca	Capacity (M)
2018	4 58658 Sunlight Partners	IPP	Alexis Solar	NC	60139		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
2018	4 58658 Sunlight Partners	IPP	Anna Solar	NC	60176		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	Ę
2018	4 58658 Sunlight Partners	IPP	Blue Bird Solar	NC	60177		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4
2018 2018	4 58658 Sunlight Partners	IPP	Bonnie Solar	NC	60175		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5
2018	4 58658 Sunlight Partners 4 58658 Sunlight Partners	IPP	Brooke Solar Cardinal Solar	NC NC	60140 60174		5 Solar Photovoltaic 0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction (L) Regulatory approvals pending. Not under construction	5
2018	4 58658 Sunlight Partners	IPP	Carter Solar	NC NC	60167		0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5
2018	4 58658 Sunlight Partners	IPP	Cash Solar	NC	60178		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
2018	4 58658 Sunlight Partners	IPP	Christina Solar	NC	60172		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
2018	4 58658 Sunlight Partners	IPP	Clayton Solar	NC	60171		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5
2018	4 58658 Sunlight Partners	IPP	Eagle Solar	NC	60161	PV1 4.	0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
2018	4 58658 Sunlight Partners	IPP	Grove Solar	NC	60181		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5
2018	4 58658 Sunlight Partners	IPP	Hawk Solar	NC	60163		0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5
2018	4 58658 Sunlight Partners	IPP	Heedeh Solar	NC	60157		5 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4
2018	4 58658 Sunlight Partners	IPP	Higgins Solar	NC	60166		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5
2018	4 58658 Sunlight Partners	IPP	Icarus Solar	NC	60169		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3
2018	4 58658 Sunlight Partners	IPP	Iga Solar Izia Solar	NC NC	60170		0 Solar Photovoltaic 0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5
2018 2018	4 58658 Sunlight Partners 4 58658 Sunlight Partners	IDD	Jordan Solar	NC NC	60141 60164		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction (L) Regulatory approvals pending. Not under construction	
2018	4 58658 Sunlight Partners	IPP	June Solar	NC NC	60158		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
2018	4 58658 Sunlight Partners	IPP	Kathleen Solar	NC.	60180		0 Solar Photovoltaic	SUN	P\/	(L) Regulatory approvals pending. Not under construction	
2018	4 58658 Sunlight Partners	IPP	Longleaf Solar	NC NC	60173		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5
2018	4 58658 Sunlight Partners	IPP	Robin Solar	NC	60165		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
2018	4 58658 Sunlight Partners	IPP	Roman Solar	NC	60159		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
2018	4 58658 Sunlight Partners	IPP	Sadie Solar	NC	60168		0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	
2018	4 58658 Sunlight Partners	IPP	Shelter Solar	NC	60156		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	Į
2018	4 58658 Sunlight Partners	IPP	Signature Solar	NC	60155		0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	Ę
2018	4 58658 Sunlight Partners	IPP	Tate Solar	NC	60160		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
2018	4 58658 Sunlight Partners	IPP	Wilfork Solar	NC	60162	PV1 5.	0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	į
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
2018	5 19002 CPV Towantic, LLC	IPP	CPV Towantic Energy Center	СТ	56047	• • • • • • • • • • • • • • • • • • •	6 Natural Gas Fired Combined Cycle	NG	СТ	(V) Under construction, more than 50 percent complete	280
2018	5 19002 CPV Towantic, LLC	IPP	CPV Towantic Energy Center	СТ	56047		6 Natural Gas Fired Combined Cycle	NG	СТ	(V) Under construction, more than 50 percent complete	280
2018	5 19002 CPV Towantic, LLC	IPP	CPV Towantic Energy Center	CT	56047		8 Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	280
2018	5 6455 Duke Energy Florida, LLC	Electric Utility	Citrus County Combined Cycle Plant	FL	60138		7 Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310
2018	5 6455 Duke Energy Florida, LLC	Electric Utility	Citrus County Combined Cycle Plant	FL	60138		7 Natural Gas Fired Combined Cycle	NG NG	CT	(V) Under construction, more than 50 percent complete	310
2018	5 6455 Duke Energy Florida, LLC	Electric Utility	Citrus County Combined Cycle Plant	FL	60138		7 Natural Gas Fired Combined Cycle		CA	(V) Under construction, more than 50 percent complete	364
2018 2018	5 61104 Elbe Solar Center LLC 5 61070 Foundation CA Fund IX Manager, LLC	IDD	Elbe Solar Center Foundation California Training Facility	CA	61497 61442		0 Solar Photovoltaic 8 Onshore Wind Turbine	SUN WND	WT	(T) Regulatory approvals received. Not under construction (U) Under construction, less than or equal to 50 percent complete	
2018	5 58901 Hydro Green Energy	IDD	Braddock Lock and Dam	PΔ	59091		3 Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	
2018	5 59675 Moxie Freedom LLC	IPP	Moxie Freedom Generation Plant	PA	59906		Natural Gas Fired Combined Cycle	NG	CC	(U) Under construction, less than or equal to 50 percent complete	529
2018	5 59675 Moxie Freedom LLC	IPP	Moxie Freedom Generation Plant	PA	59906		0 Natural Gas Fired Combined Cycle	NG	CC	(U) Under construction, less than or equal to 50 percent complete	529
2018	5 60100 PSEG Keys Energy Center, LLC	IPP	Keys Energy Center	MD	60302		0 Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	359
2018	5 60100 PSEG Keys Energy Center, LLC	IPP	Keys Energy Center	MD	60302		0 Natural Gas Fired Combined Cycle	NG	СТ	(V) Under construction, more than 50 percent complete	235
2018	5 60100 PSEG Keys Energy Center, LLC	IPP	Keys Energy Center	MD	60302		0 Natural Gas Fired Combined Cycle	NG	СТ	(V) Under construction, more than 50 percent complete	235
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
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	f
2018	6 60367 BRE NC Solar 3, LLC	IPP	BRE NC Solar 3	NC	60627		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	Ţ.
2018	6 60368 BRE NC Solar 4, LLC	IPP	BRE NC Solar 4	NC	60628		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	<u></u>
2018	6 60170 Clean Energy Future-Lordstown, LLC	IPP	Clean Energy Future-Lordstown, LLC	OH	60376		0 Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	311
2018	6 60170 Clean Energy Future-Lordstown, LLC	IPP	Clean Energy Future-Lordstown, LLC	ОН	60376		0 Natural Gas Fired Combined Cycle	NG	СТ	(V) Under construction, more than 50 percent complete	311
2018 2018	6 60170 Clean Energy Future-Lordstown, LLC	IPP	Clean Energy Future-Lordstown, LLC	OH	60376		0 Natural Gas Fired Combined Cycle	NG SUN	CA	(V) Under construction, more than 50 percent complete	340 180
2018	6 56769 Consolidated Edison Development Inc.	IPP	Castle Gap Solar	I X	60123		0 Solar Photovoltaic 0 Batteries	MWH	PV	(U) Under construction, less than or equal to 50 percent complete	180
2018	6 59997 Customized Energy Solutions 6 59997 Customized Energy Solutions	IPP	ESS Fairgrounds ESS Wesel	MD	60215 60214		0 Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction (T) Regulatory approvals received. Not under construction	
2018	6 58970 Ecoplexus, Inc	IPP	Manning PV 1	NC	59520		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
2018	6 59735 Enerparc CA2, LLC	IPP	Cloverdale Solar Center	CA	60813		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
2018	6 60147 Enerparc Solar Development, LLC	IPP	Gastonia Solar Center	NC	60359		3 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	,
2018	6 61070 Foundation CA Fund IX Manager, LLC	IPP	Foundation Mann Packing	CA	61443		8 Onshore Wind Turbine		WT	(U) Under construction, less than or equal to 50 percent complete	1
2018	6 61070 Foundation CA Fund IX Manager, LLC	IPP	Foundation Salinas Valley State Prison	CA	61444		8 Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	
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	(T) Regulatory approvals received. Not under construction	9:
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
2018	6 60747 Gamble Solar, LLC	IPP	Gamble Solar	NC	61127		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	,
2018	6 60886 Gray Hawk Solar, LLC	IPP	Gray Hawk Solar	AZ	61272		0 Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5
2018	6 60849 Green Beanworks C, LLC	IPP	Green Beanworks C PV	CA	61215		0 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	;
2018	6 60850 Green Beanworks D, LLC	IPP	Green Beanworks D PV	CA	61216		0 Solar Photovoltaic	SUN	PV PV	(P) Planned for installation, but regulatory approvals not initiated	;
2018	6 60534 Halifax Solar LLC	IPP	Halifax Solar LLC	NC NC	60884		0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	
2018	6 60356 Hexagon Energy	IPP	Bay Branch Solar	INC	60601		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20
2018 2018	6 9273 Indianapolis Power & Light Co 6 9273 Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991 991		0 Natural Gas Fired Combined Cycle 0 Natural Gas Fired Combined Cycle	NG NG	CT	(V) Under construction, more than 50 percent complete	20 [°] 20 [°]
2018	6 9273 Indianapolis Power & Light Co 6 9273 Indianapolis Power & Light Co	Electric Utility Electric Utility	Eagle Valley (IN) Eagle Valley (IN)	IN	991		0 Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete	23
2018	6 58783 Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	II II	58903		6 Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	
2018	6 58783 Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL.	58903		6 Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	
2018	6 58783 Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903		6 Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	
2018	6 58783 Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903		6 Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	
2018	6 60527 Milestone Wildomar LLC	IPP	Wildomar Solar	CA	60872		2 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
2018	6 60471 Mt. Tom Solar, LLC	IPP	Mt. Tom Solar Project	MA	60906	BA1 3.	1 Batteries	MWH	ВА	(P) Planned for installation, but regulatory approvals not initiated	
2018	6 59357 Navasota Energy Generation Holdings	IPP	Clear Springs Energy Center	TX	59615		0 Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	18
2018	6 59357 Navasota Energy Generation Holdings	IPP	Clear Springs Energy Center	TX	59615		0 Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	18
2018	6 59357 Navasota Energy Generation Holdings	IPP	Clear Springs Energy Center	TX	59615		0 Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	18
2018	6 59357 Navasota Energy Generation Holdings	IPP	Union Valley Energy Center	TX	59616		0 Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	18
2018	6 59357 Navasota Energy Generation Holdings	IPP	Union Valley Energy Center	TX	59616		0 Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	18
2018	6 59357 Navasota Energy Generation Holdings	IPP	Union Valley Energy Center	TX	59616		0 Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	18
2018	6 59357 Navasota Energy Generation Holdings	IPP	Van Alat yn Energy Center	TX	59617		0 Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	18
2018	6 59357 Navasota Energy Generation Holdings	IPP	Van Alstyne Energy Center	TX	59617		0 Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	18
2018	6 59357 Navasota Energy Generation Holdings	IPP	Van Alstyne Energy Center	IX NO	59617		0 Natural Gas Fired Combustion Turbine	NG	GT DV	(P) Planned for installation, but regulatory approvals not initiated	18
2018	6 58477 Ozenergies, Inc.	IPP	Five Forks Solar	NC OD	59951		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2
2018	6 58764 Origis Energy USA, Inc	IPP IPP	OR Solar 2, LLC	OR	61200		0 Solar Photovoltaic	SUN	ICT	(P) Planned for installation, but regulatory approvals not initiated	1
2018	6 15147 PSEG Fossil LLC 6 15147 PSEG Fossil LLC	<u>" '</u>	PSEG Sewaren Generating Station PSEG Sewaren Generating Station	NJ	2411 2411		0 Natural Gas Fired Combined Cycle 0 Natural Gas Fired Combined Cycle	NG NG	CT CA	(V) Under construction, more than 50 percent complete	43 28
2018	61 161/1/IDSEL: E0001111:	lipp	IDCL(: Comoron () an aretis a literature	18.1		71121 210	CONTRACT LESS EITEG L'OMNINGG (VOIA	10011	н. А	(V) Under construction, more than 50 percent complete	~ ~ ~

Table 6.5	Planned	II S	Flectric	Generating	Unit	Additions
I able 0.5.	riailleu	U.J.		Generalina	Ullit	Additions

Year Montl	th 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	Namepla Capacity (M)
2018	6 18642 Tennessee Valley Authority	Electric Utility	Allen Combined Cycle Plant	TN	60671	CTG1	311.9 Natural Gas Fired Combined Cycle	NG	СТ	(U) Under construction, less than or equal to 50 percent complete	347
2018	6 18642 Tennessee Valley Authority	Electric Utility	Allen Combined Cycle Plant	TN	60671	CTG2	311.9 Natural Gas Fired Combined Cycle	NG	СТ	(U) Under construction, less than or equal to 50 percent complete	347
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
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
2018	6 60596 Western Grid Development, LLC	IPP	Santa Paula Energy Storage	CA	60946	SPES1	5.0 Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	5
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
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
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
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
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
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
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
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
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
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
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
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
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
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	50
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
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
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	
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	
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
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	100
2018	7 59316 Whitetail Solar LLC	IPP	Whitetail Solar	SC	59569	PV1	10.0 Solar Photovoltaic	SUN	PV		1
2018		IDD	Two Mile Desert Project	NIC	60510	PV1	16.2 Solar Photovoltaic	SUN	D\/	(L) Regulatory approvals pending. Not under construction	1 1
2010	8 60292 Advanced Solar Power Holdings, Inc	IDD	-	TV	+			NIC	GT CT	(L) Linder construction, less than or equal to 50 percent complete	
2010	8 60248 Agilon Energy LLC	IPP	Victoria City Power LLC	1 ^ T V	61241	VC-1	43.0 Natural Gas Fired Combustion Turbine	NG NG	GT	(U) Under construction, less than or equal to 50 percent complete	5
2018	8 60248 Agilon Energy LLC	" '	Victoria City Power LLC	TX	61241	VC-2	43.0 Natural Gas Fired Combustion Turbine		T .	(U) Under construction, less than or equal to 50 percent complete	
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	5
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	5
2018	8 56608 Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	CTG5	216.3 Natural Gas Fired Combined Cycle	NG	СТ	(U) Under construction, less than or equal to 50 percent complete	23
2018	8 56608 Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	CTG6	216.3 Natural Gas Fired Combined Cycle	NG	СТ	(U) Under construction, less than or equal to 50 percent complete	23
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	41
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	
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	
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	2
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	
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	
.018	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	2
2018	8 59123 NTE Carolinas, LLC	IPP	Kings Mountain Energy Center	NC	59325	KMEC1	259.0 Natural Gas Fired Combined Cycle	NG	СТ	(V) Under construction, more than 50 percent complete	31
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	23
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
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
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
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
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
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	-
2018	9 60874 Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	PΑ	61286	GEN1	4.2 Natural Gas Internal Combustion Engine	NG	IC.	(P) Planned for installation, but regulatory approvals not initiated	
2018	9 60874 Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	ΡΔ	61286	GEN2	4.2 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	
2018	9 60874 Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	DΔ	61286	GEN3	4.2 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	
2018	9 60874 Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	DΔ	61286	GEN4	4.2 Natural Gas Internal Combustion Engine	NG	IC IC	(P) Planned for installation, but regulatory approvals not initiated	
2018	9 60874 Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	DA.	61286	GEN5	4.2 Natural Gas Internal Combustion Engine	NG	IC IC	(P) Planned for installation, but regulatory approvals not initiated	
2018	9 60910 Sun Farm V, LLC	IDD	Sun Farm V, LLC	NC	61287	SF5PV	4.8 Solar Photovoltaic	SUN	DV/		
	'	IPP	·	NC					PV	(P) Planned for installation, but regulatory approvals not initiated	
2018	9 59840 Wallace Solar 2 LLC	IPP	Walface Solar 2	INC DA	60090	2MWPV	1.9 Solar Photovoltaic	SUN	PV IO	(T) Regulatory approvals received. Not under construction	
2018	9 60875 Wolf Run Energy LLC		Wolf Run Energy	PA	61263	GEN1	4.4 Natural Gas Internal Combustion Engine	NG	10	(P) Planned for installation, but regulatory approvals not initiated	
2018	9 60875 Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN2	4.4 Natural Gas Internal Combustion Engine	NG	IC I	(P) Planned for installation, but regulatory approvals not initiated	
2018	9 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	
2018	9 60875 Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN4	4.4 Natural Gas Internal Combustion Engine	NG	IC IC	(P) Planned for installation, but regulatory approvals not initiated	
2018	9 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	
2018 10	0 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	10
2018 10	0 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	10
2018 10	0 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	10
018 10	0 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	
018 10	0 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	
018 10	0 61054 Fluvanna Wind Energy 2 LLC	IPP	Gopher Creek Wind Farm	TX	61417	GCWF	152.0 Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	1
018 10	0 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	1
018 10	0 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	2
018 10	0 61101 Minnesota Solar CSG 1, LLC	IPP	Wrigth Cuddyer	MN	61494	41327	1.0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
018 10	0 61101 Minnesota Solar CSG 1, LLC	IPP	Wrigth Cuddyer	MN	61494	41328	1.0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
018 10	0 61101 Minnesota Solar CSG 1, LLC	IPP	Wrigth Cuddyer	MN	61494	41329	1.0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	
018 10	0 15466 Public Service Co of Colorado	Electric Utility	Rush Creek Wind	СО	60619	GEN1	576.0 Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	6
018 10	0 17633 Southern Indiana Gas & Elec Co	Electric Utility	Oak Hill Solar Array	IN	61333	OHSA1	2.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
018 10	0 17633 Southern Indiana Gas & Elec Co	Electric Utility	Volkman Road Solar Array	IN	61334	VRSA1	2.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
- 1 ''	0 17633 Southern Indiana Gas & Elec Co	Electric Utility	Volkman Road Solar Array	IN	61334	VRSA2	1.0 Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	
18 1	0 59598 Tooele Army Depot	IDD	Tooele Army Depot	LIT	59817	PV1	1.5 Solar Photovoltaic	SUN	P\/	(V) Under construction, more than 50 percent complete	
	VI VUUVUI I VUUVU I IIIV BEEKK	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	
18 10		n 1	AES LAWAI SOLAR	ш	61068	LAWA1	20.0 Solar Photovoltaic	SUN	P\/	(T) Regulatory approvals received. Not under construction	-
18 10 18 10	0 59056 Tri Global Energy, LLC	IPP	AES LAWAI SOLAR	' '' Ы	61068	LAWA1	20.0 Batteries	MWH	RΔ		-
18 10 18 10 18 1	0 59056 Tri Global Energy, LLC 1 60691 AES LAWAI SOLAR, LLC	IPP		I II	01008				CT DV	(T) Regulatory approvals received. Not under construction	
118 10 118 10 118 11 118 11	0 59056 Tri Global Energy, LLC 1 60691 AES LAWAI SOLAR, LLC 1 60691 AES LAWAI SOLAR, LLC	IPP		IA/	116	GT6	104.7 Natural Gas Fired Combustion Turbine	NG	OT.	(U) Under construction, less than or equal to 50 percent complete	
018 10 018 10 018 1 018 1 018 1	0 59056 Tri Global Energy, LLC 1 60691 AES LAWAI SOLAR, LLC 1 60691 AES LAWAI SOLAR, LLC 1 803 Arizona Public Service Co	IPP Electric Utility	Ocotillo	1	. 4461	GT7	104.7 Natural Gas Fired Combustion Turbine	NG	ا ای	(U) Under construction, less than or equal to 50 percent complete	
18 10 18 10 18 11 18 11 18 11 18 11	0 59056 Tri Global Energy, LLC 1 60691 AES LAWAI SOLAR, LLC 1 60691 AES LAWAI SOLAR, LLC 1 803 Arizona Public Service Co 1 803 Arizona Public Service Co	IPP Electric Utility Electric Utility	Ocotillo Ocotillo	AZ	110				 -	(I) B	1
18 10 18 10 18 11 18 11 18 11 18 11	0 59056 Tri Global Energy, LLC 1 60691 AES LAWAI SOLAR, LLC 1 60691 AES LAWAI SOLAR, LLC 1 803 Arizona Public Service Co 1 803 Arizona Public Service Co 1 58847 Carlsbad Energy Center	IPP Electric Utility Electric Utility IPP	Ocotillo Ocotillo Carlsbad Energy Center	AZ CA	59002	CEC 9	105.3 Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	
18 10 18 10 18 11 18 11 18 11 18 11 18 11 18 11	0 59056 Tri Global Energy, LLC 1 60691 AES LAWAI SOLAR, LLC 1 60691 AES LAWAI SOLAR, LLC 1 803 Arizona Public Service Co 1 803 Arizona Public Service Co 1 58847 Carlsbad Energy Center 1 58847 Carlsbad Energy Center	IPP Electric Utility Electric Utility IPP IPP	Ocotillo Ocotillo Carlsbad Energy Center Carlsbad Energy Center	AZ CA CA	59002	CEC 9 CEC10	105.3 Natural Gas Fired Combustion Turbine 105.3 Natural Gas Fired Combustion Turbine	NG NG	GT GT	(L) Regulatory approvals pending. Not under construction	
018 10 018 11 018 1 018 1 018 1 018 1 018 1 018 1 018 1	0 59056 Tri Global Energy, LLC 1 60691 AES LAWAI SOLAR, LLC 1 60691 AES LAWAI SOLAR, LLC 1 803 Arizona Public Service Co 1 803 Arizona Public Service Co 1 58847 Carlsbad Energy Center 1 58847 Carlsbad Energy Center 1 60656 Chestnut Solar LLC	IPP Electric Utility Electric Utility IPP	Ocotillo Ocotillo Carlsbad Energy Center Carlsbad Energy Center Chestnut Solar	AZ CA CA NC	59002 61011	CEC 9 CEC10 PV1	105.3 Natural Gas Fired Combustion Turbine 105.3 Natural Gas Fired Combustion Turbine 74.9 Solar Photovoltaic	NG NG SUN		(L) Regulatory approvals pending. Not under construction (P) Planned for installation, but regulatory approvals not initiated	1
018 10 018 11 018 1 018 1 018 1 018 1 018 1 018 1 018 1	0 59056 Tri Global Energy, LLC 1 60691 AES LAWAI SOLAR, LLC 1 60691 AES LAWAI SOLAR, LLC 1 803 Arizona Public Service Co 1 803 Arizona Public Service Co 1 58847 Carlsbad Energy Center 1 58847 Carlsbad Energy Center	IPP Electric Utility Electric Utility IPP IPP	Ocotillo Ocotillo Carlsbad Energy Center Carlsbad Energy Center	AZ CA CA NC	59002	CEC 9 CEC10 PV1 CPHGN	105.3 Natural Gas Fired Combustion Turbine 105.3 Natural Gas Fired Combustion Turbine	NG NG		(L) Regulatory approvals pending. Not under construction	1
018 10 018 10 018 11 018 11 018 11 018 11 018 11 018 11	0 59056 Tri Global Energy, LLC 1 60691 AES LAWAI SOLAR, LLC 1 60691 AES LAWAI SOLAR, LLC 1 803 Arizona Public Service Co 1 803 Arizona Public Service Co 1 58847 Carlsbad Energy Center 1 58847 Carlsbad Energy Center 1 60656 Chestnut Solar LLC	IPP Electric Utility Electric Utility IPP IPP	Ocotillo Ocotillo Carlsbad Energy Center Carlsbad Energy Center Chestnut Solar	AZ CA CA NC NY FL	59002 61011	CEC 9 CEC10 PV1	105.3 Natural Gas Fired Combustion Turbine 105.3 Natural Gas Fired Combustion Turbine 74.9 Solar Photovoltaic	NG NG SUN		(L) Regulatory approvals pending. Not under construction (P) Planned for installation, but regulatory approvals not initiated	1
2018 10 2018 10 2018 11 2018 11	 59056 Tri Global Energy, LLC 60691 AES LAWAI SOLAR, LLC 60691 AES LAWAI SOLAR, LLC 803 Arizona Public Service Co 803 Arizona Public Service Co 58847 Carlsbad Energy Center 58847 Carlsbad Energy Center 60656 Chestnut Solar LLC 58840 Copenhagen Wind Farm, LLC 	IPP Electric Utility Electric Utility IPP IPP IPP IPP	Ocotillo Ocotillo Carlsbad Energy Center Carlsbad Energy Center Chestnut Solar Copenhagen Wind Farm	AZ CA CA NC NY FL FL	59002 61011 58979	CEC 9 CEC10 PV1 CPHGN	105.3 Natural Gas Fired Combustion Turbine 105.3 Natural Gas Fired Combustion Turbine 74.9 Solar Photovoltaic 79.9 Onshore Wind Turbine	NG NG SUN WND		(L) Regulatory approvals pending. Not under construction(P) Planned for installation, but regulatory approvals not initiated(T) Regulatory approvals received. Not under construction	10 10 30 30 30
018 10 018 11 018 11 018 11 018 11 018 11 018 11 018 11 018 11 018 11	0 59056 Tri Global Energy, LLC 1 60691 AES LAWAI SOLAR, LLC 1 60691 AES LAWAI SOLAR, LLC 1 803 Arizona Public Service Co 1 803 Arizona Public Service Co 1 58847 Carlsbad Energy Center 1 58847 Carlsbad Energy Center 1 60656 Chestnut Solar LLC 1 58840 Copenhagen Wind Farm, LLC 1 6455 Duke Energy Florida, LLC	IPP Electric Utility Electric Utility IPP IPP IPP IPP Electric Utility IPP IPP IPP IPP	Ocotillo Ocotillo Carlsbad Energy Center Carlsbad Energy Center Chestnut Solar Copenhagen Wind Farm Citrus County Combined Cycle Plant	AZ CA CA NC NY FL FL FL	59002 61011 58979 60138	CEC 9 CEC10 PV1 CPHGN 2GTA	105.3 Natural Gas Fired Combustion Turbine 105.3 Natural Gas Fired Combustion Turbine 74.9 Solar Photovoltaic 79.9 Onshore Wind Turbine 251.7 Natural Gas Fired Combined Cycle	NG NG SUN WND NG	GT PV WT CT	(L) Regulatory approvals pending. Not under construction (P) Planned for installation, but regulatory approvals not initiated (T) Regulatory approvals received. Not under construction (V) Under construction, more than 50 percent complete	3
18 10 18 10 18 11 18 11 18 11 18 11 18 11 18 11 18 11 18 11 18 11	 59056 Tri Global Energy, LLC 60691 AES LAWAI SOLAR, LLC 60691 AES LAWAI SOLAR, LLC 803 Arizona Public Service Co 803 Arizona Public Service Co 58847 Carlsbad Energy Center 58847 Carlsbad Energy Center 60656 Chestnut Solar LLC 58840 Copenhagen Wind Farm, LLC 6455 Duke Energy Florida, LLC 6455 Duke Energy Florida, LLC 	IPP Electric Utility Electric Utility IPP IPP IPP IPP Electric Utility Electric Utility	Ocotillo Ocotillo Carlsbad Energy Center Carlsbad Energy Center Chestnut Solar Copenhagen Wind Farm Citrus County Combined Cycle Plant Citrus County Combined Cycle Plant	AZ CA CA NC NY FL FL FL TX	59002 61011 58979 60138 60138	CEC 9 CEC10 PV1 CPHGN 2GTA 2GTB	105.3 Natural Gas Fired Combustion Turbine 105.3 Natural Gas Fired Combustion Turbine 74.9 Solar Photovoltaic 79.9 Onshore Wind Turbine 251.7 Natural Gas Fired Combined Cycle 251.7 Natural Gas Fired Combined Cycle	NG NG SUN WND NG	GT PV WT CT	(L) Regulatory approvals pending. Not under construction (P) Planned for installation, but regulatory approvals not initiated (T) Regulatory approvals received. Not under construction (V) Under construction, more than 50 percent complete (V) Under construction, more than 50 percent complete	

