Independent Statistics & Analysis
U.S. Energy Information Administration

Electric Power Monthly
with Data for February 2019

April 2019

This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views in this report therefore should not be construed as representing those of the Department of Energy or other Federal agencies

Independent Statistics & Analysis
www.eia.gov

U.S. Department of Energy
Washington, DC 20585

Contacts

The Electric Power Monthly is prepared by the U.S. Energy Information Administration.

Questions and comments concerning the contents of the Electric Power Monthly may be directed to:

Brady Tyra
U.S. Energy Information Administration, EI-23
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, DC, 20585-0650

Email address: infoelectric@eia.gov

Subject specialists:

Subject	Specialist
U.S. electric net generation	Brady Tyra
U.S. electric consumption of fuels	Christopher Cassar
U.S. electric stocks of fuels	Christopher Cassar
U.S. electric fossil-fuel receipts	Joy Liu
U.S. electric fossil-fuel costs	Joy Liu
U.S. sales of electricity to ultimate consumers	Peter Wong
Sampling and estimation methodologies	Orhan Yildiz.

Requests for additional information on other statistics available from the U.S. Energy Information Administration or questions concerning subscriptions and report distribution may be directed to the Office of Communications of the U.S. Energy Information Administration at infoctr@eia.gov.

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.”

Table of Contents

Contacts

- Quality

Preface

- Background
- Data Sources
- Table and Figure Index

References

Glossary

Table and Figure Index

Executive Summary

Table ES.1.A. Total Electric Power Industry Summary Statistics
Table ES.1.B. Total Electric Power Industry Summary Statistics, Year-to-Date
Table ES.2.A. Summary Statistics: Receipts and Cost of Fossil Fuels for the Electric Power Industry by Sector, Physical Units
Table ES.2.B. Summary Statistics: Receipts and Cost of Fossil Fuels for the Electric Power Industry by Sector, Btus

Chapter 1. Net Generation

Table 1.1. Net Generation by Energy Source: Total (All Sectors)
Table 1.1.A. Net Generation from Renewable Sources: Total (All Sectors)
Table 1.2.A. Net Generation by Energy Source: Electric Utilities
Table 1.2.B. Net Generation by Energy Source: Independent Power Producers
Table 1.2.C. Net Generation by Energy Source: Commercial Combined Heat and Power Sector
Table 1.2.D. Net Generation by Energy Source: Industrial Combined Heat and Power Sector
Table 1.2.E. Net Generation by Energy Source: Residential Sector
Table 1.3.A. Net Generation by State by Sector
Table 1.3.B. Net Generation by State by Sector, Year-to-Date
Table 1.4.A. Net Generation from Coal by State by Sector
Table 1.4.B. Net Generation from Coal by State by Sector, Year-to-Date
Table 1.5.A. Net Generation from Petroleum Liquids by State by Sector
Table 1.5.B. Net Generation from Petroleum Liquids by State by Sector, Year-to-Date
Table 1.6.A. Net Generation from Petroleum Coke by State by Sector
Table 1.6.B. Net Generation from Petroleum Coke by State by Sector, Year-to-Date
Table 1.7.A. Net Generation from Natural Gas by State by Sector
Table 1.7.B. Net Generation from Natural Gas by State by Sector, Year-to-Date
Table 1.7.C. Utility-ScaleFacility Net Generation from Natural Gas by Technology: Total (All Sectors)
Table 1.8.A. Net Generation from Other Gases by State by Sector
Table 1.8.B. Net Generation from Other Gases by State by Sector, Year-to-Date
Table 1.9.A. Net Generation from Nuclear Energy by State by Sector
Table 1.9.B. Net Generation from Nuclear Energy by State by Sector, Year-to-Date
Table 1.10.A. Net Generation from Hydroelectric (Conventional) Power by State by Sector
Table 1.10.B. Net Generation from Hydroelectric (Conventional) Power by State by Sector, Year-to-Date
Table 1.11.A. Net Generation from Renewable Sources Excluding Hydroelectric by State by Sector
Table 1.11.B. Net Generation from Renewable Sources Excluding Hydroelectric by State by Sector, Year-to-Date
Table 1.12.A. Net Generation from Hydroelectric (Pumped Storage) Power by State by Sector
Table 1.12.B. Net Generation from Hydroelectric (Pumped Storage) Power by State by Sector, Year-to-Date
Table 1.13.A. Net Generation from Other Energy Sources by State by Sector
Table 1.13.B. Net Generation from Other Energy Sources by State by Sector, Year-to-Date
Table 1.14.A. Net Generation from Wind by State by Sector
Table 1.14.B. Net Generation from Wind by State by Sector, Year-to-Date
Table 1.15.A. Net Generation from Biomass by State by Sector

Table 1.15.B. Net Generation from Biomass by State by Sector, Year-to-Date
Table 1.16.A. Net Generation from Geothermal by Census Division by Sector
Table 1.16.B. Net Generation from Geothermal by Census Division by Sector, Year-to-Date
Table 1.17.A. Net Generation from Solar Photovoltaic by Census Division by Sector
Table 1.17.B. Net Generation from Solar Pholtovoltaic by Census Division by Sector, Year-to-Date
Table 1.18.A. Net Generation from Solar Thermal by Sector
Table 1.18.B. Net Generation from Solar Thermal by Census Division by Sector, Year-to-Date

Chapter 2. Consumption of Fossil Fuels

Table 2.1.A. Coal: Consumption for Electricity Generation by Sector
Table 2.1.B. Coal: Consumption for Useful Thermal Output by Sector
Table 2.1.C. Coal: Consumption for Electricity Generation and Useful Thermal Output by Sector
Table 2.2.A. Petroleum Liquids: Consumption for Electricity Generation by Sector
Table 2.2.B. Petroleum Liquids: Consumption for Useful Thermal Output by Sector
Table 2.2.C. Petroleum Liquids: Consumption for Electricity Generation and Useful Thermal Output by Sector
Table 2.3.A. Petroleum Coke: Consumption for Electricity Generation by Sector
Table 2.3.B. Petroleum Coke: Consumption for Useful Thermal Output by Sector
Table 2.3.C. Petroleum Coke: Consumption for Electricity Generation and Useful Thermal Output by Sector
Table 2.4.A. Natural Gas: Consumption for Electricity Generation by Sector
Table 2.4.B. Natural Gas: Consumption for Useful Thermal Output by Sector
Table 2.4.C. Natural Gas: Consumption for Electricity Generation and Useful Thermal Output by Sector
Table 2.5.A. Landfill Gas: Consumption for Electricity Generation by Sector
Table 2.5.B. Landfill Gas: Consumption for Useful Output by Sector
Table 2.5.C. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output by Sector
Table 2.6.A. Biogenic Municipal Solid Waste: Consumption for Electricity Generation by Sector
Table 2.6.B. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output by Sector
Table 2.6.C. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and Useful Thermal Output by Sector
Table 2.7.A Wood/Wood Waste Biomass: Consumption for Electricity Generation by Sector
Table 2.7.B Wood/Wood Waste Biomass: Consumption for Useful Thermal Output by Sector
Table 2.7 C Wood/Wood Waste Biomass: Consumption for Electricity Generation and Useful Thermal Output by Sector
Table 2.8.A. Consumption of Coal for Electricity Generation by State by Sector
Table 2.8.B. Consumption of Coal for Electricity Generation by State by Sector, Year-to-Date
Table 2.9.A. Consumption of Petroleum Liquids for Electricity Generation by State by Sector
Table 2.9.B. Consumption of Petroleum Liquids for Electricity Generation by State by Sector, Year-to-Date
Table 2.10.A. Consumption of Petroleum Coke for Electricity Generation by State by Sector
Table 2.10.B. Consumption of Petroleum Coke for Electricity Generation by State by Sector, Year-to-Date
Table 2.11.A. Consumption of Natural Gas for Electricity Generation by State by Sector
Table 2.11.B. Consumption of Natural Gas for Electricity Generation by State by Sector, Year-to-Date
Table 2.12.A. Consumption of Landfill Gas for Electricity Generation by State by Sector
Table 2.12.B. Consumption of Landfill Gas for Electricity Generation by State by Sector, Year-to-Date
Table 2.13.A. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State by Sector

Table 2.13.B. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State by Sector, Year-to-Date
Table 2.14.A Consumption of Wood/Wood Waste Biomass for Electricity Generation by State by Sector
Table 2.14.B Consumption of Wood/Wood Waste Biomass for Electricity Generation by State by Sector, Year-to-Date

Chapter 3. Fossil-Fuel Stocks for Electricity Generation

Table 3.1. Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector
Table 3.2. Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, by State
Table 3.3. Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, by Census Division
Table 3.4. Stocks of Coal by Coal Rank

Chapter 4. Receipts and Cost of Fossil Fuels

Table 4.1. Receipts, Average Cost, and Quality of Fossil Fuels: Total (All Sectors)
Table 4.2. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities
Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers
Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector
Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector
Table 4.6.A. Receipts of Coal Delivered for Electricity Generation by State
Table 4.6.B. Receipts of Coal Delivered for Electricity Generation by State, Year-to-Date
Table 4.7.A. Receipts of Petroleum Liquids Delivered for Electricity Generation by State
Table 4.7.B. Receipts of Petroleum Liquids Delivered for Electricity Generation by State, Year-to-Date
Table 4.8.A. Receipts of Petroleum Coke Delivered for Electricity Generation by State
Table 4.8.B. Receipts of Petroleum Coke Delivered for Electricity Generation by State, Year-to-Date
Table 4.9.A. Receipts of Natural Gas Delivered for Electricity Generation by State
Table 4.9.B. Receipts of Natural Gas Delivered for Electricity Generation by State, Year-to-Date
Table 4.10.A. Average Cost of Coal Delivered for Electricity Generation by State
Table 4.10.B. Average Cost of Coal Delivered for Electricity Generation by State, Year-to-Date
Table 4.11.A. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State
Table 4.11.B. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, Year-to-Date
Table 4.12.A. Average Cost of Petroleum Coke Delivered for Electricity Generation by State
Table 4.12.B. Average Cost of Petroleum Coke Delivered for Electricity Generation by State, Year-to-Date
Table 4.13.A. Average Cost of Natural Gas Delivered for Electricity Generation by State
Table 4.13.B. Average Cost of Natural Gas Delivered for Electricity Generation by State, Year-to-Date
Table 4.14. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Total (All Sectors) by State
Table 4.15. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Electric Utilities by State
Table 4.16. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Independent Power Producers by State
Table 4.17. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Commercial Combined Heat and Power Producers by State
Table 4.18. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Industrial Combined Heat and Power Producers by State

Chapter 5. Sales to Ultimate Consumers, Revenue, and Average Price of Electricity to Ultimate Consumers