Table 6.5	Planned II S	Electric Generating	Unit Additions
i able 0.5.	Planneu U.S.	Electric Generating	Unit Additions

r Month	Entity ID Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW) Technology	Energy Source Code		Status	Nam Capacity
3 11	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	
3 11	15248 Portland General Electric Co	Electric Utility	Timothy Lake Powerhouse	OR	60868	1	1.2 Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	
3 11 3 12	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	
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	
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	
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	
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	
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	
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	
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	
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	
3 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	
3 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	
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	
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	
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	
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	
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	
12	<u> </u>	IPP	Bloomsbury Solar, LLC	NC	59970	BLOOM	5.0 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	
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	
12	15399 Avangrid Renewables LLC	IDD	La Joya NM	NM	61044	WT1	400.0 Onshore Wind Turbine	WND	\\/T		
12		IPP							VV I	(U) Under construction, less than or equal to 50 percent complete	
12	15399 Avangrid Renewables LLC	IPP	Lund Hill	WA	61045	WT1	60.0 Onshore Wind Turbine	WND	VV I	(U) Under construction, less than or equal to 50 percent complete	
12 12	15399 Avangrid Renewables LLC	" '	WyEast Solar	OR	61345	PV1	20.0 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	
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	
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	
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	
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	
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	
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	
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	
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	
12	60476 Bluebell Solar, LLC	IPP	Bluebell Solar	TX	60789	UNIT1	30.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
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	
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	
12	58190 Bluestem LLC	IDD	West Liberty Wind Farm	ΙΔ	61057	T2	2.5 Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	
12	59365 Capital Power Corporation	IPP	New Frontier Wind	ND	59903	GEN	99.0 Onshore Wind Turbine	WND	\\/T		
12	·	IPP		NC NC					DV I	(T) Regulatory approvals received. Not under construction	
12	58508 Carolina Solar Energy II LLC	" '	Brantley Solar	NC NC	60623	PV1	50.2 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	
12	58508 Carolina Solar Energy II LLC	IPP	Cabaniss Solar	NC NC	60430	PV1	4.2 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
12	56872 Contra Costa Generating Station LLC	IDD	Oakley Generating Station	CA	57552	97	191.3 Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	
12		IFF		MD		BFSC	· · · · · · · · · · · · · · · · · · ·		DV/		
12	58695 Coronal Development Services	IPP	Biggs Ford Solar Center	MD	61321		15.0 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	
12	58695 Coronal Development Services	IPP	Latitude Solar Center	IN	61412	LATSC	15.0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	
12	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	
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	
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	
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	
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	
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	
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	
12	58970 Ecoplexus, Inc	IPP	Boykin PV1	NC	59996	BOYK1	17.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
12	58970 Ecoplexus, Inc	IPP	E Nash PV1	NC	60002	NASH1	20.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
12	58970 Ecoplexus, Inc	IPP	Everett PV1	NC	60997	EVRT1	10.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
12	58970 Ecoplexus, Inc	IPP	Grandy PV 1	NC	59518	GRAND	20.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
12	58970 Ecoplexus, Inc	IPP	High Shoals PV1	NC.	59997	HISHO	16.0 Solar Photovoltaic	SUN	P\/	(T) Regulatory approvals received. Not under construction	
12	58970 Ecoplexus, Inc	IDD	Round Hill PV1	NC NC	59998	RNDHL	5.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
12	58970 Ecoplexus, Inc	IPP	Underwood PV2	NC NC	60998	UNW D2	16.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
12	·	IPP		NC NC				SUN	D\/		
12	58970 Ecoplexus, Inc	" '	Willoughby PV1	NC V.T	60003	WILL1	20.0 Solar Photovoltaic		PV	(L) Regulatory approvals pending. Not under construction	
12	58135 Ecos Energy LLC	IPP	Apple Hill Solar	V I	61037	APPL	2.0 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	
12	58135 Ecos Energy LLC	IPP	Weybridge 1 Solar	VI	61038	WEY1	3.0 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	
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	
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	
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	
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	
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	
12	58672 Everpower Wind Holdings Inc	IPP	Scioto Ridge Wind Farm	ОН	58780	1	189.2 Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	
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	
12	6035 Exelon Power	lidd	Exelon West Medway II LLC	MΔ	59882	-	97.4 Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction (L) Regulatory approvals pending. Not under construction	+
12		IPP	CA Flats Solar 150, LLC	CA		CENI04		SUN	D\/		
12	59745 First Solar Asset Management	" '	-		60034	GEN01	150.0 Solar Photovoltaic		L A	(U) Under construction, less than or equal to 50 percent complete	
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	
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	
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	
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	
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	
12	58692 Florey Knob LLC	IPP	Florey Knobb	PΔ	58821	2	6.8 Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	+
12	58692 Florey Knob LLC	IPP	Florey Knobb	DΛ	58821	2	6.8 Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction (T) Regulatory approvals received. Not under construction	-
12	60411 Friesian Holdings, LLC	IPP	<u> </u>	INC.		3			D\/		
40	DOMESTIC DESIGN FORMORS LLC	ILLA	Friesian Holdings	NC	60692	PV1	75.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	
12	58146 Gaelectric LLC	IPP	Jawbone Wind Project	1	58175	JWPI	131.1 Onshore Wind Turbine	WND	\ \ / T	(P) Planned for installation, but regulatory approvals not initiated	

Table 6.5	Planned	U.S.	Flectric	Generating	Unit	Additions
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							Energy	Prime		
	Plant Producer		Plant		Net Summe		Source	Mover	-	Nameplate
Year Month Entity ID Entity Name 2018 12 60025 Greenbacker Renewable Energy Corporation	Type IPP	Plant Name Flannagan Hydroelectric Project	State VA	Plant ID 58827	Generator ID Capacity (MW LEFT 0.9	7) Technology 9 Conventional Hydroelectric	Code WAT	Code HY	Status (L) Regulatory approvals pending. Not under construction	Capacity (MW)
2018 12 60025 Greenbacker Renewable Energy Corporation	IPP	Flannagan Hydroelectric Project	VA	58827	RGHT 0.9	9 Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.9
2018 12 60222 Haida Energy, Inc.	Electric Utility	Hillangaay Hydro	AK	59037		0 Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	5.0
2018 12 60040 Hale Wind Energy 2018 12 60928 Holdridge Energy LLC	IPP IPP	Hale Community Wind Farm Holdridge Energy	PA	59247 61305		Onshore Wind Turbine Natural Gas Internal Combustion Engine	WND NG	WT IC	(P) Planned for installation, but regulatory approvals not initiated(P) Planned for installation, but regulatory approvals not initiated	240.0
2018 12 60928 Holdridge Energy LLC	IPP	Holdridge Energy	PA	61305		4 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.
2018 12 60928 Holdridge Energy LLC	IPP	Holdridge Energy	PA	61305		4 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018 12 60928 Holdridge Energy LLC	IPP	Holdridge Energy	PA	61305		4 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018 12 60928 Holdridge Energy LLC 2018 12 58684 Hop Bottom Energy LLC	IPP IPP	Holdridge Energy Hop Bottom	PA	61305 58800		4 Natural Gas Internal Combustion Engine 8 Natural Gas Internal Combustion Engine	NG NG	IC IC	(P) Planned for installation, but regulatory approvals not initiated (T) Regulatory approvals received. Not under construction	7.0
2018 12 58684 Hop Bottom Energy LLC	IPP	Hop Bottom	PA	58800		8 Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.9
2018 12 58684 Hop Bottom Energy LLC	IPP	Hop Bottom	PA	58800		8 Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2018 12 61001 Hu Honua Bioenergy, LLC	IPP	Hu Honua Bioenergy Facility	HI	61364		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		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 2018 12 59439 Innovative Solar 54, LLC	Industrial IPP	Power Island Innovative Solar 54	NC.	10154 59669		Natural Gas Fired Combustion Turbine Solar Photovoltaic	NG SUN	GT PV	(U) Under construction, less than or equal to 50 percent complete (T) Regulatory approvals received. Not under construction	50.0 50.0
2018 12 59448 Innovative Solar 67, LLC	IPP	Innovative Solar 67	NC	59678		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		0 Natural Gas Fired Combined Cycle	NG	CS	(U) Under construction, less than or equal to 50 percent complete	555.0
2018 12 60349 Juneau Hydropower, Inc	IPP	Sweetheart Lake Hydroelectric Facility	AK	60588		6 Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.6
2018 12 60349 Juneau Hydropower, Inc	IPP IPP	Sweetheart Lake Hydroelectric Facility	AK AK	60588		6 Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.6
2018 12 60349 Juneau Hydropower, Inc 2018 12 59678 KDC Solar PR1, LLC	IPP	Sweetheart Lake Hydroelectric Facility KDC Solar PR1, LLC	NJ	60588 59910		6 Conventional Hydroelectric 0 Solar Photovoltaic	WAT	PV	(P) Planned for installation, but regulatory approvals not initiated (T) Regulatory approvals received. Not under construction	6.6
2018 12 58804 Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941		0 Offshore Wind Turbine	WND	WS	(L) Regulatory approvals received. Not under construction	3.0
2018 12 58804 Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	ОН	58941		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	ОН	58941	WTG3 3.0	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		0 Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2018 12 58804 Lake Erie Energy Development Corp	IPP IPP	Icebreaker Offshore Wind Farm Icebreaker Offshore Wind Farm	OH	58941 58941		O Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2018 12 58804 Lake Erie Energy Development Corp 2018 12 60569 Lincoln Land Wind, LLC	IPP	Lincoln Land Wind	IL	58941 58925		0 Offshore Wind Turbine 0 Onshore Wind Turbine	WND	WS WT	(L) Regulatory approvals pending. Not under construction (P) Planned for installation, but regulatory approvals not initiated	30.0
2018 12 55983 Luminant Generation Company LLC	IPP	Horseshoe Bend	TX	59806		0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	140.0
2018 12 60340 M&G Resins USA, LLC	Industrial	M&G Resins USA	TX	60642	1 11.	7 All Other	WH	ОТ	(U) Under construction, less than or equal to 50 percent complete	14.3
2018 12 60340 M&G Resins USA, LLC	Industrial	M&G Resins USA	TX	60642		7 All Other	WH	ОТ	(U) Under construction, less than or equal to 50 percent complete	14.3
2018 12 11664 Mark Technologies Corp	IPP	Alta Mesa Project Phase IV	CA	55352		Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	40.0
2018 12 60929 Mineral Point Energy LLC 2018 12 60929 Mineral Point Energy LLC	IPP IPP	Mineral Point Energy Mineral Point Energy	PA	61300 61300		4 Natural Gas Internal Combustion Engine 4 Natural Gas Internal Combustion Engine	NG NG	IC	(P) Planned for installation, but regulatory approvals not initiated(P) Planned for installation, but regulatory approvals not initiated	4.4
2018 12 60929 Mineral Point Energy LLC	IPP	Mineral Point Energy	PA	61300		4 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018 12 60929 Mineral Point Energy LLC	IPP	Mineral Point Energy	PA	61300		4 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018 12 60929 Mineral Point Energy LLC	IPP	Mineral Point Energy	PA	61300		4 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018 12 60018 NET Power, LLC	IPP	NET Power La Porte Station	TX	60910		5 Other Natural Gas	NG	ОТ	(V) Under construction, more than 50 percent complete	25.5
2018 12 58653 Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714		8 Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2018 12 58653 Oxbow Creek Energy LLC 2018 12 58653 Oxbow Creek Energy LLC	IPP IPP	Oxbow Creek Oxbow Creek	PA	58714 58714		8 Natural Gas Internal Combustion Engine 8 Natural Gas Internal Combustion Engine	NG NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2018 12 4202 Phillips 66-Ponca City Refinery	Industrial	Ponca City Refinery	OK	52188		0 Other Gases	OG	ST	(T) Regulatory approvals received. Not under construction (P) Planned for installation, but regulatory approvals not initiated	5./
2018 12 60930 Red Glen Energy LLC	IPP	Red Glen Energy	PA	61306		4 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.
2018 12 60930 Red Glen Energy LLC	IPP	Red Glen Energy	PA	61306	GEN2 4.4	4 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018 12 60930 Red Glen Energy LLC	IPP	Red Glen Energy	PA	61306		4 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018 12 60930 Red Glen Energy LLC	IPP IPP	Red Glen Energy	PA	61306		4 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018 12 60930 Red Glen Energy LLC 2018 12 60466 Rowan Solar NC LLC	IPP	Red Glen Energy Rowan Solar NC LLC	NC.	61306 60780		4 Natural Gas Internal Combustion Engine 0 Solar Photovoltaic	NG SUN	D\/	(P) Planned for installation, but regulatory approvals not initiated (T) Regulatory approvals received. Not under construction	4.4
2018 12 60975 SR Innovation, LLC	IPP	SR Innovation - NIKE PV	TN	61332		7 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.
2018 12 16534 Sacramento Municipal Util Dist	Electric Utility	White Rock/Slab Creek	CA	435		7 Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	2.
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		5 Landfill Gas	LFG	IC	(P) Planned for installation, but regulatory approvals not initiated	1.6
2018 12 60523 Springfield Project Development LLC	IPP IPP	Homestead Wind LLC	IL DA	60871		0 Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	35.0
2018 12 60931 Stourbridge Energy LLC 2018 12 60931 Stourbridge Energy LLC	IPP	Stourbridge Energy Stourbridge Energy	PA	61301 61301		4 Natural Gas Internal Combustion Engine 4 Natural Gas Internal Combustion Engine	NG NG	IC IC	(P) Planned for installation, but regulatory approvals not initiated(P) Planned for installation, but regulatory approvals not initiated	4.2
2018 12 60931 Stourbridge Energy LLC	IPP	Stourbridge Energy	PA	61301		4 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.
2018 12 60931 Stourbridge Energy LLC	IPP	Stourbridge Energy	PA	61301		4 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018 12 60931 Stourbridge Energy LLC	IPP	Stourbridge Energy	PA	61301		4 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018 12 60568 Sugar Creek Wind One LLC	IPP	Sugar Creek Wind One LLC	IL NA	58924		0 Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	175.0
2018 12 59138 SunPower Corporation, Systems 2018 12 61005 Sweetwater Solar LLC	IPP IPP	Aragonne Solar LLC Sweetwater Solar	INIVI	59252 61369		4 Solar Photovoltaic 0 Solar Photovoltaic	SUN	PV PV	(L) Regulatory approvals pending. Not under construction (P) Planned for installation, but regulatory approvals not initiated	40.0 80.0
2018 12 60249 Tenaska Pennsylvania Partners, LLC	IPP	Tenaska Westmoreland Generating Station	PA	60464		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		0 Natural Gas Fired Combined Cycle	NG	СТ	(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		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		0 Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	300.0
2018 12 59056 Tri Global Energy, LLC 2018 12 59056 Tri Global Energy, LLC	IPP IPP	Cone Renewable Energy Project, LLC Easter	TY	60272 59971		0 Onshore Wind Turbine 0 Onshore Wind Turbine	WND WND	WT	(P) Planned for installation, but regulatory approvals not initiated(U) Under construction, less than or equal to 50 percent complete	300.0 300.0
2018 12 59056 Tri Global Energy, LLC	IPP	Lorenzo Wind	TX	59244		0 Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	80.0
2018 12 58796 Trishe Wind Colorado	IPP	Trishe Wind Colorado	СО	58928		0 Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	30.0
2018 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
2018 12 60602 Tyler Solar, LLC	IPP	Tyler Solar	NC	60970		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		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 2018 12 19876 Virginia Electric & Power Co	Electric Utility Electric Utility	Greensville County Power Station Greensville County Power Station	VΑ	59913 59913		4 Natural Gas Fired Combined Cycle 4 Natural Gas Fired Combined Cycle	NG NG	CC	(L) Regulatory approvals pending. Not under construction (L) Regulatory approvals pending. Not under construction	369.8 369.8
2018 12 19876 Virginia Electric & Power Co	Electric Utility	Greensville County Power Station Greensville County Power Station	VA	59913		4 Natural Gas Fired Combined Cycle 4 Natural Gas Fired Combined Cycle	NG	CC	(L) Regulatory approvals pending. Not under construction (L) Regulatory approvals pending. Not under construction	369.8
2018 12 19876 Virginia Electric & Power Co	Electric Utility	Greensville County Power Station	VA	59913		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	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		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		O Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	150.0
2018 12 20421 Western Minnesota Mun Pwr Agny 2018 12 20421 Western Minnesota Mun Pwr Agny	Electric Utility	Red Rock Hydro Plant Red Rock Hydro Plant	IA IA	58434 58434		5 Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction (T) Regulatory approvals received. Not under construction	18.2
2018 12 20421 Western Minnesota Mun Pwr Agny 2018 12 60154 White Street Renewables LLC	Electric Utility IPP	White Street Renewables	NC	60364		5 Conventional Hydroelectric 6 Landfill Gas	LFG	IC	(T) Regulatory approvals received. Not under construction (T) Regulatory approvals received. Not under construction	18.2
2018 12 60154 White Street Renewables LLC	IPP	White Street Renewables	NC	60364		4 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.
2018 12 59731 Windham Solar LLC	IPP	Lebanon Solar 1	СТ	59991		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	СТ	59992		0 Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018 12 60932 Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302		4 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2018 12 60932 Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302 61302		4 Natural Gas Internal Combustion Engine 4 Natural Gas Internal Combustion Engine	NG NG	IC IC	(P) Planned for installation, but regulatory approvals not initiated(P) Planned for installation, but regulatory approvals not initiated	4.4
2018 12 60932 Wrighter Energy LLC	lipp	Wrighter Energy	IDV			AUNTALITA LA SE AUSTRON LA CONTRACTION ENGINA			INTERCED TO THE PROPERTY OF TH	

Table 6.5. Planned	U.S. Electric	Generating I	Unit Additions
Table v.s. I latitied	O.O. LICCUITO	Oction atting	Jilli Additions

2018 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019	12 60932 Wrighter Energy LLC 1 60667 Aksamit Energy Development 1 60687 Alpine Pacific Utilities Hydro 1 60687 Alpine Pacific Utilities Hydro	IPP	Plant Name	State	Plant ID		t Summer city (MW) Technology	Source Code	Mover Code	Status	Nameplate Capacity (MW)
2019 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019	1 60687 Alpine Pacific Utilities Hydro		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
2019 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019	· · · · · · · · · · · · · · · · · · ·	IPP	Monument Road	NE	61033	MR001	66.0 Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	66.0
2019 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019 2019		IPP	Fresno Dam Site Water Power Project Fresno Dam Site Water Power Project	MT	61061 61061	1 2	0.5 Conventional Hydroelectric 0.5 Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction (L) Regulatory approvals pending. Not under construction	0.5
2019 2019 2019 2019 2019 2019 2019 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 2019 2019 2019 2019 2019 2019 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 2019 2019 2019 2019 2019 2019 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 2019 2019 2019 2019 2019 2019 2019	1 18445 City of Tallahassee - (FL) 1 18445 City of Tallahassee - (FL)	Electric Utility Electric Utility	Arvah B Hopkins Arvah B Hopkins	FL	688	IC2	18.5 Natural Gas Internal Combustion Engine 18.5 Natural Gas Internal Combustion Engine	NG NG	IC	(P) Planned for installation, but regulatory approvals not initiated	18.8 18.8
2019 2019 2019 2019 2019 2019	1 18445 City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688 688	IC3	18.5 Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated(P) Planned for installation, but regulatory approvals not initiated	18.8
2019 2019 2019 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 2019 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	СТ	(L) Regulatory approvals pending. Not under construction	170.0
2019 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 59686	4	390.0 Natural Gas Fired Combined Cycle	NG LFG	CA	(L) Regulatory approvals pending. Not under construction	390.0
	1 59458 Landfill Energy Systems Florida 1 58718 Na Pua Makani Power Partners LLC	IPP	Sarasota County LFGTE Facility Na Pua Makani Wind Project	HI	58837	LESF4 WT1	1.6 Landfill Gas 25.0 Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated(P) Planned for installation, but regulatory approvals not initiated	25.0
-U I U	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	2 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
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	(T) Regulatory approvals received. Not under construction	65.0
2019 2019	3 56545 Pattern Operators LP 3 58846 Southeast Renewable Fuels, LLC	Industrial	Grady Wind Energy Center, LLC SRF Sorghum to Ethanol Advanced Biorefin	NM	60317 58997	G1001	200.8 Onshore Wind Turbine 12.0 Other Waste Biomass	WND OBS	W I	(P) Planned for installation, but regulatory approvals not initiated(U) Under construction, less than or equal to 50 percent complete	200.8 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	СТ	(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 2019	4 15473 Public Service Co of NM 4 59056 Tri Global Energy, LLC	Electric Utility	La Luz Energy Center Changing Winds	INIM	58284 59243	0002 CHAN1	40.2 Natural Gas Fired Combustion Turbine 288.0 Onshore Wind Turbine	NG WND	M/T	(P) Planned for installation, but regulatory approvals not initiated(U) Under construction, less than or equal to 50 percent complete	42.3 288.0
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	СТЗ	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 2019	5 56987 RRE Austin Solar LLC 5 17718 Southwestern Public Service Co	Electric Utility	Pflugerville Solar Farm Gaines County	TX	57659 60697	PSF GC-1	120.0 Solar Photovoltaic 186.0 Natural Gas Fired Combustion Turbine	SUN NG	PV	(P) Planned for installation, but regulatory approvals not initiated (T) Regulatory approvals received. Not under construction	120.0 225.0
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 2019	5 61029 Upper Michigan Energy Resources Company 5 61029 Upper Michigan Energy Resources Company	Electric Utility Electric Utility	F.D. Kuester Generating Station F.D. Kuester Generating Station	MI	61392 61392	K3 K4	18.3 Natural Gas Internal Combustion Engine 18.3 Natural Gas Internal Combustion Engine	NG	IC IC	(L) Regulatory approvals pending. Not under construction (L) Regulatory approvals pending. Not under construction	18.3 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 2019	6 60395 California Ethanol Power, LLC 6 56606 Calpine New Jersey Generation LLC	Industrial IPP	CE&P Imperial Valley 1 Deepwater	CA N.I	60670 2384	T CT1	50.0 All Other 235.0 Natural Gas Fired Combustion Turbine	OTH NG	GT	(T) Regulatory approvals received. Not under construction (L) Regulatory approvals pending. Not under construction	50.0 242.0
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 11241 Entergy Louisiana LLC	Electric Utility	St. Charles Power Station (LA)	LA	60926	1A	250.0 Natural Gas Fired Combined Cycle	NG	СТ	(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	СТ	(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 2019	6 56615 First Solar Project Development 6 56625 Flat Water Wind Farm LLC	IPP IDD	Morada del Sol, LLC Flat Water Wind Farm LLC	TX	61049	PV1 WTG2	239.3 Solar Photovoltaic 10.5 Onshore Wind Turbine	SUN WND	PV	(P) Planned for installation, but regulatory approvals not initiated	247.0
2019	6 6452 Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FI	57283 60345	1A	376.6 Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated (L) Regulatory approvals pending. Not under construction	10.5 376.6
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	СТ	(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 2019	6 61037 Foard City Wind, LLC 6 7140 Georgia Power Co	IPP	Foard City Wind	TX	61402	FOARD	350.0 Onshore Wind Turbine 1,100.0 Nuclear	NUC	WT	(L) Regulatory approvals pending. Not under construction (U) Under construction, less than or equal to 50 percent complete	350.0
2019	6 60002 Halyard Energy Wharton, LLC	Electric Utility	Vogtle Halyard Wharton Energy Center	TX	649 60221	TBN1	210.0 Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	1,100.0 232.0
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	СТ	(L) Regulatory approvals pending. Not under construction	195.5
2019	6 59487 Moundsville Power, LLC 6 21461 NRG Canal LLC	IPP IPP	Moundsville Power Canal	WV	59720	MPCT2	177.3 Natural Gas Fired Combined Cycle 330.0 Natural Gas Fired Combustion Turbine	NG NG	GT GT	(L) Regulatory approvals pending. Not under construction	195.5
2019 2019	6 59101 NTE Texas, LLC	IPP	Pecan Creek Energy Center	TX	1599 59298	PCEC1	133.0 Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated(P) Planned for installation, but regulatory approvals not initiated	330.0 171.8
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 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 2019	6 59489 Perennial-Wind Chaser LLC 6 59489 Perennial-Wind Chaser LLC	IPP IPP	Perennial Wind Chaser Station Perennial Wind Chaser Station	OR OR	59721 59721	GT3 GT4	98.7 Natural Gas Fired Combustion Turbine 98.7 Natural Gas Fired Combustion Turbine	NG NG	GT GT	(T) Regulatory approvals received. Not under construction (T) Regulatory approvals received. Not under construction	106.0 106.0
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	СТ	(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	СТ	(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	СТ	(V) Under construction, more than 50 percent complete	200.0
2019	6 20159 Washington Parish Engy Ctr LLC	IPP 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 2019	6 58761 White Camp Solar LLC 6 60519 Williams Solar, LLC	IPP IPP	White Camp Solar Williams Solar, LLC	TX	58888 60859	WCAMP PV1	100.0 Solar Photovoltaic 20.0 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated(P) Planned for installation, but regulatory approvals not initiated	100.0
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 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 2019	7 59235 Cogentrix Development Holdings, LLC 7 60971 NYC ENERGY LLC	IPP IPP	Buckeye Generation Center, LLC NISA Electric Generation Project	AZ NY	59471 61331	CTG06 GEN1	104.0 Natural Gas Fired Combustion Turbine 59.7 Natural Gas Fired Combined Cycle	NG NG	GT	(P) Planned for installation, but regulatory approvals not initiated (T) Regulatory approvals received. Not under construction	108.7 70.5
2019	7 60971 NYC ENERGY LLC 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 (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

Table 6.5	Planned U.S.	Electric	Congrating	Linit	Additions
i abie o.b.	Planned U.S.	Electric	Generating	Unit	Additions

Year Month	Entity ID Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Net Sumi Generator ID Capacity (N		Energy Source Code	Prime Mover Code	Status	Nameplat Capacity (MW
2019 7	54863 U S Power Generating Company LLC	IPP	Gowanus Gas Turbines Generating	NY	2494		90.0 Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	93.
2019 8	60270 Clark Canyon Hydro, LLC	IPP	Clark Canyon Hydro-Electric Facility	MT	60483		2.4 Conventional Hydroelectric	WAT	HY (F	P) Planned for installation, but regulatory approvals not initiated	2.
2019 8	60270 Clark Canyon Hydro, LLC	IPP	Clark Canyon Hydro-Electric Facility	MT	60483	FRNS2	2.4 Conventional Hydroelectric	WAT	HY (F	P) Planned for installation, but regulatory approvals not initiated	2.
2019 9	60719 Broadlands Wind Farm LLC	IPP	Broadlands Wind Farm	IL	61161	GEN01 30	00.0 Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	300.
2019 9	59365 Capital Power Corporation	IPP	Black Fork Wind Energy Project	ОН	59907		00.0 Onshore Wind Turbine	WND		P) Planned for installation, but regulatory approvals not initiated	200.
2019 9	59683 Rockwood Energy Center LLC	IPP	Rockwood Energy Center LLC	TX	59918		68.0 Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	1,068.
2019 9	17609 Southern California Edison Co	Electric Utility	DESI-1 Battery Energy Storage Facility	CA	60699		2.4 Batteries	MWH		ΓS) Construction complete, but not yet in commercial operation	2.
2019 10	60278 64KT 8me LLC	IPP	Springbok 3 Solar Farm	CA	60491	1	90.0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	90.
2019 10	60797 68SF 8me LLC	IPP	Eland 1 Solar Farm	CA	61168		00.0 Solar Photovoltaic	SUN		P) Planned for installation, but regulatory approvals not initiated	200.
2019 10	60720 Martinsdale Wind Farm LLC	IPP	Martinsdale Wind Farm	MT	61108		80.0 Onshore Wind Turbine	WND		P) Planned for installation, but regulatory approvals not initiated	80.
2019 10	14232 Otter Tail Power Co		Merricourt Wind Project	ND	57048		50.0 Onshore Wind Turbine	WND		P) Planned for installation, but regulatory approvals not initiated	150.
2019 10	16657 San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080		3.5 Other Waste Biomass	OBG		P) Planned for installation, but regulatory approvals not initiated	3.
2019 10	16657 San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080		3.5 Other Waste Biomass	OBG		P) Planned for installation, but regulatory approvals not initiated	3.
2019 10	16657 San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080		3.5 Other Waste Biomass	OBG	,	P) Planned for installation, but regulatory approvals not initiated	3.
2019 10	16657 San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080		3.5 Other Waste Biomass	OBG		P) Planned for installation, but regulatory approvals not initiated	3.
2019 10	59260 Wright Solar Park, LLC	IPP	Wright Solar Park	CA	59525		00.0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	200.
2019 11	3046 Duke Energy Progress - (NC)	Electric Utility	Asheville	NC NC	2706		91.2 Natural Gas Fired Combined Cycle	NG		P) Planned for installation, but regulatory approvals not initiated	191. 191.
2019 11	3046 Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706		91.2 Natural Gas Fired Combined Cycle	NG	`	P) Planned for installation, but regulatory approvals not initiated	
2019 11	3046 Duke Energy Progress - (NC)	Electric Utility	Asheville	NC NC	2706		02.0 Natural Gas Fired Combined Cycle	NG		P) Planned for installation, but regulatory approvals not initiated	102.
2019 11	3046 Duke Energy Progress - (NC)	Electric Utility	Asheville	NC TY	2706		02.0 Natural Gas Fired Combined Cycle	NG		P) Planned for installation, but regulatory approvals not initiated	102.
2019 11	58765 FGE Texas I LLC	IPP	FGE Texas I	TX	58931		49.9 Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	265.
2019 11	58765 FGE Texas I LLC	IPP	FGE Texas I	TX	58931		26.7 Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.
2019 11	58765 FGE Texas I LLC	IPP	FGE Texas I	TX	58931		26.7 Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.
2019 12	60600 Adams Solar, LLC	IPP	Adams Solar	NC	60949		2.0 Solar Photovoltaic	SUN		P) Planned for installation, but regulatory approvals not initiated	2.
2019 12	61118 Ameresco, Inc - Candlewood		Candlewood Solar	CT	61517		25.0 Solar Photovoltaic	SUN	· ·	P) Planned for installation, but regulatory approvals not initiated	25.
2019 12	15399 Avangrid Renewables LLC	IPP	Karankawa Wind LLC	TX	61343		00.0 Onshore Wind Turbine	WND		P) Planned for installation, but regulatory approvals not initiated	200.
2019 12	15399 Avangrid Renewables LLC		Montague Wind Power Facility LLC	OR	58099		00.0 Onshore Wind Turbine	WND	 	P) Planned for installation, but regulatory approvals not initiated	200.
2019 12	15399 Avangrid Renewables LLC	IPP	Otter Creek Wind Farm LLC	IL	61344		29.0 Onshore Wind Turbine	WND		P) Planned for installation, but regulatory approvals not initiated	129.
2019 12	15399 Avangrid Renewables LLC	IPP	Tatanka Ridge	SD	61046		98.0 Onshore Wind Turbine	WND	,) Under construction, less than or equal to 50 percent complete	98.
2019 12	60560 Big Blue Wind Farm, LLC (TX)	IPP	Big Blue River Wind Farm	IN	60907		00.0 Onshore Wind Turbine	WND		P) Planned for installation, but regulatory approvals not initiated	200.
2019 12	60289 Blazing Star Wind Farm, LLC	IPP	Blazing Star Wind Farm 1	MN	60504		00.0 Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.
2019 12	61030 Bluegrove Wind, LLC	IPP	Bluegrove Wind	TX	61400	BLUGR 10	00.0 Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	100.
2019 12	60714 Burke Wind LLC	IPP	Burke Wind, LLC	ND	61100	GE23 19	99.4 Onshore Wind Turbine	WND	WT (F	P) Planned for installation, but regulatory approvals not initiated	199.
2019 12	61031 Byers Wind, LLC	IPP	Byers Wind	TX	61401	BYERS 20	00.0 Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.
2019 12	59365 Capital Power Corporation	IPP	Cardinal Point LLC	IL	59902	GEN 15	50.0 Onshore Wind Turbine	WND	WT (F	P) Planned for installation, but regulatory approvals not initiated	150.
2019 12	59365 Capital Power Corporation	IPP	Garrison Butte Wind, LLC	ND	60066	GEN 15	50.0 Onshore Wind Turbine	WND	WT (F	P) Planned for installation, but regulatory approvals not initiated	150.
2019 12	59365 Capital Power Corporation	IPP	Poplars Ranch Solar LLC	OR	59890	GEN 1	16.0 Solar Photovoltaic	SUN	PV (F	P) Planned for installation, but regulatory approvals not initiated	16.
2019 12	60288 Cattle Ridge Wind Farm, LLC	IPP	Cattle Ridge Wind Farm 1	SD	60503	CTTL1 20	00.0 Onshore Wind Turbine	WND	WT (F	P) Planned for installation, but regulatory approvals not initiated	200.
2019 12	60290 Crocker Wind Farm, LLC	IPP	Crocker Wind Farm	SD	60505	CRCKR 20	00.0 Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.
2019 12	56215 E ON Climate Renewables N America LLC	IPP	Vici Wind Farm	ОК	59062	VICI 18	80.0 Onshore Wind Turbine	WND	WT (F	P) Planned for installation, but regulatory approvals not initiated	180.
2019 12	58672 Everpower Wind Holdings Inc	IPP	Baron Winds Farm	NY	60596	1 25	50.0 Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	250.
2019 12	58672 Everpower Wind Holdings Inc	IPP	Buckeye Wind Farm	ОН	58776	1 10	00.0 Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	100.
2019 12	58672 Everpower Wind Holdings Inc	IPP	Cassadaga Wind Farm	NY	58777		26.0 Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	126.
2019 12	58672 Everpower Wind Holdings Inc	IPP	Coyote Crest Wind Farm	WA	58778	1 12	27.5 Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	127.
2019 12	58672 Everpower Wind Holdings Inc	IPP	Sand Creek Wind Farm	MT	60595	WT1 7	75.0 Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	75.
2019 12	58672 Everpower Wind Holdings Inc	IPP	Terrapin Hills Wind Farm	MD	60211	1 5	50.0 Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	50.
2019 12	60405 FDS Coke Plant, LLC	Electric CHP	FDS Co-Generation Facility	ОН	60693	1 11	10.0 Other Gases	OG	ST	(T) Regulatory approvals received. Not under construction	135.
2019 12	56615 First Solar Project Development	IPP	Desert Quartzite	CA	59871		50.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	580.
2019 12	56615 First Solar Project Development	IPP	North Rosamond Solar LLC	CA	59879		50.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	150.
2019 12	56615 First Solar Project Development	IPP	Sunshine Valley Solar	NV	59826		02.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	100.
2019 12	56615 First Solar Project Development	IPP	Windhub Solar A LLC	CA	59878		20.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.
2019 12	56615 First Solar Project Development	IPP	Windhub Solar B, LLC	CA	59969		20.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.
2019 12	6541 Formosa Plastics Corp	Industrial	Formosa Utility Venture Ltd	TX	10554		38.0 Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	40.
2019 12	6541 Formosa Plastics Corp	Industrial	Formosa Utility Venture Ltd	TX	10554		97.0 Natural Gas Fired Combined Cycle	NG	СТ	(L) Regulatory approvals pending. Not under construction	102.
2019 12	6541 Formosa Plastics Corp	Industrial	Formosa Utility Venture Ltd	TX	10554		97.0 Natural Gas Fired Combined Cycle	NG	СТ	(L) Regulatory approvals pending. Not under construction	102.
2019 12	7189 Gila Bend Power Partners LLC	IPP	Gila Bend Power Generation Station	AZ	55507		56.0 Natural Gas Fired Combined Cycle	NG	СТ	(L) Regulatory approvals pending. Not under construction	170.
2019 12	60040 Hale Wind Energy	IPP	Hale Community Wind Farm	ТХ	59247		78.0 Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	478.
2019 12	56939 Lexington Chenoa Wind Farm II LLC	IPP	Bright Stalk Wind Farm II	IL.	57622		00.0 Onshore Wind Turbine	WND		P) Planned for installation, but regulatory approvals not initiated	200.
2019 12	56940 Lexington Chenoa Wind Farm LLC	IPP	Bright Stalk Wind Farm I	IL	57623		00.0 Onshore Wind Turbine	WND	`	P) Planned for installation, but regulatory approvals not initiated	200.
2019 12	12341 MidAmerican Energy Co	Electric Utility	Orient Wind Farm	IA	61077		32.0 Onshore Wind Turbine	WND	<u> </u>	P) Planned for installation, but regulatory approvals not initiated	482.
2019 12	12341 MidAmerican Energy Co	•	Plum Creek Wind	IA	61078		00.0 Onshore Wind Turbine	WND	· ·	P) Planned for installation, but regulatory approvals not initiated	500.
2019 12	61004 Midway Solar LLC	IPP	Midway Solar - TX	TX	61368		82.0 Solar Photovoltaic	SUN	<u> </u>	P) Planned for installation, but regulatory approvals not initiated	182.
2019 12	60604 Mountain Lion Solar, LLC	IPP	Mountain Lion Solar	NC	60950		1.7 Solar Photovoltaic	SUN	<u> </u>	P) Planned for installation, but regulatory approvals not initiated	1.
2019 12	60952 Mt. Jackson Solar LLC	IPP	Mt. Jackson Solar	VA	61318		15.7 Solar Photovoltaic	SUN	,	P) Planned for installation, but regulatory approvals not initiated	15.
2019 12	14354 PacifiCorp	Electric Utility	Blundell	UT	299		35.0 Geothermal	GEO		P) Planned for installation, but regulatory approvals not initiated	30.
2019 12	59771 Pecan Solar LLC	IPP	Pecan Solar	NC	60030		74.9 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	74.
2019 12	58842 Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987		87.0 Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	687.
2019 12	60982 RE Maplewood LLC	IPP	RE Maplewood	TX	61346		00.0 Solar Photovoltaic	SUN		P) Planned for installation, but regulatory approvals not initiated	100.
2019 12	60982 RE Maplewood LLC	IPP	RE Maplewood	TX	61346		00.0 Solar Photovoltaic	SUN		P) Planned for installation, but regulatory approvals not initiated	100.
2019 12	60982 RE Maplewood LLC	IPP	RE Maplewood	ТХ	61346		00.0 Solar Photovoltaic	SUN	,	P) Planned for installation, but regulatory approvals not initiated	100.
2019 12	60982 RE Maplewood LLC	IPP	RE Maplewood	ТХ	61346		00.0 Solar Photovoltaic	SUN		P) Planned for installation, but regulatory approvals not initiated	100.
2019 12	60982 RE Maplewood LLC	IPP	RE Maplewood	тх	61346		00.0 Solar Photovoltaic	SUN	•	P) Planned for installation, but regulatory approvals not initiated	100.
2019 12	60646 Reading Wind Energy, LLC	IPP	Reading Wind Project	KS	60999		00.1 Onshore Wind Turbine	WND		P) Planned for installation, but regulatory approvals not initiated	200.
2019 12	60601 River Otter Solar, LLC	IPP	River Otter Solar	NC	60969		5.0 Solar Photovoltaic	SUN	·	P) Planned for installation, but regulatory approvals not initiated	5.
2019 12	60897 Salinas Valley Solid Waste Authority	IPP	Crazy Horse Solar Project	CA	61285		2.0 Solar Photovoltaic	SUN	,	P) Planned for installation, but regulatory approvals not initiated	2.
2019 12	16609 San Diego Gas & Electric Co	Electric Utility	Top Gun Energy Storage	CA	61366		10.0 Batteries	MWH	`	P) Planned for installation, but regulatory approvals not initiated	10.
2019 12	60387 Skylar Resources, LP	IPP	Townsite Solar Project	NV	60654		60.0 Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	180
2019 12	58661 Sustainable Power Group, LLC	IPP	ESI Project	CA	50819		13.0 Onshore Wind Turbine	WND	WT /	P) Planned for installation, but regulatory approvals not initiated	13
2019 12	59098 Trishe Wind Ohio LLC	IPP	Trishe Wind Ohio LLC	ОН	59296		50.0 Onshore Wind Turbine	WND	·	P) Planned for installation, but regulatory approvals not initiated	150.
2019 12	58153 US Magnesium	Industrial	US Magnesium	UT	58191		24.0 Natural Gas Fired Combustion Turbine	NG	GT (.	(V) Under construction, more than 50 percent complete	30.
2019 12	60597 Violet Solar, LLC	IPP	Violet Solar	NC.	60961		5.0 Solar Photovoltaic	SUN		P) Planned for installation, but regulatory approvals not initiated	5.
2019 12	60427 WPD Wind Projects Inc	IPP	New Colony Wind Project	MT	60718		25.0 Onshore Wind Turbine	WND	· ·	P) Planned for installation, but regulatory approvals not initiated	25
2019 12	60599 Washington Solar, LLC	IPP	Washington Solar	NC.	60948		5.0 Solar Photovoltaic	SUN	,	P) Planned for installation, but regulatory approvals not initiated	5
2019 12	2 20323 Wellhead Services Inc	IPP	Stanton Energy Reliability Center	CA	60698		45.9 Natural Gas Fired Combustion Turbine	NG		P) Planned for installation, but regulatory approvals not initiated	60.
2019 12	2 20323 Wellhead Services Inc	IPP	Stanton Energy Reliability Center	CA	60698		45.9 Natural Gas Fired Combustion Turbine	NG	·	P) Planned for installation, but regulatory approvals not initiated	60.
2019 12	2 20323 Wellhead Services Inc	lidd	Stanton Energy Reliability Center	CA	60698		45.9 Natural Gas Fired Combustion Turbine	NG	`	P) Planned for installation, but regulatory approvals not initiated	60.
	59365 Capital Power Corporation	II I	Salt Springs Wind Farm	K6	60807		00.0 Onshore Wind Turbine	WND		P) Planned for installation, but regulatory approvals not initiated	200.
20201 4	Ocoopouphai i owoi Corporation	IFF		INO.					,	· · · · · · · · · · · · · · · · · · ·	200.
2020 1	56534 Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	INY	5710F	IINN11 3/	15 Ulivatilitai (*36 Fired i ombined i veie	INIC	[(;(;	(T) Regulatory approvals received. Not under construction	200
2020 1 2020 1 2020 1	56534 Cricket Valley Energy Center LLC 13478 Entergy New Orleans Inc	IPP Electric Utility	Cricket Valley Energy New Orleans Power	NY I A	57185 60928		45.0 Natural Gas Fired Combined Cycle 50.0 Natural Gas Fired Combustion Turbine	NG NG	CC GT	(T) Regulatory approvals received. Not under construction(L) Regulatory approvals pending. Not under construction	390. 250.

Table 6.5. Planned	U.S. Electric	Generating I	Unit Additions
Table v.s. I latitied	O.O. LICCUITO	Oction atting	Jilli Additions

Table 6.5	5.5. Planned U.S. Electric Generating Unit Additions		T								
		Dignat Dug divisor		Dient		Not Comen		Energy			Namanlata
Year M	Month Entity ID Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Net Summer Generator ID Capacity (MV		Source Code	Mover Code	Status	Nameplate Capacity (MW)
2020	1 56615 First Solar Project Development	IPP	White Wing Solar	AZ	60572		.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	 	.0 Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	286.0
2020		IPP	Mattawoman Energy Center	MD	59662		.0 Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	286.0
2020 2020	1 59434 Mattawoman Energy, LLC	IPP	Mattawoman Energy Center	MD	59662 60356		.0 Natural Gas Fired Combined Cycle .0 Natural Gas Fired Combined Cycle	NG NG	CC	(P) Planned for installation, but regulatory approvals not initiated	436.0 1,105.0
2020	1 60131 South Field Energy, LLC 1 20856 Wisconsin Power & Light Co	Electric Utility	South Field Energy Riverside Energy Center	WI	55641		.0 Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction (T) Regulatory approvals received. Not under construction	232.9
2020	1 20856 Wisconsin Power & Light Co	_	Riverside Energy Center	WI	55641		.0 Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	232.9
2020	1 20856 Wisconsin Power & Light Co	•	Riverside Energy Center	WI	55641		.0 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	1 20856 Wisconsin Power & Light Co		Riverside Energy Center	WI	55641		.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		.0 Natural Gas Fired Combined Cycle	NG	СТ	(T) Regulatory approvals received. Not under construction	232.0
2020	2 59686 Coronado Power Ventures LLC		Pinecrest Energy Center	TX	59923		.0 Natural Gas Fired Combined Cycle	NG	СТ	(T) Regulatory approvals received. Not under construction	232.0
2020	2 59686 Coronado Power Ventures LLC		Pinecrest Energy Center	TX	59923	 	.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		.0 Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	390.0 265.2
2020 2020	2 58766 FGE Texas II LLC 2 58766 FGE Texas II LLC	IPP	FGE Texas II	TY	58930 58930		.9 Natural Gas Fired Combined Cycle .7 Natural Gas Fired Combined Cycle	NG NG	CA	(T) Regulatory approvals received. Not under construction (T) Regulatory approvals received. Not under construction	238.9
2020	2 58766 FGE Texas II LLC	IPP	FGE Texas II	TX	58930		.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		.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		.0 Natural Gas Fired Combined Cycle	NG	СС	(T) Regulatory approvals received. Not under construction	390.0
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	,	.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		.0 Flywheels	MWH	FW	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	5 60383 Henrietta D Energy Storage LLC		Henrietta D Energy Storage LLC	CA	60641		.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		.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		.0 Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	41.0
2020 2020	6 60799 33UI 8me LLC 6 59272 41MB 8me, LLC	IPP	Long Ridge Solar Farm Borden Solar Farm	UT CA	61170 59531		.0 Solar Photovoltaic .0 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated (T) Regulatory approvals received. Not under construction	300.0 50.0
2020	6 60798 69SV 8me LLC	IPP	Eland 2 Solar Farm	CA	61169		.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		.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		.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		.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	СТ	(P) Planned for installation, but regulatory approvals not initiated	371.5
2020	6 11241 Entergy Louisiana LLC	Electric Utility	Lake Charles Power	LA	60927		.0 Natural Gas Fired Combined Cycle	NG	СТ	(L) Regulatory approvals pending. Not under construction	250.0
2020	6 11241 Entergy Louisiana LLC	Electric Utility	Lake Charles Power	LA	60927		.0 Natural Gas Fired Combined Cycle	NG	СТ	(L) Regulatory approvals pending. Not under construction	250.0
2020	6 11241 Entergy Louisiana LLC	Electric Utility	Lake Charles Power	LA	60927		.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 TV	649		.0 Nuclear .0 Natural Gas Fired Combustion Turbine	NUC NG	GT	(U) Under construction, less than or equal to 50 percent complete	1,100.0 232.0
2020	6 60050 Halyard Energy Henderson, LLC 6 60050 Halyard Energy Henderson, LLC	IPP	Halyard Henderson Energy Center Halyard Henderson Energy Center	TX	60268 60268		.0 Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction (T) Regulatory approvals received. Not under construction	232.0
2020	6 60659 Hickory Run Energy, LLC	IPP	Hickory Run Energy Station	PA	61028		.0 Natural Gas Fired Combined Cycle	NG	СТ	(T) Regulatory approvals received. Not under construction	311.0
2020	6 60659 Hickory Run Energy, LLC	IPP	Hickory Run Energy Station	PA	61028		.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		.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		.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		.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		.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		.0 Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020 2020	6 55983 Luminant Generation Company LLC 6 55983 Luminant Generation Company LLC	IPP	Tradinghouse	TV	3506 3506		.0 Natural Gas Fired Combustion Turbine .0 Natural Gas Fired Combustion Turbine	NG NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5 235.5
2020	6 59677 Middlesex Energy Center LLC	IPP	Tradinghouse Middlesex Energy Center LLC	N.I	59909		.0 Natural Gas Fired Combined Cycle	NG	CC	(U) Under construction, less than or equal to 50 percent complete (P) Planned for installation, but regulatory approvals not initiated	560.0
2020	6 59490 Neches Station, LLC	IPP	Neches Station, LLC	TX	59716		.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		.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	ОН	61322		.0 Natural Gas Fired Combined Cycle	NG	СС	(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		.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		.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		.0 Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	41.0
2020 2020	7 59686 Coronado Power Ventures LLC 7 59686 Coronado Power Ventures LLC	IPP	La Paloma Energy Center La Paloma Energy Center	TY	59924 59924		.5 Natural Gas Fired Combined Cycle.5 Natural Gas Fired Combined Cycle	NG NG	CT	(T) Regulatory approvals received. Not under construction (T) Regulatory approvals received. Not under construction	230.0 230.0
2020	7 59686 Coronado Power Ventures LLC	IPP	La Paloma Energy Center	TX	59924		.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		.0 Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	122.0
2020	7 58798 Shell Chemical Appalachia LLC		Shell Chemical Appalachia LLC	PA	58933		.0 Natural Gas Fired Combined Cycle	NG	СТ	(U) Under construction, less than or equal to 50 percent complete	41.0
2020	7 58798 Shell Chemical Appalachia LLC		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		Shell Chemical Appalachia LLC	PA	58933		.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	+	Blythe Solar III, LLC	CA	60094		.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 NY	60095		.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		.6 Other Waste Biomass	OBG	CA	(U) Under construction, less than or equal to 50 percent complete	12.0
2020 2020	8 56789 TBE Montgomery LLC 9 58881 Apex Bethel Energy Center	IPP	TBE-Montgomery LLC Apex Bethel Energy Center	TX	57472 59048		.4 Other Waste Biomass.5 Natural Gas with Compressed Air Storage	OBG NG	CF	(U) Under construction, less than or equal to 50 percent complete (T) Regulatory approvals received. Not under construction	158.5
2020	9 58881 Apex Bethel Energy Center	·· ·	Apex Bethel Energy Center	TX	59048		.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		.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		.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		.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		.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		.0 Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	275.0
2020	10 59844 Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60094		.2 Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	 10 59845 Blythe Solar IV, LLC 10 5580 East Kentucky Power Coop, Inc 	<u>"" "</u>	Blythe Solar IV, LLC Green Valley LFGTE	KY	60095 56278		.2 Solar Photovoltaic .8 Landfill Gas	SUN LFG	PV IC	(T) Regulatory approvals received. Not under construction (P) Planned for installation, but regulatory approvals not initiated	31.2
2020	10 57028 West Butte Wind Power LLC	IPP	West Butte Wind Power Project	OR	57704		.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		.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		.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		.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		.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		.7 Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.7
2020	12 59365 Capital Power Corporation		Nolin Hills Wind, LLC	OR	60070		.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		.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		.0 Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2020	12 56615 First Solar Project Development		American Kings Solar, LLC	CA NV	60777		.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.

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

Table 6.5. Planned U.S. Electric Generating Unit Additions		_								
							Energy	Prime		
	Plant Producer		Plant			Net Summer	Source	Mover		Nameplate
Year Month Entity ID Entity Name	Туре	Plant Name	State	Plant ID	Generator ID	Capacity (MW) Technology	Code	Code	Status	Capacity (MW)
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 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		SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	45.0
2020 12 60473 Renovo Energy Center 2020 12 60473 Renovo Energy Center	IPP	Renovo Energy Center Renovo Energy Center	PA	60786 60786	RECNY RECPJ	1	NG NG	CS CS	(L) Regulatory approvals pending. Not under construction	513.0 513.0
2020 12 60475 Reflow Energy Center 2020 12 17539 South Carolina Electric&Gas Company	Electric Utility	V C Summer	SC	6127	RECPJ	1,100.0 Nuclear	NUC	CS ST	(L) Regulatory approvals pending. Not under construction (U) Under construction, less than or equal to 50 percent complete	1,100.0
2020 12 17539 South Carolina Electricagas Company 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
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		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		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		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		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	СТ	(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		NG	СТ	(P) Planned for installation, but regulatory approvals not initiated	280.5
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	ВА	(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		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	СТ	(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	-	NG	СТ	(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	ОТ	(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	СТ	(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	,	NG	CC	(L) Regulatory approvals pending. Not under construction	552.0
2021 7 60835 NTE Carolinas II, LLC	IPP IPP	Reidsville Energy Center	NC	61240	REC	,	NG	CC	(L) Regulatory approvals pending. Not under construction	534.5
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	-	NG	CI	(P) Planned for installation, but regulatory approvals not initiated	357.0
2021 12 49745 Cash Creek Generating LLC 2021 12 60064 Clean Path Energy Center, LLC	IPP	Clash Creek	NIM	56107	ST CPEC1	123.6 Natural Gas Fired Combined Cycle 680.0 Natural Gas Fired Combined Cycle	NG NG	CA	(P) Planned for installation, but regulatory approvals not initiated	136.0
2021 12 60064 Clean Path Energy Center, LLC 2021 12 60064 Clean Path Energy Center, LLC	IPP	Clean Path Energy Center Clean Path Energy Center	NIM	60289 60289	PVGEN	-	SUN	D\/	(P) Planned for installation, but regulatory approvals not initiated	680.0 55.0
2021 12 59380 Enel Green Power NA, Inc.	IPP	Pomerado Energy Storage, LLC	CA	61390	PMRDO		MWH	BA	(P) Planned for installation, but regulatory approvals not initiated(P) Planned for installation, but regulatory approvals not initiated	3.0
2021 12 59646 Summit Texas Clean Energy	IPP	Texas Clean Energy Project	TX	59859	TCE1A		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		OG	CA	(T) Regulatory approvals received. Not under construction	126.0
2022 4 55927 Power4Georgians LLC	Electric Utility	Plant Washington	GA	56675	MAIN		SUB	ST	(T) Regulatory approvals received. Not under construction	850.0
2022 5 16572 Salt River Project	Electric Utility	Copper Crossing Energy Center	A7	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		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	-	NG	CT	(L) Regulatory approvals pending. Not under construction	235.5
2022 6 55983 Luminant Generation Company LLC	IPP	Eagle Mountain	TX	3489	ST1		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	•	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		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		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		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		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		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		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	טו	61075	NPM6		NUC	SI	(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		NUC	S1	(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	חו	61075	NPM8		NUC	S1	(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	ח	61075	NPM9 NPM10		NUC	01 0T	(P) Planned for installation, but regulatory approvals not initiated	50.0 50.0
2027 2 40575 Utah Associated Mun Power Sys 2027 3 40575 Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant UAMPS Carbon Free Power Plant	חו	61075	NPM10 NPM11	47.5 Nuclear 47.5 Nuclear	NUC NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2027 3 40575 Utah Associated Mun Power Sys 2027 4 40575 Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant UAMPS Carbon Free Power Plant	חו	61075	NPM11 NPM12		NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	
2027 4 40575 Otan Associated Mun Power Sys 2027 12 60223 Ketchikan Electric Company	Electric Utility Electric Utility	Mahoney Lake Hydroelectric	AK	61075 59027	GEN 1	9.6 Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated(P) Planned for installation, but regulatory approvals not initiated	50.0 9.6
NOTES:	Lieunic Ounty	Manoricy Lake Hydroelectric	1/311	33021	GEN I	5.0 Conventional Flydroelectric	IVV A I	1111	(1) Francisco for installation, but regulatory approvals not illitiated	9.0