Table 5.1. Sales of Electricity to Ultimate Customers: Total by End-Use Sector
Table 5.2. Revenue from Sales of Electricity to Ultimate Customers: Total by End-Use Sector
Table 5.3. Average Price of Electricity to Ultimate Customers: Total by End-Use Sector
Table 5.4.A. Sales of Electricity to Ultimate Customers by End-Use Sector, by State
Table 5.4.B. Sales of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date
Table 5.5.A. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State
Table 5.5.B. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date
Table 5.6.A. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State
Table 5.6.B. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date
Table 5.7. Number of Ultimate Consumers Served, by Sector
Table 5.8. Number of Ultimate Consumers Served, by Sector and State

Chapter 6. Capacity

Table 6.1. Electric Generating Summer Capacity Changes (MW) for Utility Scale Units
Table 6.1.A. Net Summer Capacity for Utility Scale Solar Photovoltaic and Distributed Solar Photovoltaic Capacity (Megawatts), 2008-September 2015
Table 6.1.B. Net Summer Capacity for Estimated Distributed Solar Photovoltaic Capacity by Sector
Table 6.2.A. Net Summer Capacity of Utility Scale Units by Technology and by State
Table 6.2.B. Net Summer Capacity Using Primarily Renewable Energy Sources by State
Table 6.2.C. Net Summer Capacity of Utility Scale Units Using Primarily Fossil Fuels by State
Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month
Table 6.4. Retired Utility Scale Generating Units by Operating Company, Plant, and Month
Table 6.5. Planned U.S. Electric Generating Unit Additions
Table 6.6 Planned U.S. Electric Generating Unit Retirements
Table 6.7.A. Capacity Factors for Utility Scale Generators Primarily Using Fossil Fuels
Table 6.7.B. Capacity Factors for Utility Scale Generators Not Primarily Using Fossil Fuels
Figure 6.1.A. Utility Scale Generating Units Added
Figure 6.1.B. Utility Scale Generating Units Retired
Figure 6.1.C. Utility Scale Generating Units Planned to Come Online
Figure 6.1.D. Utility Scale Generating Units Planned to Retire

Chapter 7. Imports and Exports

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

Chapter 8. Puerto Rico

Table 8.1 Sales of Electricity to Ultimate Customers by End-Use Sector
Table 8.2 Revenue from Sales of Electricity to Ultimate Consumers by End-Use Sector
Table 8.3 Number of Ultimate Customers Seved by Sector by End-Use Sector
Table 8.4 Average Price of Electricity to Ultimate Consumers by End-Use Sector
Table 8.5 Table 8.5. Net Summer Capacity (MW) of Existing Utility Scale Units by Technology for Puerto Rico, 2007-April 2018

Appendices

Table A.1.A. Relative Standard Error for Net Generation by Fuel Type: Total (All Sectors) by Census Division and State

Table A.1.A. Relative Standard Error for Net Generation by Fuel Type: Total (All Sectors) by Census Division and State (Continued)

Table A.1.B. Relative Standard Error for Net Generation by Fuel Type: Total (All Sectors) by Census Division and State, Year-to-Date

Table A.1.B. Relative Standard Error for Net Generation by Fuel Type: Total (All Sectors) by Census Division and State, Year-to-Date (Continued)

Table A.2.A. Relative Standard Error for Net Generation by Fuel Type: Electric Utilities by Census Division and State

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

Table A.2.B. Relative Standard Error for Net Generation by Fuel Type: Electric Utilities by Census Division and State, Year-to-Date

Table A.2.B. Relative Standard Error for Net Generation by Fuel Type: Electric Utilities by Census Division and State, Year-to-Date (Continued)

Table A.3.A. Relative Standard Error for Net Generation by Fuel Type: Independent Power Producers by Census Division and State

Table A.3.A. Relative Standard Error for Net Generation by Fuel Type: Independent Power Producers by Census Division and State (Continued)

Table A.3.B. Relative Standard Error for Net Generation by Fuel Type: Independent Power Producers by Census Division and State, Year-to-Date

Table A.3.B. Relative Standard Error for Net Generation by Fuel Type: Independent Power Producers by Census Division and State, Year-to-Date (Continued)

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

Table A.4.A. Relative Standard Error for Net Generation by Fuel Type: Commercial Sector by Census Division and State (Continued)

Table A.4.B. Relative Standard Error for Net Generation by Fuel Type: Commercial Sector by Census Division and State, Year-to-Date

Table A.4.B. Relative Standard Error for Net Generation by Fuel Type: Commercial Sector by Census Division and State, Year-to-Date (Continued)

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

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

Table A.5.B. Relative Standard Error for Net Generation by Fuel Type: Industrial Sector by Census Division and State, Year-to-Date

Table A.5.B. Relative Standard Error for Net Generation by Fuel Type: Industrial Sector by Census Division and State, Year-to-Date (Continued)

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

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

Table A.7.A. Relative Standard Error for Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, Census Division, and State
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
Table A.8.A. Relative Standard Error for Average Price of Electricity to Ultimate Customers by End-Use Sector, Census Division, and State
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
Table B.1. Major Disturbances and Unusual Occurrences, Year-to-Date
Table B.2 Major Disturbances and Unusual Occurrences, Prior Year
Table C.1. Average Heat Content of Fossil-Fuel Receipts
Table C.2. Comparison of Preliminary Monthly Data versus Final Monthly Data at the U.S. Level
Table C.3. Comparison of Annual Monthly Estimates versus Annual Data at the U.S. Level, All Sectors
Table C.4. Unit-of-Measure Equivalents for Electricity

Executive Summary

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

Net Generation and Consumption of Fuels for February														
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	80,008	81,922	-2.3%	59,594	61,029	19,831	20,197	29	32	554	664	0	0
Petroleum Liquids	Utility Scale Facilities	790	780	1.2%	552	609	189	122	9	8	40	41	0	0
Petroleum Coke	Utility Scale Facilities	722	738	-2.1%	564	575	111	106	1	1	46	55	0	0
Natural Gas	Utility Scale Facilities	110,428	96,002	15.0%	53,702	46,841	48,633	41,328	661	635	7,432	7,197	0	0
Other Gas	Utility Scale Facilities	1,015	990	2.4%	22	17	351	309	0	0	641	665	0	0
Nuclear	Utility Scale Facilities	64,715	64,790	-0.1%	34,243	33,941	30,472	30,849	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	22,031	25,533	-13.7%	19,887	23,504	2,045	1,895	NM	23	81	112	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	33,034	34,674	-4.7%	3,924	4,265	26,666	27,858	270	237	2,174	2,314	0	0
... Wind	Utility Scale Facilities	23,047	24,096	-4.4%	3,067	3,422	19,955	20,648	17	16	NM	9	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	3,913	4,113	-4.9%	400	335	3,475	3,737	33	35	5	5	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	3,165	3,379	-6.3%	290	300	784	855	9	6	2,082	2,218	0	0
... Other Biomass	Utility Scale Facilities	1,570	1,761	-10.8%	87	123	1,235	1,377	171	179	78	82	0	0
... Geothermal	Utility Scale Facilities	1,339	1,326	1.0%	81	85	1,218	1,241	41	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-389	-315	23.3%	-310	-226	-79	-89	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	925	1,001	-7.6%	32	40	500	549	72	73	321	339	0	0
All Energy Sources	Utility Scale Facilities	313,278	306,115	2.3%	172,210	170,598	128,719	123,123	1,060	1,008	11,290	11,387	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	2,085	1,762	18.4%	0	0	0	0	688	599	178	154	1,219	1,008
Estimated Total Solar Photovoltaic	All Facilities	5,867	5,684	3.2%	397	332	3,346	3,549	721	635	183	160	1,219	1,008
Estimated Total Solar	All Facilities	5,999	5,875	2.1%	400	335	3,475	3,737	721	635	183	160	1,219	1,008
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	44,982	45,655	-1.5%	33,360	33,933	11,407	11,470	8	9	207	243	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,363	1,369	-0.4%	995	1,090	312	219	14	15	41	44	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	269	275	-2.1%	222	234	35	30	0	0	12	10	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	786,953	717,482	9.7%	398,141	356,680	341,156	314,828	4,138	3,965	43,518	42,008	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	1,122	1,267	-11.4%	207	215	77	139	45	45	792	868	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	187	147	26.8%	8	5	18	10	28	26	133	107	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	60	63	-5.0%	1	1	8	8	1	2	49	53	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	102,027	97,799	4.3%	3,447	3,169	26,437	26,576	8,577	8,610	63,565	59,444	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	46,104	46,922	-1.7%	33,567	34,148	11,484	11,609	53	54	999	1,111	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,550	1,516	2.2%	1,003	1,095	331	229	42	40	175	151	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	329	338	-2.6%	224	235	43	38	1	2	61	63	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	888,980	815,281	9.0%	401,588	359,850	367,594	341,404	12,715	12,575	107,083	101,452	0	0
Fuel Stocks (end-of-month)														
Coal (1000 tons)	Utility Scale Facilities	99,297	121,789	-18.5%	81,099	101,983	17,645	19,035	56	85	497	686	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	26,439	28,871	-8.4%	16,717	18,924	8,242	8,315	358	389	1,123	1,243	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	672	811	-17.1%	497	562	11	127	3	3	162	120	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for February									
	Total U.S. Electric Power Industry								
	Sales of Electricity to Ultimate Customers (million kWh)			Revenue from Sales of Electricity to Ultimate Customers (million dollars)			Average Price of Electricity to Ultimate Customers (cents/kWh)		
Sector	February 2019	February 2018	Percentage Change	February 2019	February 2018	Percentage Change	February 2019	February 2018	Percentage Change
Residential	116,311	113,383	2.6%	14,768	14,353	2.9%	12.70	12.66	0.3%
Commercial	102,690	102,001	0.7%	10,801	10,860	-0.5%	10.52	10.65	-1.2%
Industrial	72,371	71,948	0.6%	4,838	4,899	-1.3%	6.68	6.81	-1.9%
Transportation	677	643	5.3%	68	63	7.1%	10.01	9.84	1.7%
All Sectors	292,049	287,975	1.4%	30,474	30,176	1.0%	10.43	10.48	-0.5%

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

Table ES1.B. Total Electric Power Industry Summary Statistics, Year-to-Date 2019 and 2018