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

		Plant Producer		Plant			Net Summer	Energy Source	Prim Mov
Year Montl	nth Entity ID Entity Name	Type	Plant Name	State	Plant ID	Generator ID	Capacity (MW) Technology	Code	Cod
2017 11	11 11713 City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC2	0.9 Natural Gas Internal Combustion Engine	NG	IC
2017 11	11 11713 City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC4	0.7 Petroleum Liquids	DFO	IC
2017 11	11 9417 Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	1	2.1 Petroleum Liquids	DFO	IC
2017 11	11 9417 Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	2	1.8 Petroleum Liquids	DFO	IC
2017 11	11 9417 Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	3	1.9 Petroleum Liquids	DFO	IC
2017 11	11 9417 Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	GT1	21.6 Petroleum Liquids	DFO	GT
2017 11	11 9417 Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	GT2	25.7 Petroleum Liquids	DFO	GT
2017 11	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
	12 221 Alaska Village Elec Coop, Inc	Electric Utility	Brevig Mission	AK	60260	3	0.5 Petroleum Liquids	DFO	IC
2017 12	12 221 Alaska Village Elec Coop, Inc	Electric Utility	Kasigluk	AK	57066	UNIT1	0.4 Petroleum Liquids	DFO	IC T
	 733 Appalachian Power Co 733 Appalachian Power Co 	Electric Utility	Kanawha River Kanawha River	WV WV	3936 3936	1	200.0 Conventional Steam Coal 200.0 Conventional Steam Coal	BIT BIT	SI ST
2017 12 2017 12	12 733 Apparachian Power Co 12 17833 City Utilities of Springfield - (MO)	Electric Utility Electric Utility	James River Power Station	MO	2161		21.0 Conventional Steam Coal	SUB	ST
2017 12	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	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	12 9205 Illinois Electricial Gen Partn	IPP	Streator Energy Partners LLC	II	55760	ST1	0.9 Landfill Gas	LFG	IC.
2017 12	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	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	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	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	12 13960 NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	2	104.0 Natural Gas Steam Turbine	NG	ST
2017 12	12 13960 NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	3	110.0 Natural Gas Steam Turbine	NG	ST
2017 12	12 13960 NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	4	300.0 Natural Gas Steam Turbine	NG	ST
2017 12	12 13960 NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	5	330.0 Natural Gas Steam Turbine	NG	ST
2017 12	12 13960 NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	GT1	14.0 Natural Gas Fired Combustion Turbine	NG	GT
2017 12	12 13960 NRG Cabrillo Power Ops Inc	IPP	Kearny	CA	303	KEA3	61.0 Natural Gas Fired Combustion Turbine	NG	GT
2017 12	12 14063 Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	3	121.0 Natural Gas Steam Turbine	NG	ST
2017 12	12 14063 Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	4	259.0 Natural Gas Steam Turbine	NG	ST
2017 12	12 14030 Oklahoma State University	Commercial	Oklahoma State University	OK	54779	GEN1	1.6 Natural Gas Steam Turbine	NG	ST
2017 12	12 14030 Oklahoma State University	Commercial	Oklahoma State University	OK	54779	GEN2	1.6 Natural Gas Steam Turbine	NG	ST
2017 12	12 14030 Oklahoma State University	Commercial	Oklahoma State University	OK	54779	GEN4	5.2 Natural Gas Steam Turbine	NG	ST
2017 12	12 15473 Public Service Co of NM	Electric Utility	San Juan	NM	2451	2	340.0 Conventional Steam Coal	BIT	ST
2017 12	12 15473 Public Service Co of NM	Electric Utility	San Juan	NM	2451	3	497.0 Conventional Steam Coal	BIT	ST
2017 12	12 18642 Tennessee Valley Authority	Electric Utility	Johnsonville	TN	3406	1	107.0 Conventional Steam Coal	SUB	ST
2017 12	12 18642 Tennessee Valley Authority	Electric Utility	Johnsonville	TN	3406	2	107.0 Conventional Steam Coal	SUB	ST
2017 12	12 18642 Tennessee Valley Authority	Electric Utility	Johnsonville	TN	3406	3	107.0 Conventional Steam Coal	SUB	ST
2017 12	12 18642 Tennessee Valley Authority	Electric Utility	Johnsonville	TN	3406	4	107.0 Conventional Steam Coal	SUB	ST
2017 12	12 5677 Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT1	0.5 Landfill Gas	LFG	IC
2017 12	12 5677 Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT2	0.3 Landfill Gas	LFG	IC
2017 12	12 5677 Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT3	0.3 Landfill Gas	LFG	IC
2017 12	12 5677 Waste Energy Services Inc	Electric CHP	Waste Energy Services	IVII	50077	CAT4	0.3 Landfill Gas	LFG	CT
2018 1 2018 1	1 49735 HGST a Western Digital Company 1 9617 JEA	Industrial Electric Utility	HGST San Jose Standby Generator St Johns River Power Park	CA FI	50024 207	50MW	42.0 Petroleum Liquids 626.0 Conventional Steam Coal	DFO BIT	GT GT
	1 9617 JEA 1 9617 JEA	Electric Utility	St Johns River Power Park St Johns River Power Park	FL	207	<u> </u>	626.0 Conventional Steam Coal	BIT	OT OT
2018 1 2018 1	1 55983 Luminant Generation Company LLC	IPP	Monticello	TV	6147		535.0 Conventional Steam Coal	SUB	ST ST
2018 1	1 55983 Luminant Generation Company LLC	IPP	Monticello	TX	6147	<u> </u>	535.0 Conventional Steam Coal	SUB	OT
2018 1	1 55983 Luminant Generation Company LLC	IPP	Monticello	TX	6147	3	795.0 Conventional Steam Coal	SUB	ST
2018 1	1 55983 Luminant Generation Company LLC	IPP	Sandow No 4	TX	6648	<u> </u>	600.0 Conventional Steam Coal	LIG	ST
2018 1	1 55983 Luminant Generation Company LLC	IPP	Sandow No 5	TX	52071		600.0 Conventional Steam Coal	LIG	ST
2018 1	1 25835 Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS1	0.9 Conventional Hydroelectric	WAT	HY
2018 1	1 25835 Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS2	0.9 Conventional Hydroelectric	WAT	HY
2018 1	1 25835 Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS3	0.9 Conventional Hydroelectric	WAT	HY
2018 1	1 25835 Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS4	0.9 Conventional Hydroelectric	WAT	HY
018 1	1 25835 Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS5	0.9 Conventional Hydroelectric	WAT	HY
018 1	1 25835 Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS6	0.9 Conventional Hydroelectric	WAT	HY
	2 55983 Luminant Generation Company LLC	IPP	Big Brown	TX	3497	1	606.0 Conventional Steam Coal	SUB	ST
2018 2	in the state of th	IPP	Big Brown	TX	3497	2	602.0 Conventional Steam Coal	SUB	ST
	2 55983 Luminant Generation Company LLC	[11 1	<u> </u>	011	57926	HP	0.0 Natural Gas Steam Turbine	NG	ST
2018 2	2 55983 Luminant Generation Company LLC 2 57305 Wright Patterson AFB	Commercial	Heat Plant 770	OH	0/0201	1 11 1	0.0[Natural Gas Steam Turbine	ING	, O !
2018 2 2018 2			Heat Plant 770 Heat Plant 770	ОН		LP	0.0 Natural Gas Steam Turbine 0.0 Natural Gas Steam Turbine	NG	ST
2018 2 2018 2 2018 2	2 57305 Wright Patterson AFB 2 57305 Wright Patterson AFB	Commercial			57926 6319				ST
2018 2 2018 2 2018 2 2018 4	2 57305 Wright Patterson AFB	Commercial Commercial	Heat Plant 770	ОН	57926	LP	0.0 Natural Gas Steam Turbine	NG	
2018 2 2018 2 2018 2 2018 4 2018 4	2 57305 Wright Patterson AFB 2 57305 Wright Patterson AFB 4 221 Alaska Village Elec Coop, Inc	Commercial Commercial Electric Utility	Heat Plant 770 Hooper Bay	OH AK	57926 6319	LP 3A	0.0 Natural Gas Steam Turbine 0.3 Petroleum Liquids	NG DFO	
2018 2 2018 2 2018 2 2018 4 2018 4 2018 4	2 57305 Wright Patterson AFB 2 57305 Wright Patterson AFB 4 221 Alaska Village Elec Coop, Inc 4 221 Alaska Village Elec Coop, Inc	Commercial Commercial Electric Utility Electric Utility	Heat Plant 770 Hooper Bay Pilot Station	OH AK	57926 6319 57058	LP 3A	0.0 Natural Gas Steam Turbine 0.3 Petroleum Liquids 0.4 Petroleum Liquids	NG DFO DFO	
2018 2 2018 2 2018 2 2018 4 2018 4 2018 4 2018 4	2 57305 Wright Patterson AFB 2 57305 Wright Patterson AFB 4 221 Alaska Village Elec Coop, Inc 4 221 Alaska Village Elec Coop, Inc 4 6455 Duke Energy Florida, LLC	Commercial Commercial Electric Utility Electric Utility Electric Utility	Heat Plant 770 Hooper Bay Pilot Station Crystal River	OH AK AK FL	57926 6319 57058 628	LP 3A	0.0 Natural Gas Steam Turbine 0.3 Petroleum Liquids 0.4 Petroleum Liquids 324.0 Conventional Steam Coal	NG DFO DFO BIT	
2018 2 2018 2 2018 2 2018 2 2018 2 2018 4 2018 4 2018 4 2018 4 2018 4 2018 4 2018 4 2018 4	2 57305 Wright Patterson AFB 2 57305 Wright Patterson AFB 4 221 Alaska Village Elec Coop, Inc 4 221 Alaska Village Elec Coop, Inc 4 6455 Duke Energy Florida, LLC 4 6455 Duke Energy Florida, LLC	Commercial Commercial Electric Utility Electric Utility Electric Utility Electric Utility	Heat Plant 770 Hooper Bay Pilot Station Crystal River Crystal River	OH AK AK FL FL	57926 6319 57058 628 628	LP 3A	0.0 Natural Gas Steam Turbine 0.3 Petroleum Liquids 0.4 Petroleum Liquids 324.0 Conventional Steam Coal 442.0 Conventional Steam Coal	NG DFO DFO BIT BIT	IC IC ST ST

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

Table 6.6. Planned U.S. Electric Generating Unit Retirements								
Voca Month Entity ID Entity News	Plant Producer	Digut Name	Plant	Diam's ID	O a manada ni ID	Net Summer	Energy Source	Prime Mover
Year Month Entity ID Entity Name	Type Electric Utility	Plant Name	State	Plant ID	Generator ID	Capacity (MW) Technology 45.0 Natural Gas Steam Turbine		Code
2018 5 5701 El Paso Electric Co 2018 5 13756 Northern Indiana Pub Serv Co	Electric Utility	Rio Grande Bailly	NM	2444 995	7	160.0 Conventional Steam Coal	NG 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
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	ОН	2850	1	577.0 Conventional Steam Coal	BIT	ST
2018 6 4922 Dayton Power & Light Co	Electric Utility	J M Stuart	ОН	2850	2	577.0 Conventional Steam Coal	BIT	ST
2018 6 4922 Dayton Power & Light Co	Electric Utility	J M Stuart	ОН	2850	3	577.0 Conventional Steam Coal	BIT	ST
2018 6 4922 Dayton Power & Light Co	Electric Utility	J M Stuart	ОН	2850	4	577.0 Conventional Steam Coal	BIT	ST
2018 6 4922 Dayton Power & Light Co	Electric Utility	J M Stuart	ОН	2850	D1	2.2 Petroleum Liquids	DFO	IC
2018 6 4922 Dayton Power & Light Co	Electric Utility	J M Stuart	ОН	2850	D2	2.2 Petroleum Liquids	DFO	IC
2018 6 4922 Dayton Power & Light Co	Electric Utility	J M Stuart	ОН	2850	D3	2.2 Petroleum Liquids	DFO	IC
2018 6 4922 Dayton Power & Light Co	Electric Utility	J M Stuart	ОН	2850	D4	2.2 Petroleum Liquids	DFO	IC
2018 6 4922 Dayton Power & Light Co	Electric Utility	Killen Station	ОН	6031	2	600.0 Conventional Steam Coal	BIT	ST
2018 6 4922 Dayton Power & Light Co	Electric Utility	Killen Station	ОН	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	7	76.0 Natural Gas Steam Turbine	NG	51
2018 10 18445 City of Tallahassee - (FL)	Electric Utility	S O Purdom	FL	689	GT1	10.0 Natural Gas Fired Combustion Turbine	NG	CT
2018 10 18445 City of Tallahassee - (FL) 2018 10 56997 Marina Energy LLC	Electric Utility	S O Purdom Stockton Athletic Center	FL NII	689 57864	GT2 2LOT7	10.0 Natural Gas Fired Combustion Turbine 0.5 Solar Photovoltaic	NG SUN	PV
2018 10 36997 Marina Energy LLC 2018 10 18715 Texas Municipal Power Agency	Commercial Electric Utility	Gibbons Creek	NJ	6136	2LU17	470.0 Conventional Steam Coal	SUB	PV 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	МО	2161	4	56.0 Natural Gas Steam Turbine	NG	ST
2018 12 17833 City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	МО	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	МО	2094	1	42.2 Conventional Steam Coal	SUB	ST
2018 12 56211 KCP&L Greater Missouri Operations Co	Electric Utility	Sibley	МО	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	МО	2080	2	164.0 Conventional Steam Coal	SUB	ST
2018 12 10000 Kansas City Power & Light Co	Electric Utility	Montrose	МО	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	SI
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	ПХ
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 57864	SAC	1.6 Conventional Hydroelectric 0.3 Solar Photovoltaic	WAT	D\/
2019 2 56997 Marina Energy LLC 2019 3 8776 City of Holyoke Gas and Electric Dept.	Commercial Electric Utility	Stockton Athletic Center Harris Energy Realty	NJ MA	54981	ALBA	0.3 Conventional Hydroelectric	SUN WAT	HV
2019 3 8776 City of Holyoke Gas and Electric Dept. 2019 3 8776 City of Holyoke Gas and Electric Dept.	Electric Utility	Harris Energy Realty Harris Energy Realty	MA	54981	ALBA	0.3 Conventional Hydroelectric 0.4 Conventional Hydroelectric	WAT	HY 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 Const Prods LP-Naheola 2019 4 7136 Georgia-Pacific Const Prods LP-Naheola	Industrial	Georgia-Pacific Consr Prods LP-Naheola	AL	10699	GEN1 GEN2	12.4 Wood/Wood Waste Biomass 12.4 Wood/Wood Waste Biomass	BLQ	ST
2019 4 7136 Georgia-Pacific Const Prods LP-Narieola 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 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
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Table 6.6. Planned U.S. Electric Generating Unit Retirements

Table 6.6. Planned U.S. Electric Generating Unit Retirements								
	Plant Producer		Plant			Net Summer	0,	Prime Mover
Year Month Entity ID Entity Name	Туре	Plant Name	State	Plant ID	Generator ID	Capacity (MW) Technology	Code	Code
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
2019 6 20847 Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	9	83.0 Conventional Steam Coal	SUB	HY
2019 8 14624 PUD No 2 of Grant County 2019 9 55951 Exelon Nuclear	Electric Utility IPP	Wanapum Three Mile Island	WA PA	3888 8011	4	103.8 Conventional Hydroelectric 802.8 Nuclear	WAT 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		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	SI
2019 12 17718 Southwestern Public Service Co 2020 1 15908 NRG California South LP	Electric Utility	Plant X	IX CA	3485	1	38.0 Natural Gas Steam Turbine	NG	ST
2020 1 15908 NRG California South LP 2020 1 15908 NRG California South LP	IPP IPP	Mandalay Mandalay	CA CA	345 345	1	215.0 Natural Gas Steam Turbine 215.0 Natural Gas Steam Turbine	NG	OT.
2020 1 15908 NRG California South LP 2020 1 21622 The University of Texas at Dallas		University of Texas at Dallas	TX	54607	GEN1	3.5 Natural Gas Steam Turbine 3.5 Natural Gas Internal Combustion Engine	NG NG	10
2020 1 21022 The Offiversity of Texas at Dalias 2020 4 11820 Massachusetts Inst of Tech	Commercial Commercial	•	MA	54907	CTG1	19.0 Natural Gas Fired Combustion Turbine	NG	GT
2020 5 6455 Duke Energy Florida, LLC	Electric Utility	Avon Park	FI	624	P1	24.0 Natural Gas Fired Combustion Turbine	NG	GT
2020 5 6455 Duke Energy Florida, LLC	Electric Utility	Avon Park	FI	624	P2	24.0 Petroleum Liquids	DFO	GT
2020 5 6455 Duke Energy Florida, LLC	Electric Utility	Higgins	FI	630	P1	20.0 Natural Gas Fired Combustion Turbine	NG	GT
2020 5 6455 Duke Energy Florida, LLC	Electric Utility	Higgins	FI	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	ОН	2866	1	180.0 Conventional Steam Coal	BIT	ST
2020 5 6526 FirstEnergy Generation Corp	IPP	FirstEnergy W H Sammis	ОН	2866	2	180.0 Conventional Steam Coal	BIT	ST
2020 5 6526 FirstEnergy Generation Corp	IPP	FirstEnergy W H Sammis	ОН	2866	3	180.0 Conventional Steam Coal	BIT	ST
2020 5 6526 FirstEnergy Generation Corp	IPP	FirstEnergy W H Sammis	ОН	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		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

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

Table 0.0. Flam	nned U.S. Electric Generating Unit Retirements								
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Voar Month E	Entity ID Entity Name	Plant Producer	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW) Technology	Source Code	Mover Code
2020 11	56778 Bloom Energy 2009 PPA	Type IPP	Caltech Central	CA	57460	CL06	0.1 Other Waste Biomass	OBG	FC
2020 11	56778 Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL07	0.1 Other Waste Biomass	OBG	FC
2020 11	56778 Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL08	0.1 Other Waste Biomass	OBG	FC
2020 11	56778 Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL09	0.1 Other Waste Biomass	OBG	FC
2020 11	56778 Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL10	0.1 Other Waste Biomass	OBG	FC
2020 12	22148 AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	3	332.0 Natural Gas Steam Turbine	NG	ST
2020 12	22148 AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	4	335.0 Natural Gas Steam Turbine	NG	ST
2020 12	22148 AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	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	51
2020 12 2020 12	11208 Los Angeles Department of Water & Power 14232 Otter Tail Power Co	Electric Utility Electric Utility	Scattergood Hoot Lake	CA MN	404 1943	D1	177.0 Natural Gas Steam Turbine 0.2 Petroleum Liquids	NG DFO	21
2020 12	14232 Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	D2	0.1 Petroleum Liquids	DFO	
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	ОН	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 IPP	Dickerson	MD	1572	GT3	147.0 Natural Gas Fired Combustion Turbine	NG	GI
2021 5 2021 6	12653 GenOn Mid-Atlantic LLC 14232 Otter Tail Power Co	Electric Utility	Dickerson Hoot Lake	MD MN	1572 1943	ST1	173.0 Conventional Steam Coal 58.0 Conventional Steam Coal	BIT SUB	ST
2021 6	14232 Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	2	80.0 Conventional Steam Coal	SUB	OT
2021 9	17166 Sierra Pacific Power Co	Electric Utility	Fort Churchill	NV	2330	3	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 CT
2022 12	5701 El Paso Electric Co	Electric Utility	Rio Grande	NM	2444	7	46.0 Natural Gas Steam Turbine	NG	51
2022 12	13781 Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	3	61.0 Petroleum Liquids	DFO	CT
2022 12 2022 12	13781 Northern States Power Co - Minnesota 13781 Northern States Power Co - Minnesota	Electric Utility Electric Utility	French Island Sherburne County	WI MN	4005 6090	4	61.0 Petroleum Liquids 682.0 Conventional Steam Coal	DFO SUB	QT
2022 12	13781 Northern States Power Co - Minnesota 15466 Public Service Co of Colorado	Electric Utility	Comanche (CO)	CO	470	4	325.0 Conventional Steam Coal	SUB	ST
2022 12	17718 Southwestern Public Service Co	Electric Utility	Nichols	>./	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	2	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
	57173 AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT1	1.5 Landfill Gas	LFG	IC
				1		· .	L		

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

Table 6.6. Planned U.S. Electric Generating Unit Retirements								
							Energy	Prime
	Plant Producer		Plant			Net Summer	0,	Mover
Year Month Entity ID Entity Name	Туре	Plant Name	State	Plant ID	Generator ID	Capacity (MW) Technology		Code
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	СТ
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	СТ
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	СТ
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	CI
2023 3 13365 Nevada Cogeneration Assoc # 2 2023 12 5860 Empire District Electric Co	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	STM	28.0 Natural Gas Fired Combined Cycle 82.0 Natural Gas Fired Combustion Turbine	NG	CA
2023 12 5860 Empire District Electric Co 2023 12 13781 Northern States Power Co - Minnesota	Electric Utility Electric Utility	Empire Energy Center Blue Lake	MO MN	6223 8027	1	39.0 Petroleum Liquids	NG DFO	GT
2023 12 13781 Northern States Power Co - Minnesota 2023 12 13781 Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	2	39.0 Petroleum Liquids		GT
2023 12 13781 Northern States Power Co - Minnesota 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		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		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	***	HY
2025 8 13781 Northern States Power Co - Minnesota	Electric Utility	White River (WI)	WI	3989	2	0.2 Conventional Hydroelectric		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	SI
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 Erickson Station	MI	4012	2	0.3 Conventional Hydroelectric	WAT	HY
2025 12 56155 Lansing Board of Water and Light 2025 12 13781 Northern States Power Co - Minnesota	Electric Utility		SD	1832 7237	1	154.5 Conventional Steam Coal	SUB	CT
2025 12 13781 Northern States Power Co - Minnesota 2025 12 13781 Northern States Power Co - Minnesota	Electric Utility Electric Utility	Angus Anson Angus Anson	SD	7237	2	90.0 Natural Gas Fired Combustion Turbine 90.0 Natural Gas Fired Combustion Turbine	NG NG	GT
2025 12 13781 Northern States Power Co - Minnesota 2025 12 13781 Northern States Power Co - Minnesota	Electric Utility	Saxon Falls	WI	1756	1	0.5 Conventional Hydroelectric	WAT	HV
2025 12 13781 Northern States Power Co - Minnesota 2025 12 13781 Northern States Power Co - Minnesota	Electric Utility	Saxon Falls	WI	1756	2	0.5 Conventional Hydroelectric		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 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		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)	СО	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		61.0 Natural Gas Fired Combustion Turbine	NG	GT
2025 12 17718 Southwestern Public Service Co	Electric Utility	Maddox	NM	2446		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		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	СТ
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		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	IPV
2047 2 56031 CPV Maryland LLC	IPP	CPV St Charles Energy Center	MD	56846	GTG1	205.0 Natural Gas Fired Combined Cycle	NG	CT

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

									Energy	Prime
		P	Plant Producer		Plant			Net Summer	Source	Mover
Year	Month	Entity ID Entity Name	уре	Plant Name	State	Plant ID	Generator ID	Capacity (MW) Technology	Code	Code
2047	7	60455 PVN Milliken, LLC	PP	PVN Milliken, LLC	CA	60790	PV	3.0 Solar Photovoltaic	SUN	PV

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-October 2017

	Coal		Natura	l 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		
nnual 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%		
ear 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%		
ear 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%		
ear 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%		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%		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		

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-October 2017

Table 6.7.B. Capacit	y Factors for Ut	tility Scale Gene	erators Not Prima	rily Using Fossil	Fuels, January 20	13-October 2017 Landfill Gas and		
Period	Nuclear	Conventional Hydropower	Wind	Solar Photovoltaic	Solar Thermal	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%			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	33,3	51.15,75	55.57.5				33,373	
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%		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%		27.6%	71.3%	49.0%	77.4%
Sept	94.9%	34.7%	31.5%		29.2%	69.3%	48.2%	77.4%
October	89.1%	30.2%	41.6%		24.1%	67.0%	52.4%	69.3%

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 October 2017

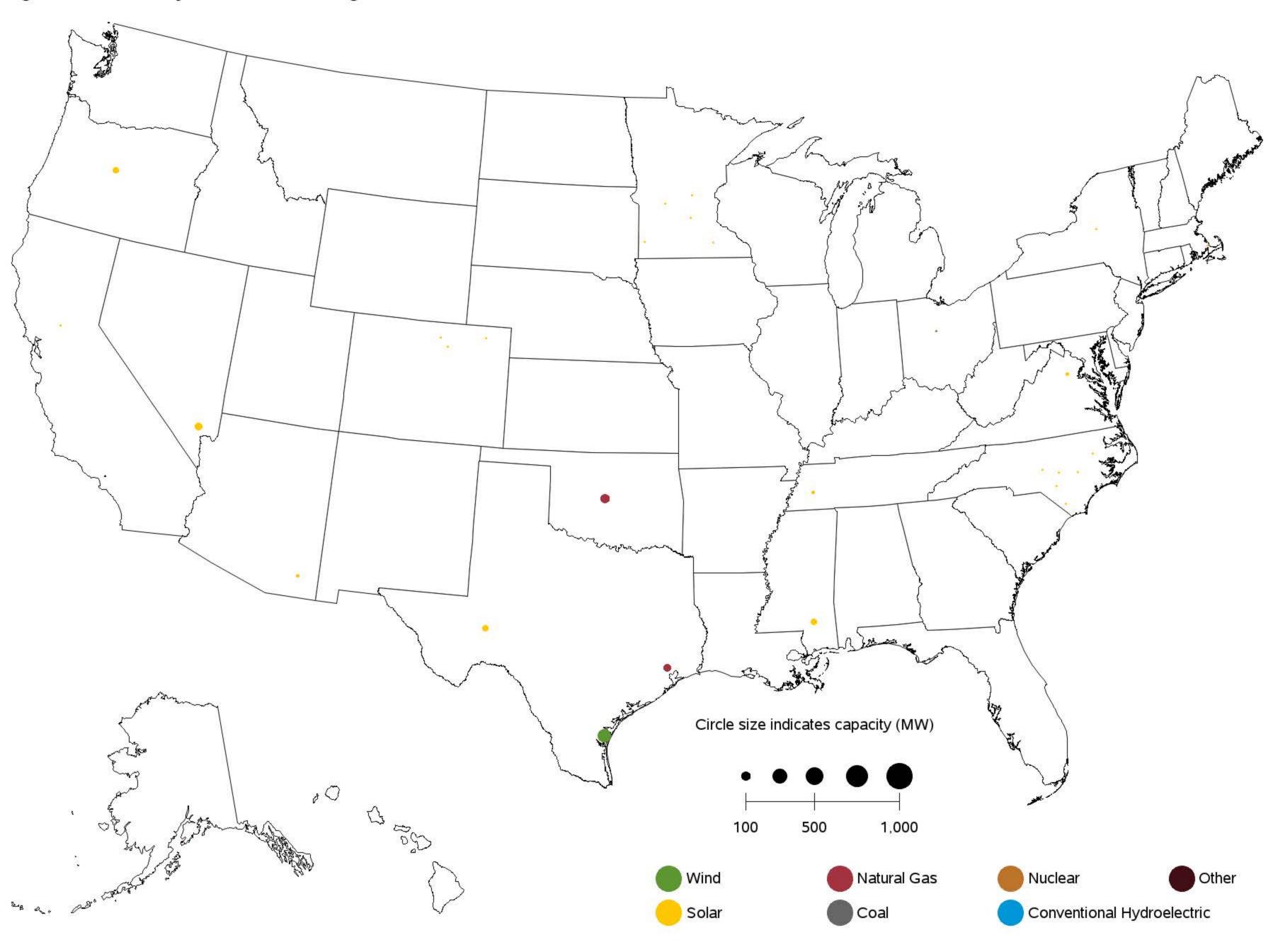


Figure 6.1.B. Utility-Scale Generating Units Retired in October 2017

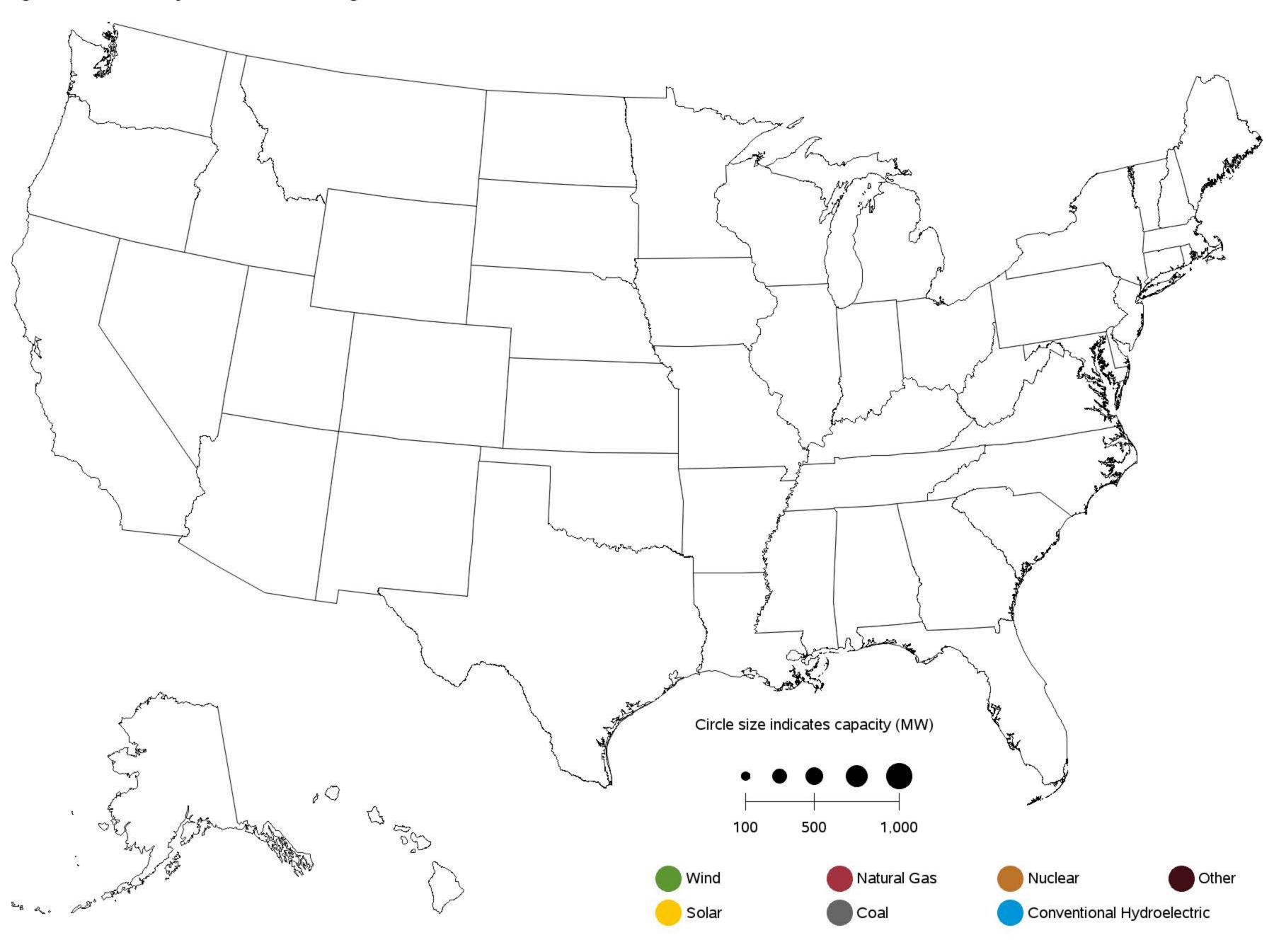


Figure 6.1.C. Utility-Scale Generating Units Planned to Come Online from November 2017 to October 2018

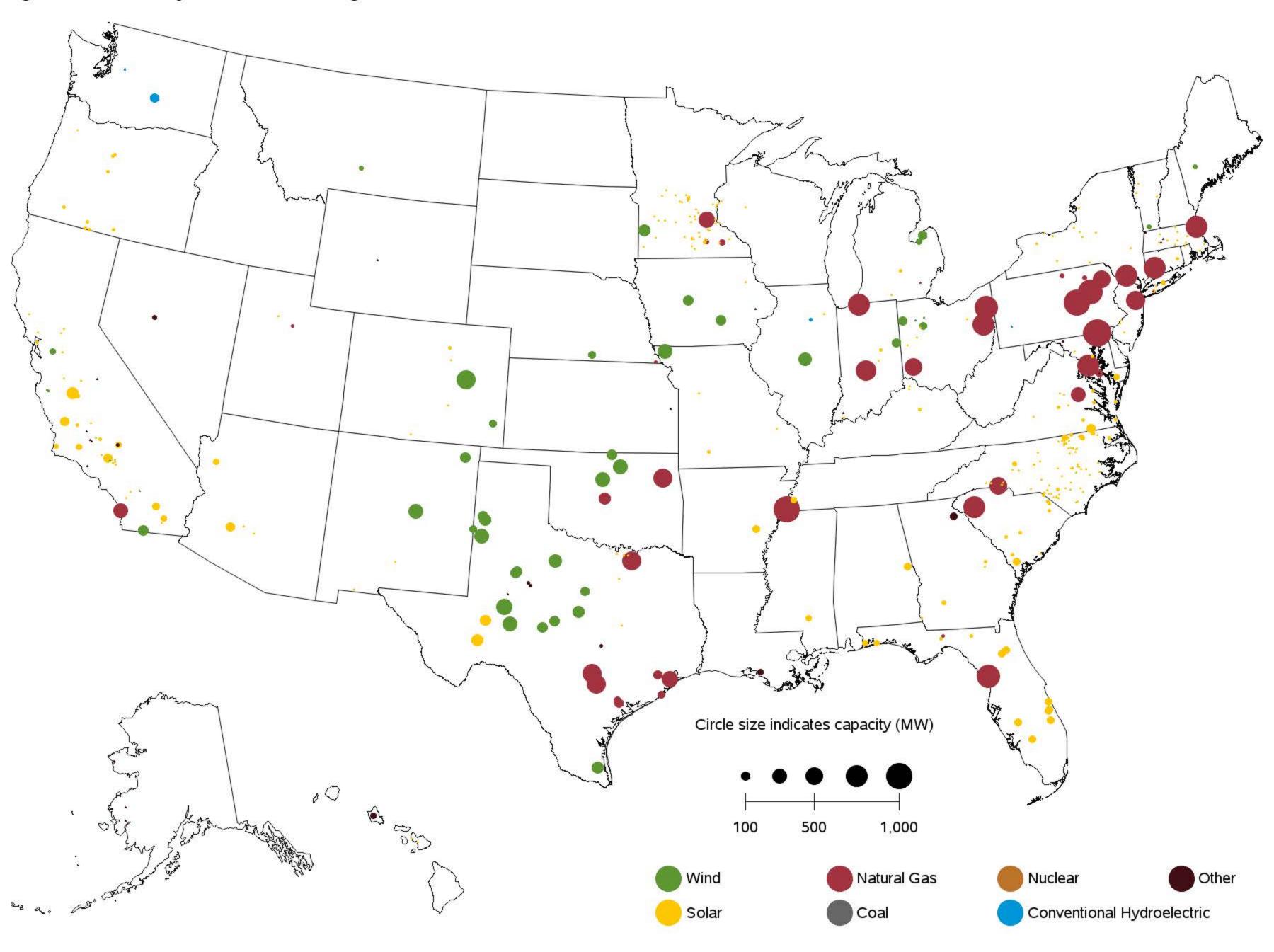


Figure 6.1.D. Utility-Scale Generating Units Planned to Retire from November 2017 to October 2018

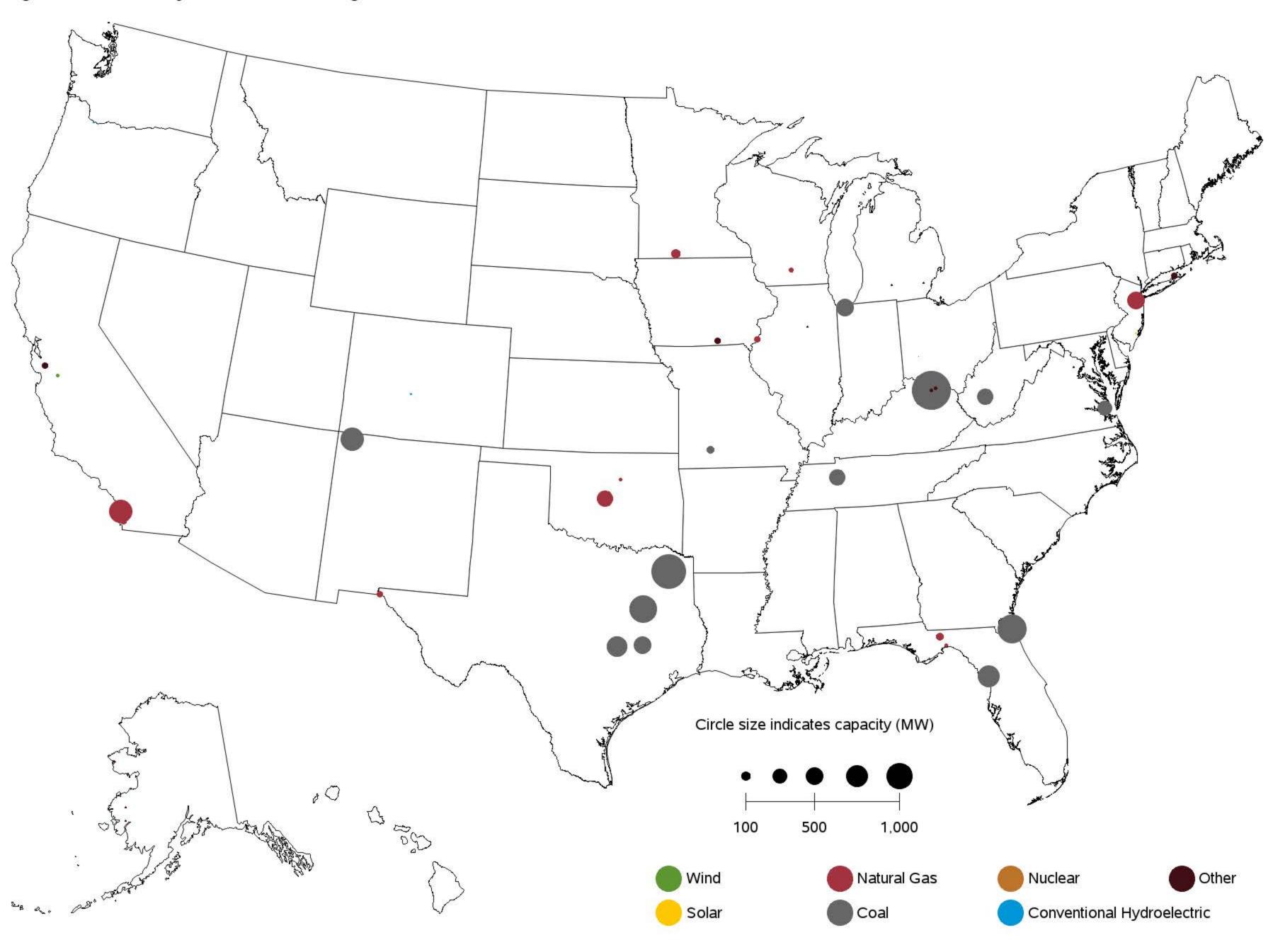


Table 7.1. Electric Power Industry - U.S. Electricity Imports from and Electricity Exports to Canada and Mexico (Megawatthours)

	Canada	1	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

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

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

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

Hydroeled Convention	Nuclear	Other Gases	Natural Gas	Petroleum Coke	Petroleum Liquids	Coal	Census Region and State
	0	0	11	0	14	19	New England
	0	0	6	0	26	0	Connecticut
	0	0	100	0	23	21	Maine
	0	0	15	0	22	0	Massachusetts
	0	0	0	0	25	0	New Hampshire
	0	0	58	0	86	0	Rhode Island
	0	0	0	0	30	0	Vermont
	0	10	6	76	12	2	Middle Atlantic
	0	0	20	0	39	0	New Jersey
	0	0	8	0	16	0	New York
	0	14	4	193	13	2	Pennsylvania
	0	5	4	17	3	1	East North Central
	0	0	22	0	12	0	Illinois
	0	7	10	0	2	1	Indiana
	0	0	2	0	5	3	Michigan
	0	10	7	65	7	1	Ohio
	0	0	4	0	16	1	Wisconsin
	0	0	15	0	7	1	West North Central
	0	0	9	0	10	2	lowa
	0	0	26	0	13	3	Kansas
	0	0	10	0	15	4	Minnesota
	0	0	59	0	5	0	Missouri
	0	0	31	0	60	5	Nebraska Nerth Delega
	0	0	23	0	8	0	North Dakota
	0	18	33 2	0 3	45 4	0	South Dakota South Atlantic
	0	21	36	0	45	0	Delaware
	0	0	30	0	0	0	District of Columbia
 	0	0	1	0	6	0	Florida
	0	0	1	134	32	0	Georgia
	0	0	26	0	9	0	Maryland
	0	0	3	0	7	0	North Carolina
	0	0	6	0	33	0	South Carolina
	0	0	4	0	8	7	Virginia
	0	0	25	0	0	1	West Virginia
	0	64	4	0	7	0	East South Central
	0	66	3	0	42	0	Alabama
	0	0	46	0	2	0	Kentucky
	0	0	4	0	41	0	Mississippi
	0	0	15	0	0	0	Tennessee
	0	7	2	0	8	0	West South Central
	0	0	10	0	3	0	Arkansas
	0	12	3	0	45	0	Louisiana
	0	0	5	0	4	0	Oklahoma
	0	7	2	0	16	0	Texas
	0	0	1	0	3	1	Mountain
	0	0	1	0	1	0	Arizona
	0	0	3	0	12	0	Colorado
	0	0	13	0	0	89	Idaho
	0	0	16	0	22	6	Montana
	0	0	0	0	0	0	Nevada
	0	0	3	0	13	0	New Mexico
	0	0	6	0	2	0	Utah
	0	0	6	0	2	4	Wyoming
	0	2	1	0	7	0	Pacific Contiguous
	0	3	1	0	7	0	California
	0	0	3	0	0	0	Oregon
	0	0	5	0	19	0	Washington
	0	0	14	0	1	16	Pacific Noncontiguous
	0	0	14	0	3	53	Alaska
	0	0	0	0	1	0	Hawaii
	0	0		0	1		

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

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

Total (All Sectors) by Ce	III JUS DIVISION	and State, O	Clobel 2017 (Solar Thermal		Hydroelectric		
Census Region and State	Wind	Geothermal	Biomass	and Photovoltaic	Other Renewables	Pumped Storage	Other Energy Sources	All Energy Sources
New England		Geothermai	0	8	Neriewabies 5	Storage	Jources	Sources
Connecticut		0	0	34	11	0	0	3
Maine		0	0	82	6	0	0	20
Massachusetts		0	0	9	6	0	2	10
New Hampshire		0	0	0	13	0	0	10
Rhode Island		0					0	54
Vermont		0	0	62 25	11 11	0	0	10
Middle Atlantic		0	0	7	3	0 0	1	10
New Jersey		0	0	8	5	0	0	10
New York		0	0	o 18	3	0	2	10
		0	0	28	3	0	0	3
Pennsylvania East North Central		0	0	10	2	0		1
		0			3		3	1
Illinois		0	0	28	3	0		2
Indiana		0	0	14	4	0	0	
Michigan		0	0	22	4	0	12	1
Ohio		0	0	24	4	0	0	2
Wisconsin		0	0	51	6	0	36	1
West North Central		0	0	8	2	0	6	1
lowa		0	0	77	3	0	0	2
Kansas		0	0	99	3	0	0	2
Minnesota		0	0	9	4	0	3	2
Missouri		0	0	29	5	0	0	4
Nebraska		0	0	55	5	0	0	3
North Dakota		0	0	0	3	0	51	1
South Dakota		0	0	195	7	0	0	6
South Atlantic	0	0	0	3	2	0	1	1
Delaware	0	0	0	35	25	0	0	34
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	6	3	0	1	1
Georgia	0	0	0	6	3	0	11	2
Maryland	0	0	0	14	7	0	0	5
North Carolina	0	0	0	4	3	0	0	1
South Carolina	0	0	0	25	5	0	0	1
Virginia	0	0	0	15	7	0	0	2
West Virginia	0	0	0	0	8	0	0	2
East South Central	0	0	0	10	3	0	5	1
Alabama	0	0	0	20	5	0	0	1
Kentucky	0	0	0	0	17	0	0	5
Mississippi	0	0	0	7	4	0	0	3
Tennessee	0	0	0	21	7	0	33	2
West South Central	0	0	0	4	2	0	2	1
Arkansas	0	0	0	15	6	0	0	3
Louisiana	0	0	0	0	5	0	3	2
Oklahoma	0	0	0	0	3	0	0	2
Texas	0	0	0	4	2	0	3	1
Mountain		8	0	2	2	0	0	1
Arizona	0	0	0	3	4	0	0	0
Colorado		0	0	9	3	0	0	1
ldaho		33	0	11	6	0	0	6
Montana		0	0	47	8	0	0	4
Nevada		8	0	3	4	0	0	1
New Mexico		0	0	8	4	0	0	1
Utah		14	0	6	6	0	0	1
Wyoming		0	0	0	6	0	0	3
Pacific Contiguous		3	0	2	2	0	2	1
California		3	0	2	2	0	3	1
Oregon		19	0	16	1	0	0	2
Washington		0	0	0	3	0	0	1
Pacific Noncontiguous		19	0	14	10	0	0	1 A
Alaska		19	0	0	20	0	0	10
		0	0	0	11	0	0	10
Hawaii		19		14	11	0	0	2
U.S. Total Displayed values of zero may re		ues that round to	0 n zero The Exce	_	ahle nrovides adi	ditional precision	Which may be ac	0

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 October 2017

, ,		Petroleum	Petroleum	Jugii Gotoboi			Hydroelectric
Census Region and State	Coal		Coke	Natural Gas	Other Gases	Nuclear	Conventional
New England		14	0	11	0	0	7
Connecticut	0	26	0	6	0	0	36
Maine	21	23	0	100	0	0	
Massachusetts	0	22	0	15	0	0	
New Hampshire		25	0	0	0	0	
Rhode Island	0	86	0	58	0	0	
Vermont		30	0	0	0	0	
Middle Atlantic	2	12	76	6	10	0	2
New Jersey	0	39	0	20	0	0	335
New York	0	16	0	8	0	0	
Pennsylvania	Ţ	13	193	4	14	0	
East North Central		3	17	4	5	0	11
Illinois	0	12	0	22	0	0	
Indiana	1	2	0	10	7	0	
	3	5	0	2	0	0	
Michigan Ohio	3	7	65	7	10	0	
	1	,					
Wisconsin	1	16	0	4	0	0	
West North Central	1	7	0	15	0	0	9
lowa	2	10	0	9	0	0	
Kansas		13	0	26	0	0	
Minnesota	4	15	0	10	0	0	
Missouri	0	5	0	59	0	0	
Nebraska	5	60		31	0	0	
North Dakota	0	8	0	23	0	0	
South Dakota	0	45	0	33	0	0	14
South Atlantic	0	4	3	2	18	0	6
Delaware	0	45	0	36	21	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	6	0	1	0	0	38
Georgia	0	32	134	4	0	0	9
Maryland	0	9	0	26	0	0	3
North Carolina	0	7	0	3	0	0	8
South Carolina	0	33	0	6	0	0	15
Virginia	7	8	0	4	0	0	15
West Virginia	1	0	0	25	0	0	17
East South Central	0	7	0	4	64	0	5
Alabama	0	42	0	3	66	0	6
Kentucky	0	2	0	46	0	0	11
Mississippi	0	41	0	4	0	0	0
Tennessee	0	0	0	15	0	0	7
West South Central	0	8	0	2	7	0	6
Arkansas	0	3	0	10	0	0	9
Louisiana	0	45	0	3	12	0	15
Oklahoma	0	4	0	5	0	0	
Texas	0	16	0	2	7	0	16
Mountain	1	3	0	1	0	0	5
Arizona	0	1	0	1	0	0	4
Colorado	0	12	0	3	0	0	22
Idaho	89	0	0	13	0	0	
Montana	6	22	0	16	0	0	
Nevada	0	0	0	0	0	0	
New Mexico	0	13	0	3	0	0	
Utah	0	2	0	6	0	0	32
Wyoming		2	0	6	0	0	
Pacific Contiguous	0	7	0	0	2	0	20
California	0	7	0	4	3	0	7
				1			/
Oregon	0	0	0	3	0	0	
Washington	0	19	0	5	0	0	
Pacific Noncontiguous	16	1	0	14	0	0	20
Alaska	53	3	0	14	0	0	
Hawaii	0	1	0	0	0	0	
U.S. Total Displayed values of zero may re	0	1	6	1	3	0	2

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 October 2017 (Continued)

Total (All Sectors) by Ce				Solar Thermal		Hydroelectric		
Census Region and State		Geothermal		and	Other		Other Energy Sources	All Energy Sources
New England	0	0	0	8	5	0	1	5
Connecticut	0	0	0	34	11	0	0	3
Maine	0	0	0	82	6	0	0	20
Massachusetts	0	0	0	9	6	0	2	10
New Hampshire	0	0	0	0	13	0	0	2
Rhode Island	0	0	0	62	11	0	0	54
Vermont	0	0	0	25	11	0	0	10
Middle Atlantic	0	0	0	7	3	0	1	2
New Jersey	0	0	0	8	5	0	0	10
New York	0	0	0	18	3	0	2	3
Pennsylvania	0	0	0	28		0	0	1
East North Central		0	0			0	3	1
Illinois	0	0				0	0	2
Indiana	0	0	0			0	0	2
Michigan	ŭ	0	0			0	12	1
Ohio		0	0			0	0	2
Wisconsin	0	0	0		6	0	36	
West North Central	0	0			2	0		1
	0	0	0		2	0	6	1
lowa	0		_		3	0		2
Kansas	0	0	0	99		0	0	2
Minnesota	0	0	0			0	3	2
Missouri	0	0	0			0	0	4
Nebraska	0	0				0	0	3
North Dakota	0	0	, and the second	_	Ū	0	51	1
South Dakota	0	0	0	195	7	0	0	6
South Atlantic	0	0	0		2	0	1	1
Delaware	0	0	0	35	25	0	0	34
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	6	3	0	1	1
Georgia	0	0	0	6	3	0	11	2
Maryland	0	0	0	14	7	0	0	5
North Carolina	0	0	0	4	3	0	0	1
South Carolina	0	0	0	25	5	0	0	1
Virginia	0	0	0	15	7	0	0	2
West Virginia	0	0	0	0	8	0	0	2
East South Central	0	0	0	10	3	0	5	1
Alabama	0	0	0	20	5	0	0	1
Kentucky	0	0	0	0	17	0	0	5
Mississippi	0	0	0	7	4	0	0	3
Tennessee	0	0	0	21	7	0	33	2
West South Central	0	0	0		2	0	2	1
Arkansas	0	0			6	0	0	3
Louisiana	0	0	0			0	3	2
Oklahoma	0	0				0	0	2
Texas	0	0		4	2	0	3	1
Mountain	0	8		2	2	0	0	1
Arizona	0	0			_	0	0	0
Colorado		0	0	9		0	0	1
Idaho	0	33		_	6	0	0	1
Montana	0	0				0	0	O
Nevada	0		-		8	_		4
	ŭ	8	0			0	0	1
New Mexico	0	0				0	0	1
Utah	0	14	0		_	0	0	1
Wyoming		0				0	0	3
Pacific Contiguous	0	3	0		_	0	2	1
California		3		2	2	0	3	1
Oregon	0	19				0	0	2
Washington	0	0				0	0	1
Pacific Noncontiguous		19	0		10	0	0	4
Alaska		0		ŭ	20	0	0	10
Hawaii		19	0	14	11	0	0	2
U.S. Total	0	4	0		1	0	1	0
Displayed values of zero may re	epresent small va	lues that round t	o zero. The Exce	el version of this	table provides ad	ditional precision	which may be ac	cessed by

Table A.1.C. Relative Standard Error (Percent) for Small Scale Solar Generation and Capacity

by Sector, Census Division and State, October 2017

ensus Region and State		Commercial	Industrial	Transportation	Т
New England	0	0	1		
Connecticut	0	1	0		
Maine	3	3	0		
Massachusetts	1	1	1		
New Hampshire	1	0	0		
Rhode Island		0			
Vermont	1	ŭ	, , , , , , , , , , , , , , , , , , ,		
	4	5	113		
Middle Atlantic	0	0	1		
New Jersey	0	0	2	-	
New York	0	0	1		
Pennsylvania	2	2	0		
East North Central	1	1	3		
Illinois	3	6			
Indiana	1	2	0		
	4	3			
Michigan		8	_		
Ohio	3	1	5		
Wisconsin	4	6	1		
West North Central	1	1	5		
lowa	4	2	25		
Kansas	7	7	0		
Minnesota	4	1	5		
		4			
Missouri	1	1	0		
Nebraska	12		30		
North Dakota	0	0	0		
South Dakota	0	0	0		
South Atlantic	1	2	3		
Delaware	2	3	22		
District of Columbia	0	0	_		
Florida			5		
Georgia			0		
Maryland	0	2	4		
North Carolina	6	1	0		
South Carolina	2	6	0		
Virginia	7	8	20		
West Virginia		0			
East South Central			0		
Alabama	0				
Kentucky	6		0		
Mississippi	9	31	0		
Tennessee	0	0	0		
West South Central	3	4	0		
Arkansas	19	4	0		
Louisiana	2				
Oklahoma	16		0		
			_		
Texas	6		0		
Mountain	0	0	0		
Arizona	0	0	0		
Colorado	2	1	13		
Idaho	3	2	0		
Montana	9		0		
Nevada	0		0		
New Mexico			0		
	3	1	_		-
Utah		1	0		
Wyoming		12	0	<u> </u>	
Pacific Contiguous	0	0	0		
California		0	0		
Oregon		2	8		
Washington		_			
Pacific Noncontiguous		0	•		
Alaska	2	4	0		
		-		Ī	
Hawaii	0	0	0	<u> </u>	

Table A.2.A. Relative Standard Error (Percent) for Net Generation by Fuel Type: Electric Utilities by Census Division and State, October 2017

Conque Borion and Otata	01	Petroleum		Netwel Or	Other Coas	Modelson	Hydroelectri
Census Region and State	Coal						Convention
New England	0	14	0	101	0		1
Connecticut	0	55	0	0	0	, , ,	6
Maine	0	0	0	0	0		
Massachusetts	0	18	0	126	0	0	_
New Hampshire	0	26	0	0	0	0	3
Rhode Island	0	0	0	0	0	0	
Vermont	0	30	0	0	0	0	2
Middle Atlantic	0	27	0	32	0	0	
New Jersey	0	210	0	227	0	0	
New York	0	27	0	32	0	0	
Pennsylvania	0	0	0	0	0	0	
East North Central	1	3	0	7	8	0	1
Illinois	0	41	0	80	0	0	4
Indiana	1	2	0	12	99	0	
Michigan	3	5	0	7	0		2
Ohio	4	10	0	41	0		2
Wisconsin	1	16	0	4	0		1
West North Central	<u>'</u>	7	0	15	ū		
	1	9		11	0	_	
lowa	2		0		_		3
Kansas	3	13	0	26			
Minnesota	4	16	0	11	0		3
Missouri	0	5	0	66	0	, , ,	1
Nebraska	5	60	0	31	0		_
North Dakota	0	8	0	24	0	0	
South Dakota	0	45	0	33	0	0	1
South Atlantic	0	5	0	1	0	0	
Delaware	0	0	0	0	0	0	
Florida	0	5	0	1	0	0	3
Georgia	0	28	0	5	0	0	
Maryland	0	11	0	0	0	0	
North Carolina	0	5	0	4	0	0	
South Carolina	0	38	0	8	0	0	1
Virginia	8	20	0	6	0	0	1
West Virginia	0	0	0	0	0	·	3
East South Central	0	3	0	5	0		
Alabama	0	27	0	5	0		
Kentucky	0	2	0	52	0		1
•						, ,	
Mississippi	0	45	0	5			
Tennessee	0	0	0	16			
West South Central	0	11	0	5	0	, ,	
Arkansas	0	5	0	26	0		
Louisiana	0	45	0	4	0	0	
Oklahoma	0	4	0	8	0	0	1
Texas	0	26	0	8	0	0	1
Mountain	1	3	0	1	0	0	
Arizona	0	1	0	1	0	0	
Colorado	0	12	0	2	0	0	2
Idaho	0	0	0	18	0	0	1
Montana	0	337	0	24	0	0	
Nevada	0	0	0	0	0		
New Mexico	0	13	0	4	0		-
Utah	0	2	0	8	0		
Wyoming	4		0	23	0		
	<u>`</u>	2					
Pacific Contiguous	0	6	0	2	0		
California	0	8	0	2	0	, and the second	
Oregon	0	0	0	7	0		
Washington	0	56	0	4	0		
Pacific Noncontiguous	107	1	0	14	0	0	
		0	0	14	0		
Alaska	107	3	0	14		0	
	107 0		0	0		, , ,	

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

Electric Utilities by Census Division and State, October 2017 (Continued)

electric Utilities by Censu		,	,	Solar Thermal		Hydroelectric		
Census Region and State	Wind	Geothermal	Biomass	and Photovoltaic	Other Renewables	Pumped Storage	Other Energy Sources	All Energy Sources
New England		0	0	31	6	0	0	23
Connecticut	0	0	0	0	0	0	0	11
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	56	35	0	0	82
New Hampshire	0	0	0	0	0		0	11
Rhode Island	0	0	0	0	0	0	0	
Vermont		0	0	10	Ţ		0	11
		0		40	9	0		- 11
Middle Atlantic	0	0	0	27	27	0	0	100
New Jersey	0	0	0	27	27	0	0	102
New York	0	0	0	0	0	0	0	
Pennsylvania	0	0	0	0	0	0	0	0
East North Central	0	0	0	17	6	0	2	1
Illinois	0	0	0	0	29	0	0	37
Indiana	0	0	0	25	16	0	0	2
Michigan	0	0	0	22	7	0	0	2
Ohio	0	0	0	81	61	0	0	7
Wisconsin	0	0	0	0	11	0	19	1
West North Central	0	0	0	54	3	0	11	1
lowa	0	0	0	77	3	0	0	2
Kansas	0	0	0	0	7	0	0	3
Minnesota	0	0	0	129	6	0	0	3
Missouri	0	0	0	0	50		0	4
Nebraska	0	0	0	0	20	0	0	4
North Dakota	0	0	0	0	5	0	51	1
South Dakota	0	0	0	0	11	0	0	
South Atlantic	0	0	0	6	8	0	0	1
Delaware	0	0	0	96	96	0	0	15
Florida	0	0	0	50		0	0	13
	ŭ	0	0	14	5 14		0	<u> </u>
Georgia		0	ű	• •		_	, ,	40
Maryland	0	0	0	85	85	0	0	48
North Carolina	0	0	0	12	12	0	0	1
South Carolina	0	0	0	0	8	0	0	1
Virginia	0	0	0	20	17	0	0	
West Virginia		0	0	0	0	0	0	0
East South Central	0	0	0	33	25	0	0	1
Alabama	0	0	0	46	46	0	0	1
Kentucky	0	0	0	0	30		0	5
Mississippi	0	0	0	0	0	0	0	3
Tennessee	0	0	0	0	0	0	0	2
West South Central	0	0	0	63	9	0	0	2
Arkansas	0	0	0	195	195	0	0	4
Louisiana	0	0	0	0	0	0	0	2
Oklahoma	0	0	0	0	9	0	0	4
Texas	0	0	0	113	32	0	0	4
Mountain	0	19	0	8	6	0	0	1
Arizona	0	0	0	9	9	0	0	0
Colorado	0	0	0	117	40	0	0	1
Idaho	0	0	0	0	101	0	0	
Montana	ŭ	0	0	0	22	0	0	 8
Nevada	0	0	0	0	0	0	0	<u> </u>
New Mexico	0	0	0	17	17	0	0	1
Utah	0	19	0	0	19	0	0	1
Wyoming	•	19	0	0	8	0	0	I
	0		0	11	3		0	4
Pacific Contiguous		0				0		1
California	0	0	0	11	5	0	0	2
Oregon	0	0	0	103	5	0	0	3
Washington	0	0	0	0	4	0	0	1
Danifia Namaantinus	0	0	0	0	19	0	0	5
Pacific Noncontiguous							_	4.4
Alaska	0	0	0	0	32	0	0	11
•	0	0	0	0	0	0	0	11