Net Generation and Consumption of Fuels for January through February														
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	181,027	200,861	-9.9%	134,648	149,676	45,141	49,701	64	75	1,174	1,408	0	0
Petroleum Liquids	Utility Scale Facilities	2,106	6,071	-65.3%	1,389	2,969	609	2,927	23	NM	85	124	0	0
Petroleum Coke	Utility Scale Facilities	1,542	1,690	-8.7%	1,198	1,345	241	222	2	2	101	121	0	0
Natural Gas	Utility Scale Facilities	229,362	206,048	11.3%	110,123	102,038	101,842	87,386	1,378	1,308	16,019	15,316	0	0
Other Gas	Utility Scale Facilities	2,009	1,984	1.2%	34	43	716	612	0	0	1,258	1,330	0	0
Nuclear	Utility Scale Facilities	138,416	139,439	-0.7%	74,049	73,307	64,367	66,132	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	46,574	51,129	-8.9%	41,902	47,168	4,458	3,692	38	45	176	224	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	68,591	71,964	-4.7%	8,383	8,970	55,071	57,652	568	491	4,568	4,850	0	0
... Wind	Utility Scale Facilities	48,211	50,958	-5.4%	6,627	7,262	41,532	43,642	35	34	18	19	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	7,565	7,521	0.6%	773	623	6,718	6,824	64	64	10	10	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	6,694	7,138	-6.2%	626	667	1,673	1,804	17	15	4,378	4,652	0	0
... Other Biomass	Utility Scale Facilities	3,325	3,615	-8.0%	187	256	2,607	2,811	369	378	162	168	0	0
... Geothermal	Utility Scale Facilities	2,795	2,733	2.3%	171	162	2,541	2,571	83	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-712	-862	-17.5%	-557	-701	-154	-162	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	2,053	2,116	-2.9%	74	82	1,074	1,129	157	158	750	746	0	0
All Energy Sources	Utility Scale Facilities	670,968	680,439	-1.4%	371,242	384,897	273,365	269,291	2,229	2,132	24,131	24,119	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	4,023	3,377	19.1%	0	0	0	0	1,335	1,146	346	300	2,342	1,930
Estimated Total Solar Photovoltaic	All Facilities	11,346	10,578	7.3%	768	619	6,481	6,509	1,399	1,210	356	310	2,342	1,930
Estimated Total Solar	All Facilities	11,588	10,897	6.3%	773	623	6,718	6,824	1,399	1,210	356	310	2,342	1,930
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	100,751	110,172	-8.6%	74,653	81,640	25,646	27,994	18	21	434	517	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	3,656	10,415	-64.9%	2,549	5,451	984	4,760	37	81	86	123	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	581	624	-6.8%	481	530	74	68	1	1	26	25	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,640,909	1,521,948	7.8%	820,160	776,925	718,432	647,220	8,584	8,117	93,733	89,686	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	2,396	2,671	-10.3%	426	450	211	280	94	103	1,665	1,838	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	564	865	-34.8%	26	54	59	117	74	134	406	560	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	127	136	-6.0%	3	2	16	17	3	3	106	113	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	216,607	206,888	4.7%	7,018	6,747	57,689	55,622	18,104	18,084	133,796	126,436	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	103,147	112,842	-8.6%	75,079	82,089	25,857	28,274	112	124	2,099	2,355	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	4,219	11,280	-62.6%	2,575	5,505	1,043	4,877	111	215	491	683	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	709	759	-6.7%	483	532	90	86	3	4	132	138	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,857,516	1,728,836	7.4%	827,177	783,672	776,121	702,842	26,688	26,201	227,529	216,122	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for January through February									
	Total U.S. Electric Power Industry								
	Sales of Electricity to Ultimate Customers (million kWh)			Revenue from Sales of Electricity to Ultimate Customers (million dollars)			Average Price of Electricity to Ultimate Customers (cents/kWh)		
Sector	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	Percentage Change
Residential	249,300	262,362	-5.0%	31,347	32,606	-3.9%	12.57	12.43	1.1%
Commercial	214,303	216,620	-1.1%	22,285	22,883	-2.6%	10.40	10.56	-1.5%
Industrial	150,404	148,009	1.6%	9,975	10,191	-2.1%	6.63	6.89	-3.8%
Transportation	1,341	1,394	-3.8%	133	134	-1.0%	9.91	9.63	2.9%
All Sectors	615,348	628,383	-2.1%	63,741	65,813	-3.1%	10.36	10.47	-1.1%

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

Table ES2.A. Summary Statistics: Receipts and Cost of Fossil Fuels for the Electric Power Industry by Sector, Physical Units, 2019 and 2018

Total (All Sectors)										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
Coal (1000 tons)	44,418	44,615	39.54	39.43	247	257	96,764	94,890	39.97	39.28
Petroleum Liquids (1000 barrels)	1,380	1,797	80.25	76.84	126	142	2,810	6,745	77.57	80.92
Petroleum Coke (1000 tons)	155	277	65.75	68.09	4	6	347	525	62.09	67.77
Natural Gas (1000 Mcf)	758,901	667,072	3.77	3.72	553	530	1,590,038	1,421,238	3.96	4.51

Electric Utilities										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
Coal (1000 tons)	32,866	33,348	40.93	40.24	170	174	71,079	69,640	41.31	39.92
Petroleum Liquids (1000 barrels)	1,033	1,303	79.78	76.46	77	91	2,040	3,398	77.94	80.77
Petroleum Coke (1000 tons)	155	277	65.75	68.09	4	6	347	525	62.09	67.77
Natural Gas (1000 Mcf)	363,249	320,418	3.94	3.93	284	278	752,731	694,831	4.14	4.67

Independent Power Producers										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
Coal (1000 tons)	10,934	10,603	34.49	36.08	60	66	24,416	23,846	35.36	36.68
Petroleum Liquids (1000 barrels)	314	465	81.50	78.46	40	41	708	3,251	76.00	81.25
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	333,039	288,320	3.60	3.48	221	205	703,504	601,416	3.79	4.51

Commercial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
Coal (1000 tons)	2	1	65.51	66.05	1	1	3	6	65.67	66.45
Petroleum Liquids (1000 barrels)	0	0	--	--	0	0	0	0	--	--
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	745	688	3.50	3.84	3	3	1,496	1,506	3.51	3.79

Industrial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
Coal (1000 tons)	617	662	54.43	52.04	16	16	1,266	1,397	53.07	51.66
Petroleum Liquids (1000 barrels)	33	30	82.99	71.32	9	10	62	95	83.15	76.80
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	61,868	57,646	3.56	3.52	45	44	132,307	123,485	3.74	3.61

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

Table ES2.B. Summary Statistics: Receipts and Cost of Fossil Fuels for the Electric Power Industry by Sector, Btus, 2019 and 2018

Total (All Sectors)										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
Coal	847,217	849,609	2.07	2.07	247	257	1,850,759	1,801,358	2.09	2.07
Petroleum Liquids	8,421	10,931	13.15	12.60	126	142	17,063	40,624	12.78	13.38
Petroleum Coke	4,486	7,769	2.27	2.43	4	6	9,934	14,778	2.17	2.41
Natural Gas	786,645	688,539	3.64	3.61	553	530	1,645,252	1,467,545	3.83	4.36
Fossil Fuels	1,646,770	1,556,848	2.85	2.79	705	690	3,523,008	3,324,306	2.92	3.17

Electric Utilities										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
Coal	628,506	638,278	2.14	2.10	170	174	1,363,702	1,328,505	2.15	2.09
Petroleum Liquids	6,343	8,008	12.99	12.43	77	91	12,443	20,573	12.78	13.33
Petroleum Coke	4,486	7,769	2.27	2.43	4	6	9,934	14,778	2.17	2.41
Natural Gas	377,502	330,518	3.80	3.81	284	278	779,194	716,969	4.00	4.52
Fossil Fuels	1,016,837	984,574	2.82	2.76	387	387	2,165,273	2,080,824	2.88	3.04

Independent Power Producers										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
Coal	205,832	197,472	1.83	1.94	60	66	460,890	443,622	1.87	1.97
Petroleum Liquids	1,879	2,735	13.63	13.30	40	41	4,238	19,456	12.69	13.48
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	344,458	297,893	3.47	3.36	221	205	728,055	621,689	3.66	4.36
Fossil Fuels	552,170	498,101	2.83	2.78	268	254	1,193,183	1,084,768	2.92	3.42

Commercial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
Coal	37	31	2.90	2.92	1	1	65	125	2.90	2.92
Petroleum Liquids	0	0	--	--	0	0	0	0	--	--
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	772	709	3.37	3.72	3	3	1,550	1,553	3.38	3.67
Fossil Fuels	810	740	3.35	3.69	3	3	1,615	1,678	3.37	3.62

Industrial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
Coal	12,842	13,828	2.61	2.49	16	16	26,102	29,106	2.58	2.48
Petroleum Liquids	199	187	13.77	11.38	9	10	382	595	13.56	12.25
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	63,912	59,419	3.45	3.42	45	44	136,453	127,335	3.62	3.50
Fossil Fuels	76,953	73,434	3.34	3.26	47	46	162,937	157,036	3.48	3.34

NM = Not meaningful due to large relative standard error.
W = Withheld to avoid disclosure of individual company data.
Number of Plants represents the number of plants for which receipts data were collected this month.
.... The total number of fossil fuel plants is not the sum of the figures above it because a plant that receives two or more different fuels is only counted once.
Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, synthetic coal, and coal-derived synthesis gas.
Petroleum Liquids include distillate fuel oil, residual fuel oil, jet fuel, kerosene, propane, and waste oil.
Natural Gas includes a small amount of supplemental gaseous fuels that cannot be identified separately.

Chapter 1

Net Generation

Table 1.1. Net Generation by Energy Source: Total (All Sectors), 2009-February 2019
(Thousand Megawatthours)

	Generation at Utility Scale Facilities												Small Scale Generation	Net Generation From Utility and Small Scale Facilities	
Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total Generation at Utility Scale Facilities	Estimated Solar Photovoltaic	Estimated Total Solar Photovoltaic	Estimated Total Solar
Annual Totals															
2009	1,755,904	25,972	12,964	920,979	10,632	798,855	273,445	891	143,388	-4,627	11,928	3,950,331	N/A	N/A	N/A
2010	1,847,290	23,337	13,724	987,697	11,313	806,968	260,203	1,212	165,961	-5,501	12,855	4,125,060	N/A	N/A	N/A
2011	1,733,430	16,086	14,096	1,013,689	11,566	790,204	319,355	1,818	192,163	-6,421	14,154	4,100,141	N/A	N/A	N/A
2012	1,514,043	13,403	9,787	1,225,894	11,898	769,331	276,240	4,327	214,006	-4,950	13,787	4,047,765	N/A	N/A	N/A
2013	1,581,115	13,820	13,344	1,124,836	12,853	789,016	268,565	9,036	244,472	-4,681	13,588	4,065,964	N/A	N/A	N/A
2014	1,581,710	18,276	11,955	1,126,609	12,022	797,166	259,367	17,691	261,522	-6,174	13,461	4,093,606	11,233	26,482	28,924
2015	1,352,398	17,372	10,877	1,333,482	13,117	797,178	249,080	24,893	270,268	-5,091	14,028	4,077,601	14,139	35,805	39,032
2016	1,239,149	13,008	11,197	1,378,307	12,807	805,694	267,812	36,054	305,579	-6,686	13,754	4,076,675	18,812	51,483	54,866
2017	1,205,835	12,414	8,976	1,296,415	12,469	804,950	300,333	53,286	332,991	-6,495	13,094	4,034,268	23,990	74,007	77,276
2018	1,146,393	15,742	8,830	1,468,013	12,191	807,078	291,724	66,604	354,445	-5,905	12,695	4,177,810	29,543	92,555	96,147
Year 2017															
January	115,333	1,121	944	95,473	1,046	73,121	26,788	2,030	26,676	-435	1,093	343,190	1,246	3,186	3,276
February	86,822	874	723	82,694	977	63,560	23,643	2,555	27,317	-508	995	289,652	1,384	3,804	3,939
March	89,365	950	699	95,022	1,060	65,093	29,272	4,245	31,688	-521	1,062	317,935	1,972	5,921	6,218
April	81,335	846	431	88,418	1,001	56,743	29,390	4,696	30,854	-439	1,049	294,325	2,195	6,580	6,891
May	92,777	971	847	98,067	1,055	61,313	32,384	5,663	28,782	-423	1,083	322,518	2,423	7,684	8,086
June	107,508	1,001	901	117,317	992	67,011	30,222	6,175	26,258	-568	1,099	357,916	2,487	8,197	8,662
July	127,697	916	889	146,994	1,048	71,314	26,491	5,753	22,832	-759	1,211	404,386	2,555	7,996	8,308
August	119,488	970	765	141,209	1,134	72,384	21,851	5,434	20,527	-638	1,220	384,342	2,480	7,573	7,914
Sept	98,203	925	712	118,112	1,060	68,098	19,067	5,115	24,142	-606	1,033	335,861	2,225	6,991	7,340
October	89,775	956	572	106,852	999	65,995	18,284	4,821	31,558	-463	1,027	320,376	1,990	6,497	6,811
November	90,986	903	755	94,883	1,001	66,618	20,565	3,409	30,596	-478	1,077	310,315	1,561	4,839	4,970
December	106,546	1,982	737	111,373	1,096	73,700	22,377	3,389	31,762	-656	1,146	353,452	1,472	4,739	4,861
Year 2018															
January	118,939	5,291	952	110,046	994	74,649	25,596	3,407	33,882	-547	1,115	374,324	1,615	4,894	5,022
February	81,922	780	738	96,002	990	64,790	25,533	4,113	30,561	-315	1,001	306,115	1,762	5,684	5,875
March	80,612	811	648	104,933	1,064	67,033	25,951	5,203	34,103	-490	1,113	320,982	2,427	7,373	7,630
April	73,383	854	691	99,446	940	59,133	27,490	6,249	32,891	-377	1,038	301,739	2,736	8,670	8,984
May	85,311	1,022	415	116,107	1,000	67,320	30,434	7,070	30,331	-390	1,074	339,694	3,010	9,650	10,080
June	101,509	1,062	765	130,823	1,010	69,688	27,955	7,804	31,106	-433	1,111	372,398	3,060	10,347	10,863
July	115,477	970	922	167,250	1,105	72,456	24,014	6,938	22,937	-644	1,116	412,542	3,147	9,705	10,085
August	115,216	1,041	873	162,377	1,225	72,282	21,400	6,981	26,326	-747	1,007	407,981	3,018	9,590	9,999
Sept	96,742	1,039	835	142,772	1,001	64,725	18,665	6,469	24,283	-603	800	356,728	2,681	8,720	9,150
October	87,452	989	484	124,171	930	59,397	18,781	5,223	27,536	-492	1,091	325,563	2,400	7,349	7,624
November	93,005	952	699	107,109	933	63,948	22,176	3,958	28,890	-343	1,081	322,409	1,914	5,705	5,873
December	96,825	930	807	106,978	998	71,657	23,728	3,188	31,599	-522	1,147	337,334	1,774	4,870	4,962
Year 2019															
January	101,019	1,316	820	118,935	994	73,701	24,544	3,652	31,905	-323	1,129	357,690	1,938	5,479	5,590
February	80,008	790	722	110,428	1,015	64,715	22,031	3,913	29,121	-389	925	313,278	2,085	5,867	5,999
Year to Date															
2017	202,155	1,995	1,667	178,168	2,022	136,681	50,431	4,585	53,993	-943	2,088	632,842	2,630	6,990	7,215
2018	200,861	6,071	1,690	206,048	1,984	139,439	51,129	7,521	64,443	-862	2,116	680,439	3,377	10,578	10,897
2019	181,027	2,106	1,542	229,362	2,009	138,416	46,574	7,565	61,025	-712	2,053	670,968	4,023	11,346	11,588
Rolling 12 Months Ending in February															
2018	1,204,541	16,490	8,999	1,324,295	12,431	807,708	301,031	56,222	343,441	-6,414	13,122	4,081,866	24,737	77,596	80,958
2019	1,126,559	11,777	8,682	1,491,327	12,215	806,054	287,169	66,648	351,028	-5,754	12,633	4,168,338	30,190	93,324	96,838

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.
See the Technical Notes for fuel conversion factors.
Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.
Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.
Estimated small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.1.A. Net Generation from Renewable Sources: Total (All Sectors), 2009-February 2019
(Thousand Megawatthours)

	Generation at Utility Scale Facilities										Small Scale Generation	Generation From Utility and Small Scale Facilities	
Period	Wind	Solar Photovoltaic	Solar Thermal	Wood and Wood-Derived Fuels	Landfill Gas	Biogenic Municipal Solid Waste	Other Waste Biomass	Geothermal	Conventional Hydroelectric	Total Renewable Generation at Utility Scale Facilities	Estimated Solar Photovoltaic	Estimated Total Solar Photovoltaic	Estimated Total Solar
Annual Totals													
2009	73,886	157	735	36,050	7,924	8,058	2,461	15,009	273,445	417,724	N/A	N/A	N/A
2010	94,652	423	789	37,172	8,377	7,927	2,613	15,219	260,203	427,376	N/A	N/A	N/A
2011	120,177	1,012	806	37,449	9,044	7,354	2,824	15,316	319,355	513,336	N/A	N/A	N/A
2012	140,822	3,451	876	37,799	9,803	7,320	2,700	15,562	276,240	494,573	N/A	N/A	N/A
2013	167,840	8,121	915	40,028	10,658	7,186	2,986	15,775	268,565	522,073	N/A	N/A	N/A
2014	181,655	15,250	2,441	42,340	11,220	7,228	3,202	15,877	259,367	538,579	11,233	26,482	28,924
2015	190,719	21,666	3,227	41,929	11,291	7,211	3,201	15,918	249,080	544,241	14,139	35,805	39,032
2016	226,993	32,670	3,384	40,947	11,218	7,265	3,331	15,826	267,812	609,445	18,812	51,483	54,866
2017	254,303	50,017	3,269	41,152	11,543	6,951	3,115	15,927	300,333	686,610	23,990	74,007	77,276
2018	274,952	63,012	3,592	41,411	11,336	7,163	2,854	16,728	291,724	712,773	29,543	92,555	96,147
Year 2017													
January	19,840	1,940	90	3,505	1,050	617	280	1,383	26,788	55,494	1,246	3,186	3,276
February	21,198	2,419	136	3,186	910	528	256	1,239	23,643	53,515	1,384	3,804	3,939
March	24,993	3,949	297	3,457	1,007	557	290	1,385	29,272	65,205	1,972	5,921	6,218
April	24,613	4,385	310	3,149	956	544	254	1,337	29,390	64,939	2,195	6,580	6,891
May	22,450	5,261	402	3,189	989	604	267	1,283	32,384	66,829	2,423	7,684	8,086
June	19,809	5,710	465	3,439	956	588	251	1,214	30,222	62,655	2,487	8,197	8,662
July	15,960	5,442	311	3,703	948	604	261	1,355	26,491	55,077	2,555	7,996	8,308
August	13,621	5,093	341	3,753	945	617	246	1,345	21,851	47,812	2,480	7,573	7,914
Sept	17,855	4,766	349	3,294	914	558	224	1,297	19,067	48,325	2,225	6,991	7,340
October	25,306	4,507	314	3,306	921	558	238	1,229	18,284	54,663	1,990	6,497	6,811
November	24,082	3,278	131	3,430	951	571	272	1,289	20,565	54,569	1,561	4,839	4,970
December	24,575	3,267	123	3,738	995	606	276	1,571	22,377	57,528	1,472	4,739	4,861
Year 2018													
January	26,862	3,279	128	3,759	989	590	275	1,407	25,596	62,885	1,615	4,894	5,022
February	24,096	3,922	191	3,379	941	561	259	1,326	25,533	60,208	1,762	5,684	5,875
March	27,283	4,945	258	3,535	999	599	272	1,414	25,951	65,257	2,427	7,373	7,630
April	26,783	5,935	314	3,096	941	570	256	1,246	27,490	66,630	2,736	8,670	8,984
May	23,603	6,640	430	3,550	932	574	238	1,434	30,434	67,835	3,010	9,650	10,080
June	24,376	7,287	517	3,573	927	630	230	1,369	27,955	66,864	3,060	10,347	10,863
July	16,014	6,558	380	3,690	945	640	212	1,436	24,014	53,890	3,147	9,705	10,085
August	19,530	6,572	409	3,570	951	632	214	1,429	21,400	54,707	3,018	9,590	9,999
Sept	17,977	6,039	430	3,284	880	563	191	1,388	18,665	49,417	2,681	8,720	9,150
October	21,147	4,949	275	3,277	929	597	240	1,347	18,781	51,541	2,400	7,349	7,624
November	22,457	3,790	168	3,284	936	588	227	1,397	22,176	55,024	1,914	5,705	5,873
December	24,825	3,096	92	3,414	967	619	239	1,535	23,728	58,515	1,774	4,870	4,962
Year 2019													
January	25,165	3,541	111	3,529	928	600	226	1,456	24,544	60,100	1,938	5,479	5,590
February	23,047	3,782	131	3,165	844	526	201	1,339	22,031	55,065	2,085	5,867	5,999
Year to Date													
2017	41,038	4,360	226	6,692	1,960	1,145	536	2,621	50,431	109,009	2,630	6,990	7,215
2018	50,958	7,201	319	7,138	1,930	1,151	534	2,733	51,129	123,093	3,377	10,578	10,897
2019	48,211	7,323	242	6,694	1,772	1,126	427	2,795	46,574	115,165	4,023	11,346	11,588
Rolling 12 Months Ending in February													
2018	264,222	52,859	3,363	41,598	11,513	6,957	3,113	16,038	301,031	700,694	24,737	77,596	80,958
2019	272,205	63,134	3,514	40,968	11,179	7,139	2,747	16,790	287,169	704,845	30,190	93,324	96,838