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

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 October 2017

		Petroleum					Hydroelectri
Census Region and State	Coal	-	Coke	Natural Gas	Other Gases	Nuclear	Conventiona
New England	0	14	0	101	0	0	1
Connecticut	0	55	0	0	0	0	6
Maine	0	Ţ.	0	0	0	0	
Massachusetts	0		0	126	0	0	5
New Hampshire	0	26	0	0	0	0	3
Rhode Island	0	0	0	0	0	0	
Vermont	0	30	0	0	0	0	2
Middle Atlantic	0	27	0	32	0	0	
New Jersey	0	210	0	227	0	0	
New York	0	27	0	32	0	0	
Pennsylvania	0	0	0	0	0	0	
East North Central	1	3	0	7	8	0	1
Illinois	0	41	0	80	0	0	2
Indiana	1	2	0	12	99	0	2
Michigan	3	5	0	7	0	0	2
Ohio	4	10	0	41	0	0	2
Wisconsin	1	16	0	4	0	0	1
West North Central	1	7	0	15	0	0	
lowa	2	9	0	11	0	0	3
Kansas	3		0	26	0	0	
Minnesota	3	16	0	11	0	0	;
	0	5			0		
Missouri			0	66	0	0	
Nebraska	5			31	0	0	
North Dakota	0	Ţ.	0	24	0	0	2
South Dakota	0	45	0	33	0	0	·
South Atlantic	0	, and the second		1	0	0	
Delaware	0	Ţ	0	0	0	0	
Florida	0	-	0	1	0	0	;
Georgia	0	28	0	5	0	0	
Maryland	0	11	0	0	0	0	
North Carolina	0	5	0	4	0	0	
South Carolina	0	38	0	8	0	0	
Virginia	8	20	0	6	0	0	
West Virginia	0	0	0	0	0	0	
East South Central	0	3	0	5	0	0	
Alabama	0	27	0	5	0	0	
Kentucky	0	2	0	52	0	0	
Mississippi	0	45	0	5	0	0	
Tennessee	0	0	0	16	0	0	
West South Central	0	11	0	5	0	0	
Arkansas	0	5	0	26	0	0	
Louisiana	0		0	4	0	0	
Oklahoma	0		0	8	0	0	,
Texas	0	26	0	8	0	0	
Mountain	1	3	0	1	0	0	
	0	3		1	0		
Arizona	0	10	0	1		0	
Colorado	0	12	0	2	0	0	
Idaho	0	Ţ	0	18	0	0	
Montana	0	337	0	24	0	0	
Nevada	0	0	0	0	0	0	
New Mexico	0	13	0	4	0	0	
Utah	0	2	0	8	0	0	
Wyoming	4	2	0	23	0	0	
Pacific Contiguous	0	6	0	2	0	0	
California	0	8	0	2	0	0	
Oregon	0	0	0	7	0	0	
Washington	0	56	0	4	0	0	
Pacific Noncontiguous	107	1	0	14	0	0	
Alaska	107	3	0	14	0	0	
	0	1	0	0	0	0	
Hawaii	111						

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 October 2017 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energ Source
New England	0	0	0	31	6	0	0	2
Connecticut	0	0	0	0	0	0	0	1
Maine	0	0	0	0	0	0	0	
Massachusetts	0	0	0	56	35	0	0	8
New Hampshire	0	0	0	0	0	0	0	1
Rhode Island	0	0	0	0	0	0	0	·
Vermont	0	0	0	40	9	0	0	1
Middle Atlantic	0	0	0	27	27	0	0	
	0	0	0	27	27	0	0	10
New Jersey	0	0					_	10
New York	0	0	0	0	0	0	0	
Pennsylvania	0	0	0	0	0	0	0	
East North Central	0	0	0	17	6	0	2	
Illinois	0	0	0	0	29	0	0	3
Indiana	0	0	0	25	16	0	0	
Michigan	0	0	0	22	7	0	0	
Ohio	0	0	0	81	61	0	0	
Wisconsin	0	0	0	0	11	0	19	
West North Central	0	0	0	54	3	0	11	
lowa	0	0	0	77	3	0	0	
Kansas	0	0	0	0	7	0	0	
Minnesota	0	0	0	129	6	0	0	
Missouri	0	0	0	0	50	0	0	
Nebraska	0	0	0	0	20	0	0	
North Dakota	0	0	0	0		0	51	
	0		-	-	5			
South Dakota	0	0	0	0	11	0	0	
South Atlantic	0	0	0	6	8	0	0	
Delaware	0	0	0	96	96	0	0	1
Florida	0	0	0	5	5	0	0	
Georgia	0	0	0	14	14	0	0	
Maryland	0	0	0	85	85	0	0	4
North Carolina	0	0	0	12	12	0	0	
South Carolina	0	0	0	0	8	0	0	
Virginia	0	0	0	20	17	0	0	
West Virginia	0	0	0	0	0	0	0	
East South Central	0	0	0	33	25	0	0	
Alabama	0	0	0	46	46	0	0	
Kentucky	0	0	0	0	30	0	0	
Mississippi	0	0	0	0	0	0	0	
Tennessee	0	0	0	0	0	0	0	
West South Central	0	0	0	63	9	0	0	
Arkansas	0	0	0	195	195	0	0	
		<u> </u>						
Louisiana	0	0	0	0	0	0	0	
Oklahoma	0	0	0	0	9	0	0	
Texas	0	0	0	113	32	0	0	
Mountain	0	19	0	8	6	0	0	
Arizona	0	0	0	9	9	0	0	
Colorado	0	0	0	117	40	0	0	
ldaho	0	0	0	0	101	0	0	
Montana	0	0	0	0	22	0	0	
Nevada	0	0	0	0	0	0	0	
New Mexico	0	0	0	17	17	0	0	
Utah	0	19	0	0	19	0	0	
Wyoming	0	0	0	0	8	0	0	
Pacific Contiguous	0	0	0	11	3	0	0	
California	0	0	0	11	5	0	0	
	0	0	0	103	5	0	0	
Oregon		ŭ			5			
Washington	0	0	0	0	4	0	0	
Pacific Noncontiguous	0	0	0	0	19	0	0	
Alaska	0	0	0	0	32	0	0	1
Hawaii	0	0	0	0	0	0	0	
	0	5	0	4 ersion of this table	2	0	3	

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

Independent Power Producers by Census Division and State, October 2017

		Petroleum	Petroleum				Hydroelectric
Census Region and State	Coal	Liquids	Coke		Other Gases	Nuclear	Conventional
New England	0	21	0	11	0	0	8
Connecticut	0	28	0	7	0	0	38
Maine	0	12	0	122	0	0	10
Massachusetts	0	50	0	16	0	0	23
New Hampshire	0		0	0	0	0	19
				Ū	0	0	19
Rhode Island	0		0	59	0	0	0
Vermont	0	0	0	0	0	0	20
Middle Atlantic	2	12	0	6	0	0	8
New Jersey	0	40	0	21	0	0	335
New York	0	23	0	8	0	0	9
Pennsylvania	2	13	0	4	0	0	11
East North Central	0	7	65	6	4	0	29
Illinois	0	9	0	23	0	0	43
Indiana	0	0	0	7	0	0	0
Michigan	0	0	0	1	0	0	89
Ohio	0	9	65	6	13	0	37
Wisconsin	0	0	0	0	0	0	85
West North Central			0	74		0	49
	0	42		74	0	0	49
lowa	0	96	0	0	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	47	0	20	0	0	63
Missouri	0	0	0	132	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	3	6	0	7	0	0	10
Delaware	0	47	0	43	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	55	0	17	0	0	0
Georgia	0		0	10	0	0	71
Maryland	0		0	29	0	0	3
North Carolina	0		0	12	0	0	66
South Carolina	0	0		12	0	0	66
			0	4	•	ŭ	
Virginia	0	2	0	4	0	0	46
West Virginia	6	0	0	34	0	0	27
East South Central	0	9	0	3	0	0	158
Alabama	0	9	0	3	0	0	0
Kentucky	0	0	0	0	0	0	158
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	0	13	0	2	5	0	14
Arkansas	0	0	0	3	0	0	47
Louisiana	0	0	0	9	0	0	15
Oklahoma	0	0	0	n	0	0	0
Texas	0	24	0	2	5	0	0
Mountain	5	7	0	2	0	0	25
Arizona	0	0	0	0	0	0	25
				ū	9	0	0
Colorado	0	0	0	13	0	0	63
Idaho	0	0	0	19	0	0	31
Montana	6	15	0	7	0	0	77
Nevada	0	0	0	0	0	0	52
New Mexico	0	0	0	6	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	0	7	0	1	0	0	29
California		0	0	1	0	0	38
Oregon	0	0	0	0	0	0	54
Washington	0	8	0	13	0	0	43
Pacific Noncontiguous	4	0	0	0	0	0	43
_	-			0	0	0	0
Alaska	31	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	0	2	32	2	3	_	6

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

Independent Power Producers by Census Division and State, October 2017 (Continued)

independent Fower From		iodo Diviolon	arra Stato, S	Solar Thermal		Hydroelectric		
Census Region and State		Geothermal		and Photovoltaic	Other	-	Other Energy Sources	All Energy Sources
New England	0	0	0	8	6	0	1	5
Connecticut	0	0	0	35	11	0	0	4
Maine	0	0	0	82	7	0	0	25
Massachusetts	0	0	0	9	6	0	2	10
New Hampshire	0	0	0	0	15	0	0	2
Rhode Island	0	0	0	62	11	0	0	55
Vermont	0	0	0	31	24	0	0	15
Middle Atlantic	0	0	0	8	3	0	0	2
New Jersey	0	0	0	9	5	0	0	10
New York	0	0	0	18	4	0	0	3
Pennsylvania		0	0	31	4	0	0	1
East North Central		0	0	13	2	0	18	1
Illinois	0	0		29		0	0	2
Indiana	0	0	0	18		0	0	3
Michigan		0	0	0		0	30	1
Ohio		0	0	26		0	0	2
Wisconsin		0	0	51	7	0	0	1
West North Central	0	0			2	0	0	1
	_	0		0		0		
lowa			0	ŭ	•	Ŭ	0	3
Kansas		0	0	99		0	0	3
Minnesota		0	0			0	0	4
Missouri		0	0	32		0	0	52
Nebraska		0		55		0	0	5
North Dakota		0	, and the second	0	•	0	0	4
South Dakota		0	0	195	8	0	0	8
South Atlantic	0	0	0		2	0	1	3
Delaware	0	0	0	38	30	0	0	42
District of Columbia		0	0	0	0	0	0	0
Florida	0	0	0	17	4	0	2	11
Georgia	0	0	0	6	5	0	0	9
Maryland	0	0	0	15	7	0	0	5
North Carolina	0	0	0	4	3	0	0	5
South Carolina	0	0	0	25	23	0	0	5
Virginia	0	0	0	22	13	0	0	3
West Virginia	0	0	0	0	8	0	0	7
East South Central	0	0	0	11	10	0	0	3
Alabama	0	0	0	23	16	0	0	3
Kentucky	0	0	0	0	0	0	0	3
Mississippi	0	0	0	7	8	0	0	0
Tennessee	0	0		21	18	0	0	17
West South Central	0	0			2	0	0	1
Arkansas	0	0		0	22	0	0	2
Louisiana	0	0	-	0		0	0	5
Oklahoma	0	0		Ğ		0	0	2
Texas	0	0		1	2	0	0	1
Mountain	_	8		2	_	0	0	1
Arizona	0	0		3		0	0	1
Colorado	_	0	0	9		0	0	<u>ı</u>
Idaho		33		11	_	0	0	3
	0				6	_		
Montana	0	0	-	47		0	0	5
Nevada		8	0	3		0	0	3
New Mexico		0		9		0	0	3
Utah		19		6		0	0	6
Wyoming		0		0		0	0	6
Pacific Contiguous		3	0		_	0	0	1
California		3		2		0	0	1
Oregon	0	19		16		0	0	2
Washington	0	0		0		0	0	3
Pacific Noncontiguous		19	0	18	13	0	0	4
Alaska		0	0	0	42	0	0	26
Hawaii	0	19	0	18	14	0	0	4
U.S. Total		4	0		1	0	1	1
Displayed values of zero may re		lues that round t	o zero. The Exce	el version of this	table provides ad	ditional precision	which may be ac	

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 October 2017

| Petroleum | Petrole

		Petroleum					Hydroelectric
Census Region and State	Coal	Liquids	Coke		Other Gases	Nuclear	Conventional
New England	0	21	0		0	0	8
Connecticut	0	28	0		0	0	38
Maine	0	12			0	-	10
Massachusetts	0	50			0	0	23
New Hampshire	0	1,008			0	0	19
Rhode Island	0	87	0		0	0	0
Vermont	0	0			0	0	20
Middle Atlantic	2	12	0		0	0	8
New Jersey	0	40			0	0	335
New York	0	23			0	0	9
Pennsylvania	2	13			0	0	11
East North Central	0	7	65		4	0	29
Illinois	0	9			0	0	43
Indiana	0	0	0	7	0	0	0
Michigan	0	0			0	0	89
Ohio	0	9	65		13	0	37
Wisconsin	0	0	0		0	0	85
West North Central	0	42	0	74	0	0	49
Iowa	0	96	0	0	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	47	0	20	0	0	63
Missouri	0	0	0	132	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	3	6	0	7	0	0	10
Delaware	0	47	0	43	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	55	0	17	0	0	0
Georgia	0	81	0	10	0	0	71
Maryland	0	10	0	29	0	0	3
North Carolina	0	92	0	12	0	0	66
South Carolina	0	0	0	4	0	0	66
Virginia	0	2	0	4	0	0	46
West Virginia	6	0	0	34	0	0	27
East South Central	0	9	0	3	0	0	158
Alabama	0	9	0	3	0	0	0
Kentucky	0	0	0	0	0	0	158
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	0	13	0	2	5	0	14
Arkansas	0	0	0	3	0	0	47
Louisiana	0	0	0	9	0	0	15
Oklahoma	0	0	0	0	0	0	0
Texas	0	24	0	2	5	0	0
Mountain	5	7	0	2	0	0	25
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	13	0	0	63
Idaho	0	0	0	19	0	0	31
Montana	6	15	0		0	0	77
Nevada	0	0	0	0	0	0	52
New Mexico	0	0			0	0	0
Utah	0	0	0		0	0	0
Wyoming	0	0			0	0	0
Pacific Contiguous	0	7	0		0	0	29
California	0	0			0	0	38
Oregon	0	0			0	0	54
Washington	0	8	0			0	43
Pacific Noncontiguous	4	0			0	_	0
Alaska	31	0			0	_	0
Hawaii	0	0	0		0	0	0
U.S. Total	0	2	32	•	3	0	6
Displayed values of zero may rep	procont small valu	ios that round to			_	_	oh maay ba

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 October 2017 (Continued)

independent Fower Frod			arra Stato, 1	Solar Thermal		Hydroelectric	naou,	
Census Region and State		Geothermal		and	Other			All Energy Sources
New England	0	0	0	8	6	0	1	5
Connecticut	0	0	0	35	11	0	0	4
Maine	0	0	0	82	7	0	0	25
Massachusetts	0	0	0	9	6	0	2	10
New Hampshire	0	0	0	0	15	0	0	2
Rhode Island	0	0	0	62	11	0	0	55
Vermont	0	0	0	31	24	0	0	15
Middle Atlantic	0	0	0	8	3	0	0	2
New Jersey	0	0	0	9	5	0	0	10
New York	0	0	0	18	4	0	0	3
Pennsylvania		0	0	31	4	0	0	1
East North Central		0	0		2	0	18	1
Illinois	0	0				0	0	2
Indiana	0	0	0			0	0	3
Michigan		0	0			0	30	1
Ohio		0	0			0	0	2
Wisconsin		0	0		7	0	0	
West North Central		0			2	0	0	<u></u>
		0	0			0	0	4
lowa		-		_	•	0		ა ი
Kansas		0	0	99		0	0	3
Minnesota		0	0			0	0	4
Missouri		0	0			0	0	52
Nebraska		0				0	0	5
North Dakota		0		_	•	0	0	4
South Dakota		0	0	195	8	0	0	8
South Atlantic		0	0		2	0	1	3
Delaware		0	0	38	30	0	0	42
District of Columbia		0	0	0	0	0	0	0
Florida	0	0	0	17	4	0	2	11
Georgia	0	0	0	6	5	0	0	9
Maryland		0	0	15	7	0	0	5
North Carolina	0	0	0	4	3	0	0	5
South Carolina	0	0	0	25	23	0	0	5
Virginia	0	0	0	22	13	0	0	3
West Virginia	0	0	0	0	8	0	0	7
East South Central	0	0	0	11	10	0	0	3
Alabama	0	0	0	23	16	0	0	3
Kentucky	0	0	0	0	0	0	0	3
Mississippi	0	0	0	7	8	0	0	0
Tennessee		0	0	21	18	0	0	17
West South Central	0	0	0	4	2	0	0	1
Arkansas	0	0	0	0	22	0	0	2
Louisiana	0	0				0	0	5
Oklahoma	0	0				0	0	2
Texas	0	0		4	2	0	0	1
Mountain	_	8		2	_	0	0	1
Arizona	0	0				0	0	1
Colorado	_	0	0	9		0	0	1
Idaho	0	33		-	6	0	0	3
Montana	0	0				0	0	5
Nevada	<u>-</u>	8	0			0	0	5
			0			_		3
New Mexico		0				0	0	3
Utah		19				0	0	6
Wyoming		0				0	0	6
Pacific Contiguous		3	0		_	0	0	1
California		3		2		0	0	1
Oregon		19				0	0	2
Washington		0				0	0	3
Pacific Noncontiguous		19	0			0	0	4
Alaska		0		J		0	0	26
Hawaii		19	0	18	14	0	0	4
U.S. Total		4	0		1	0	1	1
Displayed values of zero may re	epresent small va	lues that round t	o zero. The Exce	el version of this	table provides ad	ditional precision	which may be ac	ccessed by

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

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.

U.S. Total

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

Commercial Sector by Census Division and State, October 2017 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage		All Energ Source
New England	0	Ocotileiiilai	0	7110104011210	Nenewables	Otorage	Ources	1
Connecticut	0	0	0	0	0	0	0	2
	ő	0		0	0		0	
Maine	0	0	0	70	0	0	0	
Massachusetts	0	0	0	72	9	0	0	2
New Hampshire	0	0	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	0	0	20	5	0	4	
New Jersey	0	0	0	20	10	0	0	
New York	0	0	0	101	5	0	8	
Pennsylvania	0	0	0	93	8	0	0	
East North Central	0	0	0	153	5	0	0	
Illinois	0	0	0	0	151	0	0	3
Indiana	0	0	0	0	0	0	0	
Michigan	0	0	0	0	0	0	0	
Ohio	0	0	0	153	37	0	0	
Wisconsin	0	0	0	0	19	0	0	1
West North Central	0	0	0	0	22	0	44	
Iowa	0	0	0	0	29	0	0	
Kansas	0	0	0	0	215	0	0	21
Minnesota	0	0	0	0	42	0	44	1
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	0	0	0	0	0	0	1,07
South Atlantic	0	0	0	22	8	0	0	1,07
Delaware	0	0	0	194	65	0	0	6
	, ,	0						
District of Columbia	0	0	0	0	0	0	0	
Florida	0	0	0	138	27	0		
Georgia	0	0	0	141	141	0	0	8
Maryland	0	0	0	102	39	0	0	
North Carolina	0	0	0	24	22	0	0	
South Carolina	0	0	0	0	0	0	0	
Virginia	0	0	0	0	3	0	0	
East South Central	0	0	0	113	113	0	0	
Mississippi	0	0	0	0	0	0	0	
Tennessee	0	0	0	113	113	0	0	3
West South Central	0	0	0	0	0	0	0	3
Arkansas	0	0	0	0	0	0	0	
Louisiana	0	0	0	0	0	0	0	7
Oklahoma	0	0	0	0	0	0	0	
Texas	0	0	0	0	0	0	0	(
Mountain	0	0	0	26	22	0	0	
Arizona	0	0	0	56	56	0	0	
Colorado	0	0	0	62	62	0	0	4
Idaho	0	0	0	0	0	0	0	
Nevada	0	0	0	33	33	0	0	
New Mexico	0	0	0	0	332	0	0	
Utah	0	0	0	0	0	0	0	,
	,			ū		_		
Pacific Contiguous	0	0	0	23	6	0	0	
California	0	0	0	23	7	0	0	
Oregon	0	0	0	0	31	0	0	
Washington	0	0	0	0	54	0	0	
Pacific Noncontiguous	0	0	0	0	0	0	0	
Alaska	0	0	0	0	0	0	0	
Hawaii	0	0	0	0	0	0	0	
U.S. Total				11				

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

Commercial Sector by Census Division and State, Year-to-Date through October 2017

Commercial Sector by Go		Petroleum	Petroleum				Hydroelectric
Census Region and State	Coal				Other Gases	Nuclear	_
New England		30	0	19	0	0	0
Connecticut	0	1,654	0	27	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	48	0		0	0	0
New Hampshire	0	5	0		0	0	0
Rhode Island	0	0	0	0	0	0	
Vermont	0	0	0	0	0	0	
Middle Atlantic	0	59		18		0	
New Jersey	0	0	0			0	_
New York	0	75				0	_
Pennsylvania	0	0	0	0	_	0	
East North Central	25	25		9	ŭ	0	
Illinois	90	411	0			0	_
Indiana	0	0	0	0	_	0	
Michigan	Ū	3	0	Ü	0	0	
Ohio		0	0			0	_
Wisconsin		0			ŭ		
	_		0	19	_	0	_
West North Central	0	48	0	1	0	0	_
lowa	0	0	0	1	0	0	
Minnesota	0	56			0	0	
Missouri		0	0		0	0	
Nebraska	0	0	0		0	0	
North Dakota	0	0	0		0	0	
South Dakota	0	1,076	0	0	0	0	
South Atlantic	0	1	0	0	0	0	
District of Columbia	0	0	0		0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	13	0	0	0	0	0
Maryland	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
East South Central		0	0	34	0	0	0
Mississippi		0	0	0	0	0	0
Tennessee	0	0	0	34	0	0	0
West South Central	0	24	0	37	0	0	571
Arkansas	0	0	0	0	0	0	0
Louisiana	0	0	0	70	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	24	0	42	0	0	571
Mountain	0	0	0	8	0	0	0
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	0	0	0	0
Idaho	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0
New Mexico	0	0	0	30	0	0	0
Utah	0	0	0		0	0	
Pacific Contiguous	0	26	0	2	0	0	
California	_	36	0	2	0	0	
Oregon		0	0	20	_	0	_
Washington		0	0	0		0	
Pacific Noncontiguous	35	15	0	0	ŭ	0	
Alaska	35	29	0	•		0	
Hawaii	0	0	0		•	0	
U.S. Total		11	0	5			
Displayed values of zero may re				_			

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

Commercial Sector by Census Division and State, Year-to-Date through October 2017 (Continued)

Commercial Sector by Ce	ensus Division	and State, Ye	ear-to-Date th	Solar Thermal	r 2017 (Contir	luea) Hydroelectric		
				and		_		All Energy
Census Region and State	Wind	Geothermal	Biomass			-		Sources
New England		Ocothermai	0	72	1 CHEWables	Otorage	0	14
Connecticut	0	0	0		0	0	0	27
Maine	0	0	0		0	0	0	0
Massachusetts	0	0	0		0	0	0	27
New Hampshire	0	0	0		9	0		1
	Ü	9			0	_		1
Rhode Island		0	0		0	0	0	0
Vermont	0	0	0		0 5	0	0	0
Middle Atlantic	0	0	0			0	4	0
New Jersey		0	0		10	0	0	8
New York		0	0		5	0	8	14
Pennsylvania		0	0		8	0	0	4
East North Central	0	0	0			0	0	6
Illinois	0	0	0		151	0	0	33
Indiana		0	0		0	0	0	0
Michigan		0	0		0	0	0	4
Ohio		0	0		37	0	0	2
Wisconsin		0	0		19	0	0	14
West North Central	0	0	0		22	0	44	7
lowa	0	0	0		29	0	0	5
Kansas	0	0	0		215	0	0	215
Minnesota	0	0	0	0	42	0	44	16
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	1,076
South Atlantic	0	0	0	22	8	0	0	3
Delaware	0	0	0	194	65	0	0	65
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	138	27	0	0	19
Georgia	0	0	0	141	141	0	0	80
Maryland	0	0	0	102	39	0	0	2
North Carolina	0	0	0	24	22	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	113	113	0	0	33
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	113	113	0	0	33
West South Central	0	0	0		0		0	32
Arkansas	0	0	0		0	0	0	0
Louisiana	0	0	0		0	0	0	70
Oklahoma	0	0	0		0	0	0	0
Texas	•	0	0		0	0	0	35
Mountain		0	0		Ţ.	0	0	8
Arizona	0	0	0				0	8
Colorado		0	0		62	0		40
Idaho	0	0	0		0	0	0	0
Nevada	0	0	0		33			18
New Mexico	0	0	0		332	0	0	31
Utah	•	0	0		0	0	0	6
Pacific Contiguous	0	0	0		Ţ.		0	2
California		0	0		7	0	0	2
Oregon		0	0		31	0	0	17
Washington		0	0		54	0	0	22
Pacific Noncontiguous	0	0	0		0	0	0	12
Alaska	0	0	0		0	0	0	32
Hawaii		0	0	_	0	0		0
U.S. Total		-	0		0		0	0
U.S. I otal Displayed values of zero may re	0	0	•	11	3	0	ch may be access	3

Table A.5.A. Relative Standard Error for Net Generation by Fuel Type: Industrial Sector by Census Division and State, October 2017

		nd State, Octo	Petroleum	ım Hydroelectric				
Census Region and State	Coal	Liquids		Natural Gas	Other Gases	Nuclear	Conventional	
New England	141	88	0	15	0	0	26	
Connecticut	0	0	0	19	0	0	0	
Maine	141	88	0	38	0	0	26	
Massachusetts	0	0	0	12	0	0	0	
New Hampshire	0	0	0	0	0	0	0	
Middle Atlantic	13	10	76	12	10	0	35	
New Jersey	0	0	0	13	0	0		
New York	0	0	0	16	0	0	35	
Pennsylvania	26	144	193	18	14	0		
East North Central	5	6	0	7	6	0	28	
Illinois	5	0	0	20	0	0	0	
Indiana	0	1	0	9	7	0	0	
Michigan	58	937	0	14	0	0	57	
Ohio	69	0	0	23	0	0		
Wisconsin	16	73	0	14		0	31	
West North Central	3	0	0	4	0			
Iowa	2	0	0	0	_	0		
Kansas	0	0	0	152	0	0		
Minnesota	10	0	0	0	_	0		
Missouri	0	0	0	0	_	0		
Nebraska	7	0	0	0		0		
North Dakota	44	0	0	0	_	0		
South Atlantic	15	52	134	8		0		
Delaware	0	0	0	21	21	0		
Florida	27	110	0	18		0	_	
Georgia	53	103	134	29		0		
Maryland	0	0	0	0		0		
North Carolina	12	82	0	48		0		
South Carolina			0			0		
Virginia	24	153	0	9		0	Ğ	
West Virginia	0	0	0	0		0	_	
East South Central	6	88	0	13	-	0		
Alabama	75	103	0	22				
Kentucky	0	0	0	15		0		
Mississippi	0	0	0	30		0	_	
Tennessee	0	0	0	12	0	0	_	
West South Central	0	0	0	2	10	0		
Arkansas	0	0	0	22	0	0		
Louisiana	0	0	0	3		0		
Oklahoma	0	0	0	0	_	0		
Texas	0	0	0	3		0	_	
Mountain	8	0	0	4	0	0	_	
Colorado	0	0	0	0	_	0		
Idaho	89	0	0	40		0		
Montana	0	0	0	0		0		
Nevada	0	0	0	0		0		
New Mexico	0	0	0	0		0	_	
Utah	0	0	0	0		0		
Wyoming	16	0	0	6		0		
Pacific Contiguous	0	67	0	0	3	0		
California	0	46	0	1	3	0		
	0	46	0	40		0	_	
Oregon		81	0	22	0			
Washington	0					0		
Pacific Noncontiguous	0	3	0	0		0		
Alaska	0	16	0	0	-	0	-	
Hawaii	0	0	0	0	0	0		
U.S. Total Displayed values of zero may rep	3	9 os that round to	19	orsion of this tab	A provides addition	0	_	