Wood and Wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.
Other Waste Biomass includes sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases).
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms..
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.
Estimated small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.2.A. Net Generation by Energy Source: Electric Utilities, 2009-February 2019
(Thousand Megawatthours)

	Generation at Utility Scale Facilities											
Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total
Annual Totals												
2009	1,322,092	18,035	7,182	349,166	96	417,275	247,198	28	14,589	-3,369	483	2,372,776
2010	1,378,028	17,258	8,807	392,616	52	424,843	236,104	101	17,826	-4,466	462	2,471,632
2011	1,301,107	11,688	9,428	414,843	29	415,298	291,413	216	21,717	-5,492	604	2,460,851
2012	1,146,480	9,892	5,664	504,958	0	394,823	252,936	639	27,378	-4,202	603	2,339,172
2013	1,188,452	9,446	9,522	501,427	798	406,114	243,040	943	31,474	-3,773	615	2,388,058
2014	1,173,073	10,696	9,147	501,414	112	419,871	238,185	1,218	33,278	-5,144	622	2,382,473
2015	998,385	10,386	8,278	617,817	199	416,680	229,640	1,494	35,992	-4,105	558	2,315,323
2016	922,399	9,069	8,881	654,780	154	424,400	247,787	1,995	40,666	-5,629	421	2,304,923
2017	893,639	8,567	6,711	623,835	149	424,485	275,677	3,348	42,763	-5,448	551	2,274,277
2018	860,325	9,805	6,817	714,303	151	424,251	265,480	5,252	43,026	-4,785	587	2,325,212
Year 2017												
January	85,985	810	743	45,702	13	38,425	24,717	136	3,161	-346	44	199,391
February	64,844	632	540	39,534	17	33,911	21,619	178	3,541	-418	39	164,437
March	65,992	755	535	46,397	16	34,693	26,768	260	4,241	-455	43	179,245
April	58,913	631	260	43,444	18	30,217	26,683	288	4,020	-368	46	164,153
May	69,099	710	654	48,524	5	31,728	29,577	328	3,467	-350	38	183,781
June	81,297	714	698	56,453	10	35,022	27,897	338	3,298	-474	45	205,299
July	96,782	648	673	71,107	19	37,874	24,333	324	2,639	-646	53	233,807
August	90,517	698	540	67,671	2	38,667	20,124	318	2,304	-531	55	220,364
Sept	71,859	661	523	56,393	0	35,496	17,749	304	2,946	-522	49	185,458
October	66,498	721	405	50,140	9	35,038	16,950	291	4,543	-388	44	174,251
November	64,983	633	583	45,117	15	34,541	18,529	279	4,235	-394	45	168,569
December	76,870	953	556	53,353	24	38,871	20,729	304	4,369	-557	50	195,521
Year 2018												
January	88,647	2,359	770	55,197	26	39,366	23,664	288	4,417	-475	42	214,299
February	61,029	609	575	46,841	17	33,941	23,504	335	3,931	-226	40	170,598
March	58,552	585	491	50,592	16	35,262	23,793	453	4,181	-408	49	173,565
April	55,319	619	477	48,319	28	30,580	25,150	500	3,869	-295	42	164,609
May	64,011	730	336	58,571	11	34,479	28,051	490	3,350	-309	47	189,767
June	77,886	747	670	65,945	13	36,437	25,826	565	3,510	-339	52	211,313
July	88,147	652	716	82,694	15	38,293	21,964	512	2,721	-522	57	235,250
August	87,383	700	686	78,287	24	38,885	19,240	521	2,972	-626	58	228,131
Sept	73,136	763	639	68,926	3	34,377	16,649	496	3,052	-500	50	197,592
October	65,038	733	378	59,631	0	31,364	16,703	450	3,411	-405	46	177,349
November	69,011	673	477	50,518	0	33,043	19,806	342	3,552	-254	52	177,220
December	72,165	633	601	48,783	0	38,223	21,130	300	4,059	-426	51	185,519
Year 2019												
January	75,053	837	634	56,421	12	39,806	22,016	373	4,087	-247	41	199,033
February	59,594	552	564	53,702	22	34,243	19,887	400	3,524	-310	32	172,210
Year to Date												
2017	150,829	1,442	1,282	85,236	31	72,336	46,336	314	6,702	-763	83	363,828
2018	149,676	2,969	1,345	102,038	43	73,307	47,168	623	8,348	-701	82	384,897
2019	134,648	1,389	1,198	110,123	34	74,049	41,902	773	7,610	-557	74	371,242
Rolling 12 Months Ending in February												
2018	892,487	10,094	6,774	640,636	161	425,456	276,509	3,656	44,409	-5,385	550	2,295,346
2019	845,296	8,225	6,670	722,389	142	424,993	260,214	5,402	42,288	-4,642	578	2,311,557

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.
See the Technical Notes for fuel conversion factors.
Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.
Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Table 1.2.B Net Generation by Energy Source: Independent Power Producers, 2009-February 2019
(Thousand Megawatthours)

	Generation at Utility Scale Facilities											
Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total
Annual Totals												
2009	419,031	6,306	4,288	491,839	2,962	381,579	24,308	863	100,997	-1,259	6,146	1,437,061
2010	449,709	5,117	3,497	508,774	2,915	382,126	22,351	1,105	119,851	-1,035	6,345	1,500,754
2011	416,783	3,655	3,431	511,447	2,911	374,906	26,117	1,511	140,442	-928	7,059	1,487,335
2012	354,076	2,757	1,758	627,833	2,984	374,509	20,923	3,525	156,539	-748	7,030	1,551,186
2013	379,270	3,761	1,780	527,522	3,524	382,902	22,018	7,782	181,263	-908	6,742	1,515,657
2014	395,701	6,789	1,410	531,758	3,246	377,295	19,861	16,086	196,723	-1,030	6,690	1,554,530
2015	342,608	6,240	1,601	619,839	3,517	380,498	17,996	22,962	202,858	-987	6,838	1,603,971
2016	307,263	3,360	1,401	624,600	3,758	381,294	18,539	33,502	233,553	-1,057	6,941	1,613,156
2017	304,198	3,281	1,480	572,919	3,978	380,465	23,034	49,375	258,962	-1,047	6,527	1,603,173
2018	278,210	5,263	1,263	651,354	3,847	382,827	24,600	60,629	279,760	-1,119	6,406	1,693,041
Year 2017												
January	28,587	254	139	41,183	336	34,695	1,918	1,876	20,878	-90	583	130,360
February	21,314	197	123	35,510	291	29,650	1,894	2,348	21,360	-90	514	113,110
March	22,696	147	81	40,458	342	30,400	2,358	3,941	24,871	-66	523	125,751
April	21,829	174	113	37,135	282	26,526	2,538	4,358	24,347	-71	507	117,739
May	23,043	220	136	41,497	345	29,585	2,628	5,277	22,777	-73	548	125,981
June	25,528	249	132	52,380	313	31,988	2,185	5,772	20,315	-93	549	139,318
July	30,237	227	138	66,734	350	33,440	2,030	5,366	17,417	-114	572	156,397
August	28,293	231	140	64,705	358	33,717	1,617	5,056	15,432	-107	580	150,023
Sept	25,701	223	136	53,827	346	32,602	1,228	4,755	18,701	-84	508	137,942
October	22,616	191	110	48,686	318	30,957	1,221	4,480	24,488	-75	518	133,509
November	25,364	215	111	41,702	337	32,077	1,891	3,093	23,772	-84	539	129,016
December	28,990	951	122	49,104	359	34,828	1,526	3,054	24,605	-99	586	144,026
Year 2018												
January	29,504	2,805	116	46,057	303	35,283	1,798	3,087	26,708	-72	580	146,169
February	20,197	122	106	41,328	309	30,849	1,895	3,737	24,120	-89	549	123,123
March	21,359	177	100	46,383	330	31,770	2,012	4,698	27,241	-82	570	134,557
April	17,451	191	154	43,137	306	28,553	2,196	5,683	26,495	-82	535	124,619
May	20,649	244	23	49,389	349	32,841	2,232	6,506	24,259	-81	532	136,942
June	22,987	263	NM	56,379	317	33,251	1,992	7,147	24,944	-95	589	147,792
July	26,663	256	135	75,464	348	34,163	1,918	6,349	17,456	-123	593	163,223
August	27,171	293	124	74,840	369	33,398	2,037	6,378	20,663	-121	442	165,593
Sept	22,985	229	125	65,221	315	30,348	1,899	5,897	18,730	-103	311	145,957
October	21,843	212	43	56,160	259	28,033	1,950	4,715	21,578	-87	564	135,269
November	23,396	228	177	47,778	299	30,904	2,226	3,576	22,763	-88	559	131,818
December	24,007	244	142	49,219	342	33,434	2,446	2,856	24,804	-96	582	137,979
Year 2019												
January	25,311	420	129	53,209	365	33,895	2,413	3,244	25,162	-76	574	144,646
February	19,831	189	111	48,633	351	30,472	2,045	3,475	23,191	-79	500	128,719
Year to Date												
2017	49,901	451	262	76,693	627	64,345	3,812	4,224	42,238	-180	1,097	243,471
2018	49,701	2,927	222	87,386	612	66,132	3,692	6,824	50,828	-162	1,129	269,291
2019	45,141	609	241	101,842	716	64,367	4,458	6,718	48,353	-154	1,074	273,365
Rolling 12 Months Ending in February												
2018	303,999	5,757	1,440	583,612	3,963	382,252	22,914	51,976	267,552	-1,028	6,559	1,628,994
2019	273,651	2,946	NM	665,811	3,951	381,062	25,366	60,524	277,286	-1,112	6,351	1,697,115

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.
See the Technical Notes for fuel conversion factors.
Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.
Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Table 1.2.C. Net Generation by Energy Source: Commercial Sector, 2009-February 2019
(Thousand Megawatthours)

	Generation at Utility Scale Facilities												Small Scale Generation	Net Generation From Utility and Small Scale Facilities	
Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total Generation at Utility Scale Facilities	Estimated Solar Photovoltaic	Estimated Total Solar Photovoltaic	Estimated Total Solar
Annual Totals															
2009	1,096	157	5	4,225	0	0	71	0	1,769	0	842	8,165	N/A	N/A	N/A
2010	1,111	117	7	4,725	3	0	80	5	1,709	0	834	8,592	N/A	N/A	N/A
2011	1,049	86	3	5,487	3	0	26	84	2,392	0	950	10,080	N/A	N/A	N/A
2012	883	191	6	6,603	0	0	28	148	2,397	0	1,046	11,301	N/A	N/A	N/A
2013	839	118	5	7,154	0	0	44	294	2,662	0	1,118	12,234	N/A	N/A	N/A
2014	595	247	9	7,227	0	0	38	371	2,862	0	1,171	12,520	5,146	5,516	5,516
2015	509	183	8	7,471	0	0	35	416	2,803	0	1,170	12,595	5,689	6,106	6,106
2016	383	77	6	7,730	0	0	217	529	2,697	0	1,068	12,706	6,158	6,687	6,687
2017	329	103	8	8,042	0	0	240	521	2,729	0	1,088	13,060	7,685	8,206	8,206
2018	327	147	7	8,343	0	0	240	629	2,605	0	1,020	13,318	9,756	10,386	10,386
Year 2017															
January	41	13	1	681	0	0	27	17	232	0	84	1,098	420	438	438
February	32	8	1	597	0	0	15	27	206	0	78	963	458	485	485
March	33	9	1	652	0	0	15	42	233	0	86	1,071	629	671	671
April	20	5	0	574	0	0	23	46	222	0	87	976	699	745	745
May	19	7	0	619	0	0	24	53	245	0	101	1,069	770	823	823
June	21	5	0	718	0	0	15	61	225	0	89	1,135	777	838	838
July	25	7	0	786	0	0	14	58	237	0	99	1,227	808	866	866
August	23	8	1	766	0	0	17	55	231	0	100	1,202	788	843	843
Sept	27	6	1	701	0	0	14	52	216	0	90	1,107	709	761	761
October	24	6	1	661	0	0	29	47	217	0	94	1,079	632	679	679
November	29	7	1	611	0	0	23	34	228	0	88	1,020	502	536	536
December	35	23	1	674	0	0	23	29	238	0	91	1,114	492	521	521
Year 2018															
January	44	NM	1	673	0	0	23	28	226	0	85	1,124	547	575	575
February	32	8	1	635	0	0	23	35	202	0	73	1,008	599	635	635
March	26	8	1	651	0	0	NM	45	224	0	84	1,063	813	858	858
April	22	9	0	634	0	0	25	57	210	0	82	1,040	900	957	957
May	19	9	0	644	0	0	NM	65	216	0	91	1,070	986	1,052	1,052
June	21	8	0	706	0	0	NM	81	217	0	92	1,148	999	1,080	1,080
July	25	12	0	821	0	0	NM	68	214	0	91	1,251	1,032	1,100	1,100
August	30	10	0	831	0	0	NM	70	219	0	91	1,269	989	1,059	1,059
Sept	29	8	1	749	0	0	14	66	200	0	80	1,148	890	957	957
October	24	8	1	673	0	0	NM	50	217	0	84	1,070	786	836	836
November	27	12	1	641	0	0	NM	34	204	0	78	1,014	624	659	659
December	29	10	1	685	0	0	17	28	255	0	89	1,114	591	618	618
Year 2019															
January	35	14	1	717	0	0	NM	31	267	0	85	1,169	647	678	678
February	29	9	1	661	0	0	NM	33	237	0	72	1,060	688	721	721
Year to Date															
2017	72	21	2	1,279	0	0	42	44	438	0	162	2,060	878	922	922
2018	75	NM	2	1,308	0	0	45	64	428	0	158	2,132	1,146	1,210	1,210
2019	64	23	2	1,378	0	0	38	64	504	0	157	2,229	1,335	1,399	1,399
Rolling 12 Months Ending in February															
2018	331	NM	9	8,071	0	0	242	541	2,719	0	1,084	13,132	7,952	8,493	8,493
2019	315	118	7	8,413	0	0	NM	630	2,681	0	1,018	13,415	9,945	10,575	10,575

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.
See the Technical Notes for fuel conversion factors.
Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.
Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.
Estimated small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.2.D. Net Generation by Energy Source: Industrial Sector, 2009-February 2019
(Thousand Megawatthours)

	Generation at Utility Scale Facilities												Small Scale Generation	Net Generation From Utility and Small Scale Facilities	
Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total Generation at Utility Scale Facilities	Estimated Solar Photovoltaic	Estimated Total Solar Photovoltaic	Estimated Total Solar
Annual Totals															
2009	13,686	1,474	1,489	75,748	7,574	0	1,868	0	26,033	0	4,457	132,329	N/A	N/A	N/A
2010	18,441	844	1,414	81,583	8,343	0	1,668	2	26,574	0	5,214	144,082	N/A	N/A	N/A
2011	14,490	657	1,234	81,911	8,624	0	1,799	7	27,612	0	5,541	141,875	N/A	N/A	N/A
2012	12,603	563	2,359	86,500	8,913	0	2,353	14	27,693	0	5,108	146,107	N/A	N/A	N/A
2013	12,554	495	2,036	88,733	8,531	0	3,463	17	29,074	0	5,113	150,015	N/A	N/A	N/A
2014	12,341	544	1,389	86,209	8,664	0	1,282	16	28,659	0	4,978	144,083	1,139	1,156	1,156
2015	10,896	563	990	88,355	9,401	0	1,410	21	28,614	0	5,462	145,712	1,451	1,472	1,472
2016	9,103	503	909	91,197	8,895	0	1,269	27	28,663	0	5,324	145,890	2,060	2,087	2,087
2017	7,669	463	776	91,619	8,343	0	1,383	42	28,536	0	4,928	143,758	2,364	2,406	2,406
2018	7,531	527	743	94,012	8,193	0	1,403	92	29,055	0	4,682	146,239	2,641	2,733	2,733
Year 2017															
January	720	43	61	7,907	696	0	126	1	2,405	0	382	12,341	123	124	124
February	632	38	60	7,052	668	0	115	2	2,209	0	364	11,142	137	139	139
March	644	38	82	7,515	702	0	131	3	2,342	0	411	11,868	197	200	200
April	573	35	58	7,266	701	0	146	4	2,265	0	410	11,457	213	217	217
May	616	34	57	7,428	704	0	155	4	2,293	0	396	11,686	239	242	242
June	662	33	71	7,765	668	0	124	5	2,420	0	416	12,164	241	246	246
July	653	34	78	8,367	679	0	115	5	2,540	0	486	12,956	252	257	257
August	655	33	83	8,067	774	0	93	5	2,560	0	484	12,754	246	251	251
Sept	615	34	52	7,191	715	0	75	4	2,281	0	386	11,354	223	227	227
October	637	38	56	7,366	673	0	84	4	2,310	0	370	11,537	201	204	204
November	610	47	61	7,453	649	0	121	3	2,361	0	405	11,710	156	158	158
December	651	55	58	8,242	713	0	99	3	2,550	0	419	12,790	138	141	141
Year 2018															
January	744	82	66	8,119	665	0	112	4	2,531	0	408	12,732	146	150	150
February	664	41	55	7,197	665	0	112	5	2,309	0	339	11,387	154	160	160
March	676	41	56	7,307	718	0	122	7	2,457	0	410	11,796	220	227	227
April	591	35	59	7,356	607	0	119	8	2,316	0	379	11,471	240	248	248
May	632	40	55	7,503	640	0	125	9	2,507	0	405	11,915	266	275	275
June	615	43	77	7,793	680	0	114	11	2,435	0	376	12,144	267	278	278
July	641	50	71	8,271	742	0	113	9	2,546	0	376	12,819	276	286	286
August	633	37	63	8,419	832	0	106	11	2,472	0	416	12,989	268	278	278
Sept	592	38	70	7,876	682	0	103	10	2,301	0	359	12,031	245	255	255
October	547	37	63	7,707	671	0	115	8	2,331	0	397	11,876	223	231	231
November	572	39	44	8,172	634	0	127	6	2,370	0	391	12,357	176	182	182
December	623	43	63	8,292	656	0	135	4	2,480	0	426	12,723	159	163	163
Year 2019															
January	620	45	56	8,587	617	0	95	5	2,389	0	429	12,842	168	173	173
February	554	40	46	7,432	641	0	81	5	2,169	0	321	11,290	178	183	183
Year to Date															
2017	1,353	81	121	14,959	1,365	0	241	3	4,614	0	746	23,483	259	263	263
2018	1,408	124	121	15,316	1,330	0	224	10	4,840	0	746	24,119	300	310	310
2019	1,174	85	101	16,019	1,258	0	176	10	4,558	0	750	24,131	346	356	356
Rolling 12 Months Ending in February															
2018	7,724	506	776	91,976	8,308	0	1,366	49	28,762	0	4,928	144,394	2,405	2,454	2,454
2019	7,297	488	723	94,715	8,122	0	1,356	93	28,773	0	4,685	146,251	2,687	2,779	2,779

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.
See the Technical Notes for fuel conversion factors.
Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.
Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.
Estimated small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.2.E. Net Generation by Energy Source: Residential Sector, 2014-February 2019 (Thousand Megawatthours)

	Small Scale Generation
Period	**Estimated Small Scale Solar Photovoltaic Generation**
Annual Totals	
2014	4,947
2015	6,999
2016	10,595
2017	13,942
2018	17,146
Year 2017	
January	703
February	789
March	1,147
April	1,283
May	1,415
June	1,469
July	1,495
August	1,446
Sept	1,293
October	1,157
November	904
December	841
Year 2018	
January	922
February	1,008
March	1,394
April	1,596
May	1,758
June	1,793
July	1,839
August	1,762
Sept	1,545
October	1,391
November	1,114
December	1,025
Year 2019	
January	1,122
February	1,219
Year to Date	
2017	1,492
2018	1,930
2019	2,342
Rolling 12 Months Ending in February	
2018	14,380
2019	17,558