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

Industrial Sector by Census Division and State, October 2017 (Continued)

Onnava Danian and Otata	NA/:I	O a a the a man a l	Diamaga	Solar Thermal and	Other	Hydroelectric Pumped	Other Energy	All Energ
Census Region and State	Wind	Geothermal	Biomass	Photovoltaic	Renewables	Storage	Sources	Source
New England	0	0	0	0	10	0	0	
Connecticut	0	0	0	0	0	0	0	
Maine	0	0	0	0	10	0	0	
Massachusetts	0	0	0	0	0	0	0	
New Hampshire	0	0	0	0	0	0	0	
Middle Atlantic	0	0	0	60	8	0	0	
New Jersey	0	0	0	85	85	0	0	
New York	0	0	0	0	16	0	0	
Pennsylvania	0	0	0	85	10	0	0	
East North Central	0	0	0	0	6	0	2	
Illinois	0	0	0	0	0	0	0	
Indiana	0	0	0	0	27	0	0	
Michigan	0	0	0	0	10	0	0	
Ohio	0	0	0	0	13	0	0	
Wisconsin	0	0	0	0	11	0	58	
West North Central	0	0	0	0	1	0	0	
lowa	0	0	0	0	0	0	0	
	0	0	0	0	0		0	
Kansas Minnesota	0	0	0	0	0	0	0	
	•	0		0	9		-	
Missouri	0	U	0	0	0	0	0	
Nebraska	0	0	0	0	0	0	0	
North Dakota	0	0	0	0	89	0	0	
South Atlantic	0	0	0	0	3	0	1	
Delaware	0	0	0	0	57	0	0	
Florida	0	0	0	0	7	0	0	
Georgia	0	0	0	0	5	0	11	
Maryland	0	0	0	0	0	0	0	
North Carolina	0	0	0	0	6	0	0	
South Carolina	0	0	0	0	3	0	0	
Virginia	0	0	0	0	0	0	0	
West Virginia	0	0	0	0	0	0	0	
East South Central	0	0	0	0	4	0	33	
Alabama	0	0	0	0	5	0	0	
Kentucky	0	0	0	0	20	0	0	
Mississippi	0	0	0	0	4	0	0	
Tennessee	0	0	0	0	8	0	33	
West South Central	0	0	0	0	4	0	3	
Arkansas	0	0	0	0	6	0	0	
Louisiana	0	0	0	0	5	0	3	
Oklahoma	0	0	0	0	0	0	0	
		0		0				
Texas	0	<u> </u>	0	<u> </u>	12	0	4	
Mountain	0	0	0	0	4	0	0	
Colorado	0	0	0	0	0	0	0	
Idaho	0	0	0	0	4	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	0	0	0	0	0	0	0	
Pacific Contiguous	0	0	0	43	7	0	4	
California	0	0	0	43	12	0	4	
Oregon	0	0	0	0	15	0	0	
Washington	0	0	0	0	9	0	0	
Pacific Noncontiguous	0	0	0	0	252	0	0	
Alaska	0	0	0	0	252	0	0	
Hawaii	0	0	0	0	0	0	0	
U.S. Total	0	0	0	33	2	0	1	
ayed values of zero may repre		s that round to zo	-			•	ch may be accessed	l by colootie

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

Industrial Sector by Census Division and State, Year-to-Date through October 2017

Petroleum Petroleum Convention Petroleum Convention Petroleum Convention Convent
New England 141 88 0 15 0 0 Connecticut 0 0 0 19 0 0 Maine 141 88 0 38 0 0 Massachusetts 0 0 0 12 0 0 New Hampshire 0 0 0 0 0 0 Middle Atlantic 13 10 76 12 10 0 New Jersey 0 0 0 13 0 0 New York 0 0 0 16 0 0 Pennsylvania 26 144 193 18 14 0 East North Central 5 6 0 7 6 0 Illinois 5 0 0 20 0 0 Indiana 0 1 0 9 7 0 Michigan 58 937
Connecticut 0 0 19 0 0 Maine 141 88 0 38 0 0 Massachusetts 0 0 0 12 0 0 New Hampshire 0 0 0 0 0 0 0 Middle Atlantic 13 10 76 12 10 0 0 New Jersey 0 0 0 13 0 0 0 New York 0 0 0 16 0 0 0 Pennsylvania 26 144 193 18 14 0 East North Central 5 6 0 7 6 0 Illinois 5 0 0 20 0 0 Indiana 0 1 0 9 7 0 Michigan 58 937 0 14 0 0 O
Maine 141 88 0 38 0 0 Massachusetts 0 0 0 12 0 0 New Hampshire 0 0 0 0 0 0 Middle Atlantic 13 10 76 12 10 0 New Jersey 0 0 0 13 0 0 New York 0 0 0 16 0 0 Pennsylvania 26 144 193 18 14 0 East North Central 5 6 0 7 6 0 Illinois 5 0 0 20 0 0 Indiana 0 1 0 9 7 0 Michigan 58 937 0 14 0 0 Ohio 69 0 0 23 0 0 Wisconsin 16 73 <
Massachusetts 0 0 0 12 0 0 New Hampshire 0 0 0 0 0 0 Middle Atlantic 13 10 76 12 10 0 New Jersey 0 0 0 13 0 0 New York 0 0 0 16 0 0 Pennsylvania 26 144 193 18 14 0 East North Central 5 6 0 7 6 0 Illinois 5 0 0 20 0 0 Indiana 0 1 0 9 7 0 Michigan 58 937 0 14 0 0 Ohio 69 0 0 23 0 0 Wisconsin 16 73 0 14 0 0
New Hampshire 0 0 0 0 0 Middle Atlantic 13 10 76 12 10 0 New Jersey 0 0 0 13 0 0 New York 0 0 0 16 0 0 Pennsylvania 26 144 193 18 14 0 East North Central 5 6 0 7 6 0 Illinois 5 0 0 20 0 0 Indiana 0 1 0 9 7 0 Michigan 58 937 0 14 0 0 Ohio 69 0 0 23 0 0 Wisconsin 16 73 0 14 0 0
Middle Atlantic 13 10 76 12 10 0 New Jersey 0 0 0 13 0 0 New York 0 0 0 16 0 0 Pennsylvania 26 144 193 18 14 0 East North Central 5 6 0 7 6 0 Illinois 5 0 0 20 0 0 Indiana 0 1 0 9 7 0 Michigan 58 937 0 14 0 0 Ohio 69 0 0 23 0 0 Wisconsin 16 73 0 14 0 0
New Jersey 0 0 0 13 0 0 New York 0 0 0 16 0 0 Pennsylvania 26 144 193 18 14 0 East North Central 5 6 0 7 6 0 Illinois 5 0 0 20 0 0 Indiana 0 1 0 9 7 0 Michigan 58 937 0 14 0 0 Ohio 69 0 0 23 0 0 Wisconsin 16 73 0 14 0 0
New York 0 0 0 16 0 0 Pennsylvania 26 144 193 18 14 0 East North Central 5 6 0 7 6 0 Illinois 5 0 0 20 0 0 Indiana 0 1 0 9 7 0 Michigan 58 937 0 14 0 0 Ohio 69 0 0 23 0 0 Wisconsin 16 73 0 14 0 0
Pennsylvania 26 144 193 18 14 0 East North Central 5 6 0 7 6 0 Illinois 5 0 0 20 0 0 Indiana 0 1 0 9 7 0 Michigan 58 937 0 14 0 0 Ohio 69 0 0 23 0 0 Wisconsin 16 73 0 14 0 0
East North Central 5 6 0 7 6 0 Illinois 5 0 0 20 0 0 Indiana 0 1 0 9 7 0 Michigan 58 937 0 14 0 0 Ohio 69 0 0 23 0 0 Wisconsin 16 73 0 14 0 0
Illinois 5 0 0 20 0 0 Indiana 0 1 0 9 7 0 Michigan 58 937 0 14 0 0 Ohio 69 0 0 23 0 0 Wisconsin 16 73 0 14 0 0
Indiana 0 1 0 9 7 0 Michigan 58 937 0 14 0 0 Ohio 69 0 0 23 0 0 Wisconsin 16 73 0 14 0 0
Michigan 58 937 0 14 0 0 Ohio 69 0 0 23 0 0 Wisconsin 16 73 0 14 0 0
Ohio 69 0 0 23 0 0 Wisconsin 16 73 0 14 0 0
Wisconsin 16 73 0 14 0 0
West North Centrall 31 01 01 41 01 01
lowa 2 0 0 0 0 0
Kansas 0 0 0 152 0 0
Minnesota 10 0 0 0 0 0
Missouri 0 0 0 0 0 0
Nebraska 7 0 0 0 0 0
North Dakota 44 0 0 0 0 0 0
South Atlantic 15 52 134 8 18 0
Delaware 0 0 0 21 21 0
Florida 27 110 0 18 0 0
Georgia 53 103 134 29 0 0
Maryland 0 0 0 0 0
North Carolina 12 82 0 48 0 0
South Carolina 0 0 0 6 0 0
Virginia 24 153 0 9 0 0
West Virginia 0 0 0 0 0
East South Central 6 88 0 13 64 0
Alabama 75 103 0 22 66 0
Kentucky 0 0 0 15 0 0
Mississippi 0 0 0 30 0 0
Tennessee 0 0 0 12 0 0
West South Central 0 0 0 2 10 0
Arkansas 0 0 0 22 0 0
Louisiana 0 0 0 3 12 0
Oklahoma 0 0 0 0 0 0
Texas 0 0 0 3 15 0
Mountain 8 0 0 4 0 0
Colorado 0 0 0 0 0 0
Idaho 89 0 0 40 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
Utah 0 0 0 0 0
Wyoming 16 0 0 6 0 0
Pacific Contiguous 0 67 0 1 3 0
Oregon 0 0 40 0 0
Washington 0 81 0 22 0 0
Pacific Noncontiguous 0 3 0 0 0 0
Alaska 0 16 0 0 0 0
Hawaii 0 0 0 0 0 0
U.S. Total 3 9 19 2 4 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

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

Industrial Sector by Census Division and State, Year-to-Date through October 2017 (Continued)

industrial Sector by Cens	ao Biviolon al	ra Otato, roar	to Bato timot	Solar Thermal	lo i i (oomanaa	Hydroelectric		
Census Region and State		Geothermal		and Photovoltaic		_	Other Energy Sources	All Energy Sources
New England	0	0	0	0	10		0	9
Connecticut		0	0	0	0	0	0	19
Maine	0	0	0	0	10	0	0	11
Massachusetts	0	0	0	0	0	0	0	12
New Hampshire	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	0	60	8	0	0	7
New Jersey	0	0			85	0	0	7
New York	0	0	0		16		0	8
Pennsylvania		0	0	85	10		0	10
East North Central		0	0		6		2	3
Illinois	0	0	0		0	0	0	5
Indiana	0	0			27	0	0	5
Michigan		0	0		10	0	0	7
Ohio		0	0		13		0	8
Wisconsin		0	0		11	0	58	8
West North Central		0	0	0	1	0	0	2
lowa	0	0		0	0	0	0	
Kansas	0	0	0		0	0	0	120
Minnesota	0	0	0		0	0	0	5
Missouri	0	0	0		0	0	0	0
Nebraska	0	0	0		0	0	0	7
North Dakota		0			89	_	0	26
South Atlantic	0	0	0		3	0	1	3
Delaware	0	0	0		57	0	0	17
Florida		0	0		7	0	0	
Georgia		0	_		5	0	11	5
Maryland		0			0	0	0	0
North Carolina		0	0		6	0	0	5
South Carolina		0			ŭ	ŭ		3
Virginia		0			0		0	3
West Virginia		0	0		0	0	0	10
East South Central		0	0	0	4	0	33	10
Alabama	0	0			5	0	0	7
Kentucky	· ·	0			20	_	0	13
Mississippi		0			20	0	0	7
Tennessee	0	0			8	0	33	1
West South Central	•	0	0	0	4	0	33	2
Arkansas	0	0			6	0	0	
Louisiana	0	0			5	0	3	2
Oklahoma	0	0			0	0	0	0
Texas	0	0	0		12	0	4	3
Mountain	0	0	0	0	12	0	0	3
Colorado	_	0			0	0	0	3
Idaho		0			4	0	0	12
Montana	0	0			0	0	0	12
Nevada		0			0	0	0	0
New Mexico	0	0		0	0	0	0	0
Utah	•	0			0	0	0	0
Wyoming		0	0		0	0	0	5
Pacific Contiguous		0	0	43	7	0	4	1
California	0	0			12	0	4	1
Oregon		0	0		15		0	14
Washington		0			9	0	0	0
Pacific Noncontiguous	0	0		0	252	0	0	0
Alaska	0	0		0	252	0	0	0
Hawaii		0			0	0	0	0
U.S. Total		0		33	2	0	4	0
Displayed values of zero may re		-			_	-	rh may he access	ad by salacting

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

by End-Use Sector, Census Division, and State, October 2017

ensus Region and State	Residential	Commercial	Industrial	Transportation	T
New England	0	1	3	C	
Connecticut	0	1	5	C	
Maine	1	1	2	(
Massachusetts	1	1	7		1
		<u>'</u>			1
New Hampshire	1	1	5	C)
Rhode Island	0	0	0	C)
Vermont	2	4	7	C)
Middle Atlantic	0	0	1	d	
New Jersey	0	0			1
		0	3		
New York	0	0	2	C)
Pennsylvania	0	0	1	C	
East North Central	0	1	1	C	
Illinois	1	1	1	C)
	<u>_</u>	1	1		\
Indiana	1)
Michigan	0	2	3	C)
Ohio	1	1	2	C)
Wisconsin	1	3	5	ſ	<u> </u>
West North Central		3	3		
			3		
Iowa	1	7	5	C	<u> </u>
Kansas	3	1	6	C)
Minnesota	1	4	6	C	
Missouri	1	1	7	(
	<u> </u>	<u>'</u>	,		
Nebraska	1	/	8	('
North Dakota	1	4	8	C	
South Dakota	1	9	11	C)
South Atlantic	1	0	1	C	
Delaware		3	9		
		2			<u>'</u>
District of Columbia	0	0	0	C	
Florida	1	0	4	C)
Georgia	2	1	3	C	
Maryland	0	0	1	0)
North Carolina		<u> </u>	7	6	\(\frac{1}{2}\)
	2	11	3	C)
South Carolina	2	1	2	C	
Virginia	1	0	3	C)
West Virginia	0	1	0	C)
East South Central	1	1	2		1
	1	•	2		
Alabama	2	11	2	C	1
Kentucky	1	2	4	C	
Mississippi	3	2	4	C)
Tennessee	1	2	4	C)
West South Central	1		1		1
			-	-	
Arkansas	2	<u> </u>	3	C	1
Louisiana	2	1	1	C	<u> </u>
Oklahoma	2	1	4	C)
Texas		1	1	(<u>, </u>
					1
Mountain	1	2	2	C	
Arizona	1	3	3	C	
Colorado	2	5	5	C)
Idaho	1	4	4	C	
Montana	1	8		(
	1	0		-	<u> </u>
Nevada	1	3	1	C	1
New Mexico	4	8	6		<u> </u>
Utah	3	5	2	C	
Wyoming		7	3	(<u>, </u>
		1			1
Pacific Contiguous	0	1	2	C	
California	1	1	2	C	<u> </u>
Oregon	1	4	8	C	
	1	4	6	(
vvasningtoni	<u>'</u>	ļ			
Washington Pacific Noncontiguous	4	A	7		
Pacific Noncontiguous	1	4	3	0	
Pacific Noncontiguous Alaska	1 2	4	13	C	
Pacific Noncontiguous	2 0	10 0		C	

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 October 2017

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

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

by End-Use Sector, Census Division, and State, October 2017

Census Region and State	Residential	Commercial	Industrial	Transportation	To
New England	0	1	2	0	
Connecticut	0	1	2	0	
Maine	0	1	2	0	
Massachusetts	1	1	5	0	
New Hampshire	0	1	4	0	
Rhode Island	0	0	0	0	
Vermont	2	4	7	0	
Middle Atlantic	0	0	1	0	
New Jersey	0	0	3	0	
New York	0	0	2	0	
Pennsylvania	0	0		0	
	-	0	1	0	
East North Central	0	1	2	0	
Illinois	1	1	3	0	
Indiana	1	2	2	0	
Michigan	0	1	4	0	
Ohio	1	1	3	0	
Wisconsin	1	2	6	0	
West North Central	1	1	4	0	
lowa	2	5	7	0	
Kansas	2	2	6	0	
Minnesota	1	3	7	0	
Missouri	1	2	6	0	
Nebraska	2	6	11	0	
North Dakota	2	3	8	0	
South Dakota	2	6	12	0	
South Atlantic	1	0	2	0	
Delaware	1	3	10	0	
District of Columbia	0	0	0	0	
	0	0		0	
Florida	1	1	5	0	
Georgia	2	1	4	0	
Maryland	0	1	4	0	
North Carolina	1	1	3	0	
South Carolina	2	1	3	0	
Virginia	1	1	4	0	
West Virginia	0	1	0	0	
East South Central	1	1	2	0	
Alabama	2	1	3	0	
Kentucky	1	2	4	0	
Mississippi	2	2	6	0	
Tennessee	1	2	5	0	
West South Central	1	1	2	0	
Arkansas	2	2	4	0	
Louisiana		1	1	0	
Oklahoma	2	2	6	0	
Texas	1	1	2	0	
Mountain	1	1	2	0	
Arizona	1	3		0	
	1		5	9	
Colorado	4	6		0	
Idaho	1	3	5	0	
Montana	2	5	16	0	
Nevada	1	4	2	0	
New Mexico	6	9	11	0	
Utah	4	6	4	0	
Wyoming	2	5	4	0	
Pacific Contiguous	1	1	2	0	
California	1	1	2	0	
Oregon	1	3	10	0	
Washington	1	2	9	0	
Pacific Noncontiguous	1	2	2	0	
Alaska	2	6	12	0	
Hawaii	0	0	0	0	
	0	0	0	0	
U.S. Total	0	Und to zero. The first	1	0	which may be a see
AVECUVALUES OF ZELO MAY LEUK	esent small values that ro	una la zero. Line Excel	version of this table brov	nues augmonal precision (which may be access

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 October 2017

Census Region and State	Residential			Transportation	Total
New England	nesidential	Oommercial	2	n	n
Connecticut	0	1	2	0	0
Maine	0	1	2	0	0
	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	2
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	
Wisconsin	1	2	1	0	1
West North Central	0	1	7	0	1
	0	1	2	0	1
lowa	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		0	0
North Carolina	1	1	2	0	1
South Carolina	1	1	2	0	1
Virginia	1	1	3	0	1
	1	1	0	0	0
West Virginia	0	0			0
East South Central	1	1	2	0	1
Alabama	1	1	2	0	1
Kentucky	1	2	4	0	1
Mississippi	2	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	2	0	1
Montana	1	1	11	0	2
Nevada	0	3	11	0	1
New Mexico	2		8	0	1
					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	1	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 Displayed values of zero may re	0	0	1	0	0

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

by End-Use Sector, Census Division, and State, October 2017

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

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 October 2017

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

Table B.	1 Major D	isturbances and Uni	usual Occurrences, Restoration Date and			NERC				Number of Customers
Year	Month	Event Date and Time		Duration	Utility/Power Pool	Region		Type of Disturbance	Loss (megawatts)	
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 Fuel supply emergencies that	Unknown	106000
2017	1	01/08/2017 11:59 PM	ongoing	ongoing	California Department of Water Resources	WECC	California:	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 Loss of electric service to more than 50,000 customers for 1	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;	hour or more-Transmission Disruption Liectrical System Separation	176	126000
								(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		
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-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	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	C
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 Physical attack that could potentially impact electric power	400	Unknowr
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;	system adequacy or reliability; or vandalism which targets components of any security systems-Vandalism	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 Physical attack that could potentially impact electric power system adequacy or reliability;	254	16925
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;	or vandalism which targets components of any security systems-Vandalism Loss of electric service to more	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;	than 50,000 customers for 1 hour or more-Severe Weather Loss of electric service to more	Unknown	11159
2017	3	03/01/2017 8:30 AM	03/01/2017 2:00 PM	5 Hours, 30 Minutes	Tennessee Valley Authority	SERC	Tennessee: Kentucky:	than 50,000 customers for 1 hour or more-Severe Weather Loss of electric service to more	Unknown	58000
2017	3	03/01/2017 11:49 AM	03/02/2017 9:30 PM	33 Hours, 41 Minutes	American Electric Power	RFC		than 50,000 customers for 1 hour or more-Severe Weather	Unknown	9857
2017	વ	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	5431
2017	3	03/06/2017 8:00 PM	03/07/2017 1:00 AM	5 Hours, 0 Minutes	Kansas City Power & Light Co		Missouri: Jackson County, Platte County, Cass County, Lafayette County, Chariton County, Carroll County, Clay		Unknown	
							Calhoun County, Ingham County, Hillsdale County, Washtenaw County, Kent County, Ottawa County, Midland County, Saginaw	Loss of electric service to more than 50,000 customers for 1		
2017	3	03/08/2017 9:30 AM	03/11/2017 5:00 AM	67 Hours, 30 Minutes	Consumers Energy Co	RFC		hour or more-Severe Weather Loss of electric service to more than 50,000 customers for 1	Unknown	34300
2017	3	03/08/2017 11:30 AM	03/08/2017 7:52 PM	8 Hours, 22 Minutes	Cleveland Electric Illum Co	RFC	Ohio		Unknown	7101
2017	3	03/08/2017 12:00 PM	03/11/2017 11:31 AM	71 Hours, 31 Minutes	Detroit Edison Co	RFC	Michigan	hour or more-Severe Weather Loss or electric service to more than 50,000 customers for 1 hour or more-Severe	Unknown	80000
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	Weather/Transmission Interruption Loss of electric service to more	Unknown	10686
2017	3	03/08/2017 3:33 PM	ongoing	ongoing	Rochester Gas & Electric Corp		Connecticut: Massachusetts:	Loss of electric service to more	Unknown	50000
2017	3	03/14/2017 12:32 PM	ongoing	ongoing	ISO New England	NPCC	Rhode Island: New Hampshire: Maine: Vermont:	than 50,000 customers for 1 hour or more-Severe Weather	Unknown	6964
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	25700
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

Table B.1	1 Major Di	sturbances and Unu	isual Occurrences,	Year-to-Date 2017						Number of
Year	Month	Event Date and Time	Restoration Date and Time	Duration	Utility/Power Pool	NERC Region		Type of Disturbance	Loss (megawatts)	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	7	04/03/2017 11:00 AIVI	04/03/2017 0.001 W	3 Flours, O Milliates	Southern Company	OLIKO	Alabama, Georgia	Loss of electric service to more	230	00350
2017	4	04/06/2017 7:00 PM	ongoing	ongoing	Pacific Gas & Electric Co	WECC	California	than 50,000 customers for 1	Unknown	100000
								Loss of electric service to more		
2017	4	04/07/2017 4:33 AM	04/07/2017 8:20 AM	3 Hours, 47 Minutes	Pacificorp	WECC	Oregon	than 50,000 customers for 1 hour or more-Severe Weather	100	64852
							Oregon: Multnomah County,			
2017	4	04/07/2017 8:15 AM	04/08/2017 12:14 AM	15 Hours, 59 Minutes	Portland General Electric Co	WECC	Washington County, Marion County, Clackamas County	·	Unknown	153867
								Loss of electric service to more		
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	than 50,000 customers for 1 hour or more-Severe Weather	240	74698
								Loss of electric service to more		
2017	4	04/30/2017 1:00 AM	04/30/2017 5:45 PM	16 Hours, 45 Minutes	Entergy Corp	SERC	Arkansas, Louisiana, Mississippi	than 50,000 customers for 1 hour or more-Severe Weather	Unknown	145174
								Loss of electric service to more than 50,000 customers for 1		
2017	5	05/01/2017 11:14 PM	05/01/2017 11:34 PM	0 Hours, 20 Minutes	Pennsylvania Electric Co	RFC	Ohio	·	Unknown	92390
								Megawatts or more implemented under emergency		
2017	5	05/03/2017 6:58 PM	05/03/2017 9:15 PM	2 Hours, 17 Minutes	Southern California Edison Co	WECC	California	operational policy-Generation	572	0
2017	<u> </u>	00,00,2017 0.001 1	00/00/2017 0.1011	Z Hodro, 17 Williados	Countries California Edison Co	WEGG	Camorria	Load shedding of 100 Megawatts or more	072	0
								implemented under emergency operational policy-Generation		
2017	5	05/03/2017 7:05 PM	05/03/2017 9:00 PM	1 Hours, 55 Minutes	California ISO	WECC	California		878	Unknown
								Loss of electric service to more than 50,000 customers for 1		
2017	5	05/04/2017 5:00 AM	05/04/2017 10:00 PM	17 Hours, 0 Minutes	Southern Company	SERC	Alabama: Georgia		200	60377
								Fuel supply emergencies that could impact electric power		
2017	5	05/07/2017 5:15 AM	ongoing	ongoing	California Department of Water Resources	WECC	California: Fresno County	system adequacy or reliability- Fuel Supply Deficiency	0	0
								Public appeal to reduce the use		
								of electricity for purposes of maintaining the continuity of the		
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	electric power system- Generation Inadequacy	80	0
								Loss of electric service to more		
2017	5	05/19/2017 5:30 AM	ongoing	ongoing	Ameren Missouri	SERC			Unknown	70696
							Putnam County, Knox County,			
2017	5	05/27/2047 44:00 DM	ongoing	ongoing	Tannaga oo Vallay Aytharity	SERC	County; Alabama: Madison	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	116000
2017	5	05/27/2017 11:00 PM	ongoing	ongoing	Tennessee Valley Authority	SERC	County	Loss of electric service to more	Unknown	116000
2017	5	05/27/2017 11:10 PM	ongoing	ongoing	Memphis Light Gas and Water Division	SERC	Tennessee: Shelby County	than 50,000 customers for 1	391	188000
2017	3	03/21/2017 11:101 181	origoring	Grigoria	Memphis Light Gas and Water Division	OLIKO	Termessee. Shelby County	Loss of electric service to more	331	100000
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	than 50,000 customers for 1 hour or more-Severe Weather	Unknown	103000
				,	, , ,			Loss of electric service to more		
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	than 50,000 customers for 1 hour or more-Severe Weather	Unknown	103000
								Electrical System Separation		
								(Islanding) where part or parts of a power grid remain(s)		
								operational in an otherwise blacked out area or within the		
0047		00/44/0047 0:00 DM	00/44/0047 F.FF DM	O Havina d C Minutas	MICO	DEC	Mishinon	partial failure of an integrated electrical system-Transmission	00	Halmania
2017	б	06/11/2017 2:39 PM	06/11/2017 5:55 PM	3 Hours, 16 Minutes	MISO	RFC	Michigan Michigan: Kent County, Ottawa	Interruption	63	Unknown
								Loss of electric service to more than 50,000 customers for 1		
2017	7	07/07/2017 3:30 AM	07/08/2017 7:30 PM	40 Hours, 0 Minutes	Consumers Energy Co	RFC		hour or more-Severe Weather	Unknown	160000
								Uncontrolled loss of 300 Megawatts or more of firm		
								system loads for more than 15 minutes from a single incident-		
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	645	176867
								Megawatts or more of firm system loads for more than 15		
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		Nevada	minutes from a single incident- Severe Weather	0	0
								Loss of electric service to more		
2017	7	07/22/2017 10:00 PM	ongoing	ongoing	KCP&L Greater Missouri Operations Company	SERC	Missouri	than 50,000 customers for 1 hour or more-Severe Weather	Unknown	115000
								Loss of electric service to more than 50,000 customers for 1		
2017	7	07/22/2017 10:00 PM	ongoing	ongoing	Southwest Power Pool, Inc.	SERC	Missouri	·	Unknown	131000
							Missouri: Clay County, Jackson County, Lafayette County,			
								Loss of electric service to more than 50,000 customers for 1		
2017	7	07/22/2017 10:00 PM	07/23/2017 12:00 PM	14 Hours, 0 Minutes	Kansas City Power & Light Co	SERC			Unknown	112540
								Loss of electric service to more than 50,000 customers for 1		
2017	7	07/23/2017 4:00 AM	ongoing	ongoing	Ameren Missouri	SERC	Missouri: Illinois		Unknown	82000
								Fuel supply emergencies that could impact electric power		
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	system adequacy or reliability-	0	0
L	Į.	!			•	-	·			