See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources:
Estimated small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.3.A. Utility Scale Facility Net Generation by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	7,971	7,929	0.5%	202	260	7,452	7,334	105	102	212	232
Connecticut	3,039	2,851	6.6%	7	8	2,948	2,767	34	31	49	45
Maine	883	843	4.8%	0	0	744	673	12	17	127	152
Massachusetts	2,193	2,342	-6.4%	38	29	2,085	2,248	48	42	22	23
New Hampshire	1,264	1,267	-0.2%	75	139	1,181	1,119	7	6	2	2
Rhode Island	396	432	-8.5%	0	0	379	417	4	4	13	11
Vermont	196	194	1.3%	82	84	114	110	0	0	0	0
Middle Atlantic	34,260	31,483	8.8%	2,661	2,559	31,063	28,393	174	176	362	355
New Jersey	5,645	5,787	-2.5%	4	5	5,546	5,676	38	49	56	57
New York	10,309	9,245	11.5%	2,643	2,544	7,490	6,532	102	97	75	73
Pennsylvania	18,306	16,451	11.3%	14	11	18,027	16,186	34	30	231	225
East North Central	47,653	47,055	1.3%	18,037	18,518	28,567	27,530	155	160	893	847
Illinois	14,476	14,481	0.0%	397	373	13,795	13,828	40	39	245	241
Indiana	8,272	7,594	8.9%	5,694	5,520	2,240	1,773	17	22	321	278
Michigan	9,646	9,555	1.0%	6,593	6,627	2,856	2,732	67	66	131	130
Ohio	9,945	9,933	0.1%	1,144	1,632	8,720	8,229	19	21	63	52
Wisconsin	5,313	5,492	-3.3%	4,210	4,366	957	968	12	12	135	146
West North Central	28,677	28,597	0.3%	23,358	22,969	4,952	5,224	52	49	315	355
Iowa	5,411	5,022	7.8%	4,170	3,720	1,075	1,122	18	19	149	161
Kansas	4,544	4,219	7.7%	3,118	2,772	1,414	1,444	NM	NM	11	NM
Minnesota	4,808	4,995	-3.7%	3,797	3,787	889	1,054	17	16	105	139
Missouri	6,749	6,896	-2.1%	6,348	6,491	384	389	14	11	3	5
Nebraska	2,992	2,939	1.8%	2,460	2,466	498	436	2	1	33	35
North Dakota	3,275	3,489	-6.1%	2,731	2,873	529	603	0	0	14	NM
South Dakota	898	1,036	-13.4%	735	860	163	176	NM	NM	0	0
South Atlantic	57,389	56,626	1.3%	47,666	46,810	8,162	8,228	131	107	1,429	1,481
Delaware	302	395	-23.8%	NM	NM	200	331	0	1	101	63
District of Columbia	7	8	-11.1%	0	0	NM	0	6	8	0	0
Florida	16,442	16,534	-0.6%	15,310	15,339	742	794	5	5	385	396
Georgia	8,121	8,332	-2.5%	6,787	6,990	958	923	NM	NM	377	418
Maryland	2,832	2,644	7.1%	469	208	2,268	2,363	73	47	21	26
North Carolina	9,069	8,935	1.5%	7,673	7,792	1,229	969	22	22	145	152
South Carolina	7,650	7,078	8.1%	7,137	6,791	365	127	0	0	147	159
Virginia	8,164	7,429	9.9%	6,582	5,681	1,386	1,539	24	24	172	185
West Virginia	4,803	5,271	-8.9%	3,708	4,007	1,014	1,183	0	0	81	82
East South Central	26,718	25,862	3.3%	23,059	22,418	2,933	2,713	17	19	709	712
Alabama	10,835	9,791	10.7%	8,001	7,258	2,476	2,177	0	0	357	356
Kentucky	5,595	5,355	4.5%	5,520	5,298	28	9	0	0	47	48
Mississippi	4,358	4,655	-6.4%	3,812	4,010	407	505	0	2	139	138
Tennessee	5,929	6,060	-2.2%	5,725	5,853	23	22	17	17	165	169
West South Central	51,170	51,294	-0.2%	16,449	16,555	28,703	28,745	86	73	5,931	5,921
Arkansas	4,954	4,849	2.2%	4,253	4,166	551	534	NM	NM	147	146
Louisiana	6,594	7,208	-8.5%	3,436	4,243	582	551	12	13	2,563	2,401
Oklahoma	6,103	6,124	-0.3%	2,989	2,585	3,045	3,467	0	0	69	72
Texas	33,519	33,114	1.2%	5,771	5,561	24,525	24,193	70	57	3,152	3,303
Mountain	30,175	26,595	13.5%	23,689	20,505	6,172	5,795	83	42	231	253
Arizona	8,472	7,312	15.9%	7,676	6,778	785	523	12	11	0	0
Colorado	4,647	4,295	8.2%	3,595	3,249	1,043	1,039	NM	NM	6	6
Idaho	1,344	1,552	-13.4%	874	1,033	419	466	4	4	47	49
Montana	2,335	2,531	-7.7%	805	1,136	1,528	1,392	0	0	3	3
Nevada	2,951	2,636	11.9%	1,996	1,738	874	866	50	9	31	24
New Mexico	2,994	1,831	63.5%	1,982	864	1,004	958	NM	9	0	0
Utah	3,543	2,750	28.8%	3,220	2,431	273	266	8	7	42	46
Wyoming	3,889	3,687	5.5%	3,540	3,275	247	286	0	0	102	126
Pacific Contiguous	28,037	29,403	-4.6%	16,242	19,096	10,418	8,881	201	228	1,177	1,198
California	14,677	12,890	13.9%	5,649	4,772	7,812	6,871	193	219	1,023	1,028
Oregon	5,233	5,805	-9.8%	3,763	4,489	1,413	1,257	6	6	51	53
Washington	8,127	10,708	-24.1%	6,830	9,835	1,192	753	2	3	102	117
Pacific Noncontiguous	1,229	1,272	-3.3%	847	907	297	279	55	54	31	32
Alaska	539	535	0.8%	485	474	19	NM	26	33	10	9
Hawaii	690	737	-6.3%	362	433	278	261	29	20	21	23
U.S. Total	313,278	306,115	2.3%	172,210	170,598	128,719	123,123	1,060	1,008	11,290	11,387

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

Table 1.3.B. Utility Scale Facility Net Generation

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	17,138	17,676	-3.0%	543	851	15,934	16,117	216	212	445	497
Connecticut	6,474	6,322	2.4%	17	15	6,289	6,157	69	61	99	90
Maine	1,871	1,930	-3.1%	0	0	1,574	1,561	27	34	270	335
Massachusetts	4,643	5,087	-8.7%	87	143	4,411	4,803	98	94	46	47
New Hampshire	2,876	3,010	-4.4%	259	515	2,599	2,476	14	13	5	5
Rhode Island	843	933	-9.7%	0	0	809	904	8	9	25	21
Vermont	431	395	9.3%	180	179	250	215	1	1	0	0
Middle Atlantic	73,022	68,481	6.6%	5,691	5,762	66,213	61,627	368	374	750	717
New Jersey	11,689	11,663	0.2%	16	13	11,467	11,423	84	104	122	123
New York	21,882	21,150	3.5%	5,647	5,728	15,866	15,078	213	198	156	145
Pennsylvania	39,452	35,668	10.6%	29	21	38,880	35,127	71	72	472	449
East North Central	102,381	105,308	-2.8%	38,657	42,659	61,538	60,534	324	333	1,862	1,783
Illinois	31,725	32,158	-1.3%	839	848	30,294	30,739	85	82	507	489
Indiana	18,133	18,718	-3.1%	12,698	14,306	4,740	3,766	37	43	659	603
Michigan	20,110	20,693	-2.8%	13,855	14,428	5,837	5,853	139	143	279	268
Ohio	21,262	22,037	-3.5%	2,460	3,779	18,636	18,109	39	39	127	110
Wisconsin	11,152	11,702	-4.7%	8,804	9,297	2,032	2,067	24	25	292	313
West North Central	60,584	62,137	-2.5%	49,150	49,937	10,638	11,335	107	107	689	758
Iowa	11,341	10,887	4.2%	8,658	8,084	2,307	2,432	38	39	338	331
Kansas	9,017	9,165	-1.6%	5,988	6,050	3,004	3,087	NM	NM	23	26
Minnesota	10,226	10,903	-6.2%	8,046	8,323	1,926	2,255	35	36	219	288
Missouri	14,678	15,059	-2.5%	13,825	14,217	817	806	28	27	7	10
Nebraska	6,328	6,290	0.6%	5,213	5,204	1,040	1,009	4	3	72	74
North Dakota	7,125	7,647	-6.8%	5,909	6,274	1,186	1,344	0	0	30	29
South Dakota	1,870	2,187	-14.5%	1,511	1,786	358	402	NM	NM	0	0
South Atlantic	125,476	131,653	-4.7%	105,005	109,270	17,138	18,999	287	236	3,046	3,148
Delaware	584	936	-37.6%	NM	7	394	795	1	1	188	133
District of Columbia	16	15	9.2%	0	0	NM	0	14	15	0	0
Florida	34,861	36,222	-3.8%	32,603	33,665	1,428	1,699	12	12	819	846
Georgia	18,534	20,435	-9.3%	15,805	17,431	1,907	2,107	NM	3	822	894
Maryland	6,119	6,659	-8.1%	836	396	5,078	6,112	158	99	46	52
North Carolina	20,221	22,244	-9.1%	17,371	19,881	2,505	1,987	46	49	298	327
South Carolina	16,635	16,127	3.1%	15,602	15,266	723	523	1	1	309	338
Virginia	16,973	16,593	2.3%	13,675	13,135	2,855	3,005	54	58	390	396
West Virginia	11,534	12,422	-7.2%	9,112	9,489	2,248	2,771	0	0	173	162
East South Central	58,941	61,405	-4.0%	51,198	53,128	6,213	6,733	33	38	1,498	1,505
Alabama	23,461	23,101	1.6%	17,868	17,061	4,842	5,298	0	0	751	742
Kentucky	12,801	12,971	-1.3%	12,627	12,743	74	126	0	0	100	102
Mississippi	9,463	10,794	-12.3%	7,913	9,211	1,253	1,270	0	5	297	308
Tennessee	13,216	14,539	-9.1%	12,789	14,113	44	40	33	33	350	352
West South Central	110,023	113,025	-2.7%	36,313	37,586	60,719	62,729	182	147	12,809	12,564
Arkansas	10,790	11,026	-2.1%	9,542	9,566	936	1,148	NM	NM	305	305
Louisiana	14,292	15,920	-10.2%	7,662	9,256	1,234	1,499	27	25	5,369	5,141
Oklahoma	13,276	13,180	0.7%	6,374	5,870	6,759	7,159	0	0	144	151
Texas	71,665	72,898	-1.7%	12,735	12,894	51,790	52,923	148	114	6,992	6,967
Mountain	62,471	56,488	10.6%	48,731	43,834	13,082	12,032	172	87	486	535
Arizona	17,556	15,520	13.1%	15,492	14,433	2,040	1,064	24	24	0	0
Colorado	9,759	8,976	8.7%	7,685	6,790	2,057	2,172	4	2	14	13
Idaho	2,827	3,223	-12.3%	1,819	2,117	900	992	8	9	100	105
Montana	4,966	5,426	-8.5%	1,671	2,298	3,288	3,122	0	0	6	6
Nevada	6,057	5,473	10.7%	4,163	3,685	1,750	1,723	101	18	44	47
New Mexico	5,917	3,861	53.3%	3,896	2,003	2,004	1,840	NM	19	0	0
Utah	7,341	5,956	23.2%	6,715	5,328	520	514	17	15	89	100
Wyoming	8,048	8,052	0.0%	7,290	7,181	524	606	0	0	234	265
Pacific Contiguous	58,290	61,591	-5.4%	34,092	39,980	21,292	18,586	422	476	2,484	2,549
California	29,625	27,352	8.3%	11,386	10,748	15,679	13,958	404	457	2,155	2,188
Oregon	11,112	12,121	-8.3%	8,100	9,508	2,891	2,489	13	13	109	112
Washington	17,553	22,118	-20.6%	14,606	19,723	2,721	2,140	5	6	220	249
Pacific Noncontiguous	2,641	2,675	-1.3%	1,863	1,891	599	599	117	123	62	62
Alaska	1,155	1,139	1.4%	1,041	1,013	39	39	55	70	20	17
Hawaii	1,486	1,535	-3.2%	822	878	560	560	61	52	42	46
U.S. Total	670,968	680,439	-1.4%	371,242	384,897	273,365	269,291	2,229	2,132	24,131	24,119