Year	Month	Event Date and Time	Restoration Date and Time	Duration	Hillity/Dower Dool	NERC Region		Type of Disturbance	Loss (magawatta)	Number of Customers Affected
Year	Month	Event Date and Time	Time	Duration	Utility/Power Pool	Region	Area Affected	Type of Disturbance Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise	Loss (megawatts)	Affected
								blacked out area or within the partial failure of an integrated		
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 гехаѕ. матадогда Соцпту,		1	2
							Nueces County, Aransas County, Refugio County, San Patricio County, Calhoun County, Victoria County,			
							County, Jim Wells County, Bee			
2017	8	08/25/2017 6:17 PM	09/02/2017 5:00 PM	190 Hours, 43 Minutes	American Electric Power - Texas	TRE	County, Lavaca County	hour or more-Severe Weather Loss of electric service to more	Unknown	220400
2017	8	08/25/2017 6:30 PM	09/05/2017 5:00 PM	262 Hours, 30 Minutes	ERCOT	TRE	Texas	than 50,000 customers for 1	Unknown	330000
2017	8	08/26/2017 12:39 AM	08/26/2017 12:52 AM	0 Hours, 13 Minutes	ERCOT	TRE	Texas	operational in an otherwise blacked out area or within the partial failure of an integrated electrical system-Severe Weather	Unknown	Unknown
								Loss of electric service to more than 50,000 customers for 1		
2017	8	08/26/2017 6:26 AM	09/08/2017 12:00 AM	305 Hours, 34 Minutes	CenterPoint Energy	TRE	Texas	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	,	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	78500
2017	g	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 snedding of 100 Megawatts or more implemented under emergency operational policy-Severe Weather	100	0
2017	0	00/31/2017 Z.43 F W	00/31/2017 3.14 F W	2 Hours, 23 Williates	Southern California Edison Co	WLCC	Camorna. Los Angeles County	Load shedding of 100 Megawatts or more	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:	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
							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, Madison County, Marion			
2017	9	09/10/2017 6:35 PM	09/13/2017 5:00 PM	70 Hours, 25 Minutes	Duke Energy Florida	FRCC	County, Orange County, Osceola County, Pasco County, Pinellas County, Po	than 50,000 customers for 1	4500	1000000
2017	9	09/10/2017 8:37 PM	ongoing	ongoing	Seminole Electric Cooperative Inc	FRCC		Loss of electric service to more than 50,000 customers for 1	Unknown	452555
								Loss of electric service to more than 50,000 customers for 1		
2017	9	09/11/2017 12:30 AM	ongoing	ongoing	Lakeland Electric	FRCC	Florida:	hour or more-Severe Weather Loss of electric service to more	200	20000
2017	9	09/11/2017 2:27 AM	09/15/2017 8:44 PM	114 Hours, 17 Minutes	Southern Company	SERC	Georgia:	than 50,000 customers for 1	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:	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 Loss of electric service to more	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:	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:	(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	Unknowr
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
	.0	2.557.00	59	5559		5	, comp	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		2
2017	10	10/16/2017 3:45 PM	10/16/2017 4:09 PM	0 Hours, 24 Minutes	Bonneville Power Administration	WECC	Washington: Montana:	Interruption	0	C

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2017

Table B.	i Major Di	sturbances and Unu	sual Occurrences,	Year-to-Date 2017						Name
			Restoration Date and			NERC				Number of Customers
Year	Month	Event Date and Time	Time	Duration	Utility/Power Pool			Type of Disturbance	Loss (megawatts)	Affected
					·				`	
								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		
0047	40	40/40/0047 0.55 DM	04/20/2004 4:40 DM	57 040 House 45 Minutes	Deal, Deliahilita	WEGG	Washington	electrical system-Transmission		0
2017	10	10/16/2017 3:55 PM	04/30/2024 4:10 PM	57,312 Hours, 15 Minutes	Peak Reliability	WECC	Washington:	Interruption Uncontrolled loss of 300	0	0
								Megawatts or more of firm		
								system loads for more than 15		
						=00		minutes from a single incident-		
2017	10	10/20/2017 3:44 AM	10/20/2017 3:45 AM	0 Hours, 1 Minutes	Peak Reliability	WECC	Washington:	Severe Weather	900	Unknown
								Loss of electric service to more		
							Louisiana: Mississippi:	than 50,000 customers for 1		
2017	10	10/22/2017 8:45 AM	10/22/2017 2:00 PM	5 Hours, 15 Minutes	Entergy Corp	SERC	Arkansas: Texas:	hour or more-Severe Weather	Unknown	Unknown
								Loss of electric service to more		
								than 50,000 customers for 1		
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:	hour or more-Severe Weather	440	115144
								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		
2017	10	10/26/2017 8:17 AM	10/26/2017 8:41 AM	0 Hours, 24 Minutes	Peak Reliability	WECC	Washington: Clark County;	Interruption		0
					•		, , , , , , , , , , , , , , , , , , ,			
								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		
0047	40	40/00/0047 0 47 414	40/00/0047 0 44 554	0.11	Danner III.a Danner Adarbit to 1			electrical system-Transmission		
2017	10	10/26/2017 8:17 AM	10/26/2017 8:41 AM	0 Hours, 24 Minutes	Bonneville Power Administration	WECC	Montana:	Interruption	0	0
							Connecticut: Massachusetts:	Loss of electric service to more		
							New Hampshire: Maine: Rhode	-		
2017	10	10/29/2017 11:40 PM	11/01/2017 6:08 PM	66 Hours, 28 Minutes	ISO New England	NPCC	Island: Vermont:	hour or more-Severe Weather	Unknown	310453

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

Year	Month	isturbances and Uni Event Date and Time	Restoration Date and		Utility/Power Pool	NERC Region		Type of Disturbance	Loss (megawatts)	Number of Customers Affected
Tour	ill Giltin	Evolt Bate and Time		Bulation	Guilly/i Gilo. i Go.	riogio	Maine: Connecticut: Massachusetts: Vermont: New	Loss of electric service to more	2000 (mogamano)	7.1100.00
2016	1	01/10/2016 8:46 PM	01/11/2016 5:25 AM	8 Hours, 39 Minutes	ISO New England	NPCC		hour or more-Weather Loss of electric service to more	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:	than 50,000 customers for 1 hour or more-Weather Loss of electric service to more	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:	than 50,000 customers for 1 hour or more-Weather Loss of electric service to more	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:	than 50,000 customers for 1	Unknown	115057
2040		02/42/2046 42:44 PM	00/42/2040 4:27 DM	2 Hours 42 Migutos	Docifia Coa & Floatria Co	SERIO	Colifornia	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		4200
2016	2	02/13/2016 12:44 PM	02/13/2016 4:27 PM	3 Hours, 43 Minutes	Pacific Gas & Electric Co	SERC	virginia: коапоке County, Montgomery County; West	, , ,	/	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)	1	Virginia: Kanawha County, Cabell County; Tennessee: Sullivan County;	than 50,000 customers for 1	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	than 50,000 customers for 1 hour or more-Weather Loss of electric service to more	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 Connecticut: Maine: Massachusetts: Rhode Island:	than 50,000 customers for 1	400	284610
2016	2	02/25/2016 1:44 AM	02/25/2016 2:45 PM	13 Hours, 1 Minutes	ISO New England	NPCC	1	hour or more-Weather		114190
2016 2016	3	02/26/2016 12:01 AM 03/01/2016 3:00 PM		. Hours, . Minutes	California Department of Water Resources Puget Sound Energy		Washington: King County, Whatcom County, Kitsap	Fuel Supply Deficiency Loss of electric service to more than 50,000 customers for 1	0	0 56000
2016	3	03/03/2016 11:00 AM	04/16/2016 7:47 PM		California Department of Water Resources		Colorado: Denver, City and	Fuel Supply Deficiency Loss of electric service to more than 50,000 customers for 1	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	County of[12];	Uncontrolled loss of 300 Megawatts or more of firm		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	system loads for more than 15 minutes from a single incident- System Operations Loss of electric service to more than 50,000 customers for 1	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		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	·		214864
2016	5	05/08/2016 9:12 AM		. Hours, . Minutes	Peak Reliability	WECC	Washington: Clark County;		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;	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:	Megawatts or more of firm system loads for more than 15 minutes from a single incident- System Operations Loss of electric service to more	461	85179
								than 50,000 customers for 1 hour or more-Distribution		
2016	5	05/20/2016 12:00 AM	05/22/2016 5:00 AM	53 Hours, 0 Minutes	Entergy Services, Inc.	SERC	Louisiana:	Interruption Loss of electric service to more than 50,000 customers for 1	Unknown	85000
2016	5	05/20/2016 1:15 AM		. Hours, . Minutes	Entergy Transmission - SOC	SERC	Louisiana:		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; Georgia, Alabama, Mississippi,	Fuel Supply Deficiency Loss of electric service to more than 50,000 customers for 1	150	Unknown
2016	6	06/17/2016 3:40 PM	06/18/2016 8:34 AM	16 Hours, 54 Minutes	Southern Company	SERC		hour or more-Weather		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		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 Kansas: Johnson County;	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	Missouri: Jackson County, Platte County, Cass County, Buchanan County, Atchison County, Andrew County, Clay	Loss of electric service to more than 50,000 customers for 1	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)	1	Oakland County, Macomb County, St. Clair County,	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	County, Sanilac County, Huron	than 50,000 customers for 1	Unknown	160895
2016	7	07/08/2016 8:50 PM	07/09/2016 7:25 PM		Duke Energy Carolinas		,	Loss of electric service to more than 50,000 customers for 1		203345
								Loss of electric service to more than 50,000 customers for 1		
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	·		62000

Table B.		sturbances and Unu	Restoration Date and	2016		NERC				Number of Customers
Year	Month	Event Date and Time	Time	Duration	Utility/Power Pool	Region	Area Affected	Type of Disturbance Voltage Reduction-System	` •	Affected
2016 2016	7	07/12/2016 2:10 PM 07/13/2016 3:00 PM	07/12/2016 8:33 PM 	6 Hours, 23 Minutes . Hours, . Minutes	Puerto Rico Electric Power Authority Memphis Light Gas and Water Division		Puerto Rico Tennessee: Shelby County	Public Appeal-System		218000 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		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		Unknown
2016	7	07/19/2016 3:45 PM	07/19/2016 7:29 PM	3 Hours, 44 Minutes	Bonneville Power Administration		Idaho	Islanding, Uncontrolled Loss		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		266000
							Massachusetts: Connecticut: Rhode Island: New Hampshire:	than 50,000 customers for 1		
2016	7	07/22/2016 11:50 PM 07/23/2016 3:15 PM	07/23/2016 9:10 AM 07/23/2016 7:53 PM	9 Hours, 20 Minutes 4 Hours, 38 Minutes	ISO New England CAmbria Cogen Company		Vermont: Maine Pennsylvania: Cambria County	Voltage Reduction-System		57058 Unknown
2010	,	07/23/2010 3.13 F W	01/23/2010 1.33 F W	4 Hours, 30 Minutes	CAmbria Cogen Company	IN C	Connecticut: Massachusetts:	Loss of electric service to more		OHKHOWH
2016	7	07/23/2016 7:30 PM	07/24/2016 7:30 AM	12 Hours, 0 Minutes	ISO New England	NPCC	New Hampshire: Vermont: Rhode Island			101073
2016	7	07/25/2016 6:51 PM	07/26/2016 2:19 AM	7 Hours, 28 Minutes	Puerto Rico Electric Power Authority		Puerto Rico	Voltage Reduction-System		0
2016	7	07/26/2016 6:51 PM 07/27/2016 6:50 PM	07/27/2016 1:45 AM 07/28/2016 1:38 AM	6 Hours, 54 Minutes 6 Hours, 48 Minutes	Puerto Rico Electric Power Authority Puerto Rico Electric Power Authority		Puerto Rico Puerto Rico	Voltage Reduction-System		37100 106300
2016	7	07/28/2016 6:51 PM	07/29/2016 2:02 AM	7 Hours, 11 Minutes	Puerto Rico Electric Power Authority		Puerto Rico	Voltage Reduction-System		21600
2016	7	07/29/2016 7:09 PM	07/29/2016 7:57 PM	0 Hours, 48 Minutes	Puerto Rico Electric Power Authority		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
2016	8	08/11/2016 4:30 PM	08/11/2016 7:15 PM	2 Hours, 45 Minutes	FirstEnergy Corp	RFC	Ohio:	Uncontrolled loss of 300	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:	Megawatts or more of firm system loads for more than 15 minutes from a single incident-System Operations		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 Uncontrolled loss of 300		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:	Megawatts or more of firm system loads for more than 15 minutes from a single incident-System Operations		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		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
					•			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		
2016	8	08/31/2016 2:52 PM	<u></u>	. Hours, . Minutes	Peak Reliability		Washington: Clark County;	Loss of electric service to more than 50,000 customers for 1		0
2016	9	09/01/2016 10:00 PM		. Hours, . Minutes	Seminole Electric Cooperative Inc	FRCC	Florida: Florida: Leon County, Wakulla	hour or more-Severe Weather Loss of electric service to more		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: 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	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		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		57000

			Restoration Date and			NERC				Number of Customers
Year	Month	Event Date and Time	Time	Duration	Utility/Power Pool	Region		Type of Disturbance 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	Loss (megawatts)	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-Islanding Fuel supply emergencies that	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;	could impact electric power system adequacy or reliability-	210	Unknown
2016	9	09/08/2016 2:49 PM	09/08/2016 3:03 PM	0 Hours, 14 Minutes	Peak Reliability	WECC	Washington:		0	0
2016	0	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	135	Unknown
2010	9	09/10/2010 9.42 AW	09/10/2010 9.37 AM	o Flours, 13 Millates	r eak Keliability	WECC	Connecticut: Massachusetts: New Hampshire: Rhode Island:		133	OTINIOWIT
2016	9	09/11/2016 12:05 PM	09/11/2016 3:10 PM	3 Hours, 5 Minutes	ISO New England	NPCC		1	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	Sandoval County, Santa Fe	implemented under emergency	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;	,	69	19124
2016	10	10/02/2016 11:30 PM	10/05/2016 8:00 AM	56 Hours, 30 Minutes	Pacificorp	WECC		Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system- Transmission Interruption	50	4000
				·				Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the		
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	Unknown	Unknown
								of electricity for purposes of maintaining the continuity of the electric power system-Public		
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	Unknown	Unknown
2016	10	10/06/2016 9:50 AM	10/06/2016 7:00 PM	9 Hours, 10 Minutes	ERCOT	TRE	Texas:	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		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	413	165000
2010	10	10/01/2010 0:00 / 1111	10/00/2010 1:00 1 111	corridate, e iniliated	Baile Energy Fielda	11.00	Cumor County, Cu	Public appeal to reduce the use of electricity for purposes of	110	100000
2016	10	10/07/2016 11:08 AM	10/07/2016 7:00 PM	7 Hours, 52 Minutes	ERCOT	TRE	Texas:	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			Loss of electric service to more than 50,000 customers for 1	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:	Public appeal to reduce the use	Unknown	Unknown
2016	10	10/10/2016 1:15 PM	10/10/2016 7:00 PM	5 Hours, 45 Minutes	ERCOT	TRE	Texas:	of electricity for purposes of maintaining the continuity of the electric power system- Generation Inadequacy	Unknown	Unknown
								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		
2016	10	10/28/2016 1:29 PM	10/28/2016 1:38 PM	0 Hours, 9 Minutes	Pacific Gas & Electric Co	WECC	•	, ·	4	482
2016	11	11/09/2016 11:59 AM	11/09/2016 6:15 PM	6 Hours, 16 Minutes	Modesto Irrigation District	WECC	San Joaquin County, Alameda	system adequacy or reliability-	0	0

Table D.	able B.2 Major Disturbances and Unusual Occurrences, 2016										
Year	Month	Event Date and Time	Restoration Date and Time		Utility/Power Pool	NERC Region		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	
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.'

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:

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 estimates¹.

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. Nonsampling 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
ВА	Energy Storage, Battery
CE	Energy Storage, Compressed Air
СР	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
НҮ	Hydroelectric Turbine (including turbines associated with delivery of water by pipeline)
ВТ	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
ОТ	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.

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Other Renewable Energy Sources WND Wind GEO Geothermal PUR Purchased Steam WH Waste heat not directly attributed to a fuel source Other Energy Sources TDF Tire-Derived Fuels MWH Electricity used for energy storage		SUN	
PUR Purchased Steam WH Waste heat not directly attributed to a fuel source Other Energy Sources TDF Tire-Derived Fuels MWH Electricity used for energy storage	Other Renewable Energy Sources	WND	Wind
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Other Energy Sources TDF Tire-Derived Fuels MWH Electricity used for energy storage		PUR	Purchased Steam
MWH Electricity used for energy storage		WH	Waste heat not directly attributed to a fuel source
	Other Energy Sources	TDF	Tire-Derived Fuels
OTH Other		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 entities 14. 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 15. 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 waste²: 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-	43	44	45	45	44	43	46	46	49	50
biogenic										

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-	23	23	24	24	25	34	35	35	36	36	
biogenic											

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

622

512	Motion pictures
514	Business services
	514199 Miscellaneous services
541	Legal services
561	Engineering, accounting, research, management, and related services
611	Education services

- Social servicesMuseums, art galleries, and botanical and zoological gardens
- 713 Amusement and recreation services
- 721 Hotels
- 811 Miscellaneous repair services

Health 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. 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:

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

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

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

 $\mathcal{W}i$ is the weight factor, which is the inverse of $\mathcal{X}i_{2013}$

 eta_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

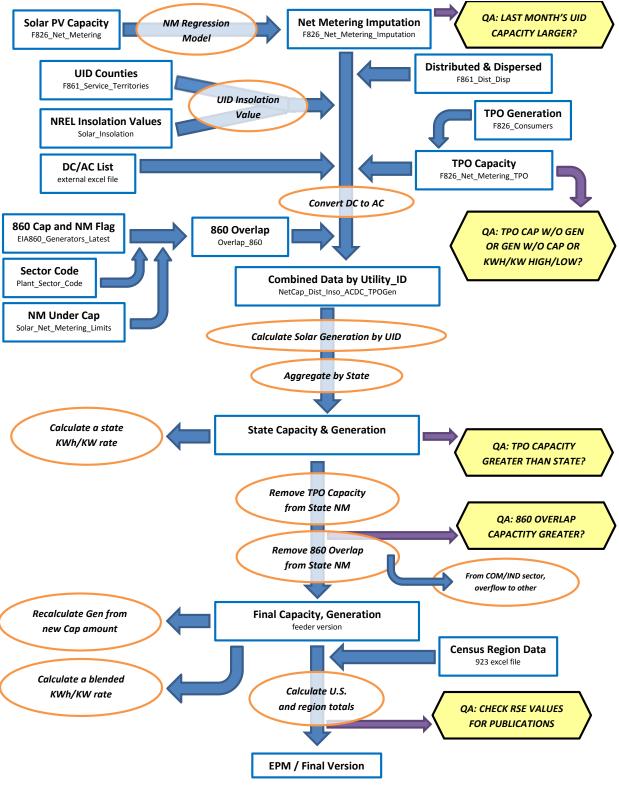
79	USA CO Colorado Springs Muni Airport	Colorado Springs, CO MSA
80	USA NY Syracuse Hancock Int'l Airport	Syracuse, NY MSA
81	USA FL Fort Myers Page Field	Cape Coral-Fort Myers, FL MSA
82	USA NC Winston-Salem Reynolds Airport	Winston-Salem, NC MSA
83	USA ID Boise Air Terminal	Boise City, ID MSA
84	USA 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

Solar PV Capacity

Net Metering Imputation

QA: LAST MO.



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://interstat.statjournals.net/; Knaub, J.R., Jr. (2007a), "Cutoff Sampling and Inference," InterStat, April 2007, http://interstat.statjournals.net/; Knaub, J.R., Jr. (2007a), "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 III: Ratios of Totals," InterStat, June 2000, http://interstat.statjournals.net/; Knaub, J.R., Jr. (2001), "Using Prediction-Oriented Software for Survey Estimation - Part III: Full-Scale Study of Variance and Bias," InterStat, June 2001, http://interstat.statjournals.net/.

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

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

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

Table C.1 Average Heat Conte	nt of Fossil-Fuel Rec	eipts, October 201	7	Natural Gas
Census Division and State	Coal (Million Btu per Ton)	Petroleum Liquids (Million Btu per Barrel)	Petroleum Coke (Million Btu per Ton)	(Million Btu per Thousand Cubic Feet)
New England	25.40	6.29		1.03
Connecticut		5.80		1.03
Maine	25.40	6.25		1.02
Massachusetts		6.30		1.03
New Hampshire		5.80		1.03
Rhode Island				1.03
Vermont				
Middle Atlantic	24.16	5.99		1.03
New Jersey	26.11	5.75		1.03
New York	25.80	6.28		1.03
Pennsylvania	24.06	5.91		1.04
East North Central	20.16	5.79	26.75	1.04
Illinois	17.75	5.78		1.00
Indiana	22.44	5.77		1.06
Michigan	18.57	5.81	26.69	1.04
Ohio	24.32	5.79		1.06
Wisconsin	17.71	5.80	27.04	1.03
West North Central	16.59	5.79	27.60	1.04
Iowa	17.55	5.83	27.60	1.05
Kansas	17.17	5.78		1.02
Minnesota	17.69	5.80		1.02
Missouri	17.61	5.78		1.02
Nebraska	16.98	5.75		1.06
North Dakota	13.09			1.00
South Dakota	16.63			
South Atlantic	23.39	5.89	28.09	1.03
Delaware		5.67		1.04
District of Columbia				
Florida	23.42	6.12	28.09	1.02
Georgia	19.74	5.94		1.03
Maryland	24.84	5.99		1.05
North Carolina	25.02	5.89		1.04
South Carolina	24.76	5.78		1.03
Virginia	24.73	5.74		1.05
West Virginia	24.54	5.77		1.09
East South Central	21.16	5.80		1.03
Alabama	20.25	5.77		1.03
Kentucky	22.41	5.82		1.05
Mississippi	14.42	5.80		1.03
Tennessee	21.35	5.77		1.01
West South Central	16.23	5.83	28.65	1.03
Arkansas	17.49	5.84		1.03
Louisiana	16.64		28.65	1.03
Oklahoma	17.34	5.80		1.03
Texas	15.76	5.84		1.03
Mountain	18.86	5.69		1.04
Arizona	19.38	5.63		1.04
Colorado	18.52	5.00		1.09
Idaho	10.52			1.03
Montana	17.13			1.04
Nevada	17.13	5.79		1.04
New Mexico	17.69	5.79		1.04
Utah	21.60	5.84		1.05
	17.67	5.84		1.03
Wyoming Recific Contiguous				
Pacific Contiguous	17.60	6.00		1.04
California	22.93			1.03
Oregon	17.28			1.05
Washington	17.02			1.09
Pacific Noncontiguous	18.24	6.13		1.00
Alaska	13.65			1.00
Hawaii	19.51	6.13		
U.S. Total	19.10	6.04	28.10	1.03

^{&#}x27;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.

^{&#}x27;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

	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	!	<u> </u>						
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		7.777	2 11					
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		31111	53.35.15					
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	3.2070	5.2070	0.2170					
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.

 $\label{thm:local_problem} \mbox{Hydroelectric includes conventional hydroelectric and hydroelectric pumped storage facilities.}$

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 cannges.

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	
	Preliminary	Final	Percent	Preliminary	Final	Percent	Preliminary	Final	Percent
ltem	Annual Data	Annual Data	Change	Annual Data	Annual Data	Change	Annual Data	Annual Data	Change
Net Generation (Thousand MWh)	4 505 007	4 504 740	0.050/	4.050.057	4.050.000	0.070/	4.040.400	4 000 440	0.000/
Coal	1,585,697	1,581,710	-0.25%	1,356,057	1,352,398	-0.27%	1,240,108		-0.08%
Petroleum Liquids	18,708	18,276	-2.31%	17,456	17,372	-0.48%	12,675		2.63%
Petroleum Coke	11,781	11,955	1.48%	10,987	10,877	-1.00%	11,232	·	-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		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		853,634	0.000/	740.055	720 504	-0.17%	678,005	677 074	0.000/
Coal (1,000 tons)	854,416		-0.09%	740,855	739,594		· · · · · · · · · · · · · · · · · · ·	677,371	-0.09%
Petroleum Liquids (1,000 barrels)	32,084	31,531	-1.72%	29,545	28,925	-2.10%	21,225		5.56%
Petroleum Coke (1,000 tons)	4,325	4,412	2.02%	4,088	4,044 10,016,576	-1.07%	4,275 10,400,189		-0.52%
Natural Gas (1,000 Mcf)	8,502,964	8,544,387	0.49%	10,048,346	10,016,576	-0.32%	10,400,169	10,170,110	-2.21%
Fuel Stocks for Electric Power Sector	151,362	151,548	0.12%	197,128	105 540	0.900/	163,946	162,009	1 100/
Coal (1,000 tons) Petroleum Liquids (1,000 barrels)	,		4.25%	32,223	195,548	-0.80% 2.05%	30,880	31,702	-1.18% 2.66%
	32,139 847	33,505 827			32,884	-0.15%		845	
Petroleum Coke (1,000 tons)	047	027	-2.29%	1,342	1,340	-0.15%	872	040	-3.10%
Retail Sales (Million kWh) Residential	1 402 044	1,407,208	0.31%	1,399,884	1,404,096	0.30%	1,407,394	1 444 050	0.26%
	1,402,911 1,357,505	1,352,158	-0.39%	1,358,419	1,360,752	0.30%	1,359,617	1,411,058 1,367,191	0.26%
Commercial	· ·		4.40%					976,715	4.32%
Industrial	955,488	997,576		958,563	986,508	2.92%	936,269	<i>'</i>	
Transportation Total	7,776	7,758	-0.24% 1.10%	7,659 3,724,525	7,637	-0.29% 0.93%	7,499	7,497	-0.03% 1.39%
	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	0.14%	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		1.33%
	309,111	393,090	1.0270	300,127	391,341	0.03%	301,433	300,309	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	0.44 //	6.75		0.03 %
Transportation	10.27	10.45	1.75%	10.17	10.09	-0.83%	9.48		1.55%
Total	10.45	10.43	-0.08%	10.17	10.41	-0.03 %	10.28		-0.06%
Receipt of Fossil Fuels	10.43	10.44	-0.00 /8	10.42	10.41	-0.10 /8	10.20	10.27	-0.00 /8
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	·	1.18%
Petroleum Coke (1,000 tons)	5,091	5,195	2.03%	4,779	4,897	2.46%	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		0.01%
Cost of Fossil Fuels (Dollars per Million Bt		0,431,423	0.0370	3,043,170	3,042,001	-0.01%	10,230,000	10,211,100	0.1270
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		0.39%
Petroleum Coke (1,000 tons)	1.96	1.98	0.97%	1.87	1.84	-1.37%	1.65		0.39 %
Natural Gas (1,000 Mcf)	4.99	4.99	0.97%	3.22	3.23	0.18%	2.88		-0.06%
Inatulal Gas (1,000 Mici)	4.99	4.99	0.01%	3.22	ა.∠ა	0.10%	2.00	2.07	-0.05%

 $Coal\ includes\ anthracite,\ bituminous,\ subbituminous,\ lignite,\ waste\ coal,\ and\ synthetic\ coal.\ Coal\ stocks\ exclude\ waste\ coal.$

and Federal Energy Regulatory Commission, FERC Form 423, 'Monthly Report of Cost and Quality of Fuels for Electric Plants.'

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';

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			
ICI (th (t.) A(t.)	4 000 (O The cont I) Well and		
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 10percent 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 abovementioned 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.