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

Table 1.4.A. Utility Scale Facility Net Generation from Coal by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	33	119	-72.0%	24	86	7	29	0	0	NM	NM
Connecticut	2	22	-90.3%	0	0	2	22	0	0	0	0
Maine	7	11	-36.6%	0	0	5	7	0	0	NM	NM
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	24	86	-71.8%	24	86	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	3,502	3,550	-1.4%	0	0	3,488	3,530	0	0	14	20
New Jersey	90	84	7.4%	0	0	90	84	0	0	0	0
New York	55	14	295.4%	0	0	55	10	0	0	0	4
Pennsylvania	3,356	3,452	-2.8%	0	0	3,343	3,436	0	0	14	16
East North Central	19,714	21,229	-7.1%	11,576	12,323	7,947	8,688	5	NM	185	209
Illinois	4,543	4,831	-6.0%	368	363	4,030	4,316	NM	NM	142	147
Indiana	5,041	5,176	-2.6%	4,726	4,892	312	280	2	4	0	0
Michigan	3,549	3,430	3.5%	3,514	3,381	30	33	0	0	5	15
Ohio	4,073	5,074	-19.7%	497	1,015	3,576	4,058	0	0	0	1
Wisconsin	2,508	2,718	-7.7%	2,471	2,672	0	0	0	0	38	47
West North Central	15,430	15,101	2.2%	15,244	14,874	0	0	7	7	179	221
Iowa	2,478	2,123	16.7%	2,367	2,001	0	0	6	6	105	117
Kansas	2,021	1,654	22.2%	2,021	1,654	0	0	0	0	0	0
Minnesota	1,590	1,845	-13.8%	1,558	1,785	0	0	0	0	32	60
Missouri	5,136	5,252	-2.2%	5,135	5,250	0	0	1	1	0	0
Nebraska	1,791	1,786	0.3%	1,758	1,751	0	0	0	0	33	35
North Dakota	2,163	2,199	-1.6%	2,154	2,191	0	0	0	0	NM	NM
South Dakota	251	242	3.7%	251	242	0	0	0	0	0	0
South Atlantic	8,687	11,667	-25.5%	7,534	10,070	1,095	1,525	8	7	50	65
Delaware	10	3	273.5%	0	0	10	3	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	993	1,757	-43.5%	987	1,748	0	0	0	0	6	9
Georgia	1,130	1,508	-25.1%	1,117	1,493	0	0	0	0	NM	15
Maryland	251	551	-54.5%	0	0	245	543	0	0	6	8
North Carolina	715	1,385	-48.4%	691	1,362	6	6	6	5	12	13
South Carolina	965	1,142	-15.5%	963	1,139	0	0	0	0	2	3
Virginia	168	433	-61.3%	149	402	6	12	2	1	12	19
West Virginia	4,457	4,889	-8.8%	3,628	3,927	829	962	0	0	0	0
East South Central	7,451	8,052	-7.5%	7,361	7,785	48	205	0	0	42	62
Alabama	2,203	2,332	-5.5%	2,198	2,330	0	0	0	0	NM	2
Kentucky	4,353	3,957	10.0%	4,353	3,957	0	0	0	0	0	0
Mississippi	55	255	-78.5%	7	51	48	205	0	0	0	0
Tennessee	840	1,508	-44.3%	803	1,448	0	0	0	0	37	60
West South Central	10,675	10,890	-2.0%	5,691	6,117	4,958	4,750	0	0	26	23
Arkansas	1,687	1,762	-4.3%	1,257	1,350	424	409	0	0	6	3
Louisiana	702	797	-11.8%	497	541	206	256	0	0	0	0
Oklahoma	836	1,222	-31.6%	816	1,075	0	127	0	0	20	20
Texas	7,450	7,109	4.8%	3,121	3,152	4,329	3,958	0	0	0	0
Mountain	13,370	11,070	20.8%	11,863	9,750	1,475	1,285	0	0	32	34
Arizona	2,424	2,368	2.3%	2,424	2,368	0	0	0	0	0	0
Colorado	2,104	2,015	4.4%	2,103	2,014	0	0	0	0	1	1
Idaho	NM	NM	NM	0	0	0	0	0	0	NM	NM
Montana	1,288	1,149	12.1%	24	23	1,263	1,125	0	0	0	1
Nevada	386	70	453.3%	265	-3	121	73	0	0	0	0
New Mexico	1,413	531	166.2%	1,413	531	0	0	0	0	0	0
Utah	2,377	1,883	26.2%	2,344	1,848	33	35	0	0	0	0
Wyoming	3,376	3,052	10.6%	3,290	2,970	57	52	0	0	28	30
Pacific Contiguous	990	88	NM	263	0	701	63	0	0	25	25
California	23	24	-3.8%	0	0	0	0	0	0	23	24
Oregon	263	0	--	263	0	0	0	0	0	0	0
Washington	703	64	NM	0	0	701	63	0	0	2	1
Pacific Noncontiguous	156	155	1.2%	38	NM	110	122	9	NM	0	0
Alaska	62	46	34.6%	38	NM	15	NM	9	NM	0	0
Hawaii	95	109	-13.0%	0	0	95	109	0	0	0	0
U.S. Total	80,008	81,922	-2.3%	59,594	61,029	19,831	20,197	29	32	554	664

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

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

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	211	534	-60.6%	145	323	63	203	0	0	NM	NM
Connecticut	49	187	-73.6%	0	0	49	187	0	0	0	0
Maine	16	23	-30.0%	0	0	13	15	0	0	NM	NM
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	145	323	-55.2%	145	323	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	8,638	9,153	-5.6%	0	0	8,609	9,110	0	0	29	42
New Jersey	198	287	-31.2%	0	0	198	287	0	0	0	0
New York	268	260	2.7%	0	0	268	253	0	0	0	8
Pennsylvania	8,173	8,605	-5.0%	0	0	8,144	8,571	0	0	29	35
East North Central	43,900	48,854	-10.1%	25,015	29,064	18,484	19,337	12	19	389	434
Illinois	10,418	10,718	-2.8%	760	738	9,355	9,658	NM	12	295	310
Indiana	11,486	13,310	-13.7%	10,769	12,681	713	622	4	6	0	0
Michigan	7,247	7,454	-2.8%	7,171	7,358	64	73	0	0	11	23
Ohio	9,440	11,365	-16.9%	1,088	2,380	8,352	8,984	0	0	1	2
Wisconsin	5,308	6,007	-11.6%	5,227	5,908	0	0	0	0	81	99
West North Central	32,592	32,921	-1.0%	32,192	32,438	0	0	15	17	385	466
Iowa	4,953	4,519	9.6%	4,712	4,261	0	0	12	12	229	246
Kansas	3,687	3,686	0.0%	3,687	3,686	0	0	0	0	0	0
Minnesota	3,735	4,206	-11.2%	3,669	4,078	0	0	0	0	66	128
Missouri	11,201	11,498	-2.6%	11,199	11,493	0	0	3	5	0	0
Nebraska	3,810	3,724	2.3%	3,739	3,650	0	0	0	0	72	74
North Dakota	4,695	4,787	-1.9%	4,676	4,769	0	0	0	0	18	18
South Dakota	511	501	1.9%	511	501	0	0	0	0	0	0
South Atlantic	24,089	35,485	-32.1%	21,128	30,663	2,830	4,655	16	18	115	148
Delaware	38	86	-55.3%	0	0	38	86	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,984	5,097	-41.5%	2,972	5,076	0	0	0	0	11	21
Georgia	3,133	5,272	-40.6%	3,104	5,235	0	0	0	0	30	37
Maryland	933	2,152	-56.7%	0	0	920	2,137	0	0	13	16
North Carolina	3,070	6,224	-50.7%	3,020	6,165	12	16	13	14	25	28
South Carolina	2,588	3,161	-18.1%	2,584	3,153	0	0	0	0	4	8
Virginia	574	1,882	-69.5%	513	1,724	26	116	3	3	32	39
West Virginia	10,770	11,611	-7.2%	8,936	9,310	1,834	2,301	0	0	0	0
East South Central	17,816	21,132	-15.7%	17,428	20,532	299	472	0	0	88	128
Alabama	5,251	6,100	-13.9%	5,240	6,095	0	0	0	0	11	5
Kentucky	9,851	9,541	3.3%	9,851	9,541	0	0	0	0	0	0
Mississippi	447	815	-45.1%	149	343	299	472	0	0	0	0
Tennessee	2,266	4,676	-51.5%	2,189	4,553	0	0	0	0	77	123
West South Central	23,604	27,312	-13.6%	13,411	15,206	10,147	12,052	0	0	46	55
Arkansas	4,436	4,689	-5.4%	3,758	3,794	665	886	0	0	13	10
Louisiana	1,418	2,089	-32.1%	966	1,342	452	746	0	0	0	0
Oklahoma	1,924	3,000	-35.9%	1,835	2,687	57	268	0	0	33	45
Texas	15,826	17,534	-9.7%	6,853	7,383	8,972	10,151	0	0	0	0
Mountain	27,759	24,370	13.9%	24,585	21,400	3,108	2,898	0	0	66	72
Arizona	4,761	5,138	-7.3%	4,761	5,138	0	0	0	0	0	0
Colorado	4,694	4,269	10.0%	4,691	4,266	0	0	0	0	2	3
Idaho	NM	NM	NM	0	0	0	0	0	0	NM	NM
Montana	2,752	2,602	5.8%	51	41	2,700	2,560	0	0	1	2
Nevada	767	149	413.2%	545	-7	222	156	0	0	0	0
New Mexico	2,806	1,328	111.3%	2,806	1,328	0	0	0	0	0	0
Utah	5,019	4,147	21.0%	4,948	4,074	71	73	0	0	0	0
Wyoming	6,956	6,732	3.3%	6,783	6,559	114	109	0	0	59	64
Pacific Contiguous	2,092	773	170.6%	656	0	1,382	718	0	0	54	55
California	50	51	-3.2%	0	0	0	0	0	0	50	51
Oregon	656	0	--	656	0	0	0	0	0	0	0
Washington	1,387	722	92.1%	0	0	1,382	718	0	0	4	4
Pacific Noncontiguous	327	328	-0.2%	87	50	220	256	20	22	0	0
Alaska	139	101	37.3%	87	50	31	29	20	22	0	0
Hawaii	189	227	-16.9%	0	0	189	227	0	0	0	0
U.S. Total	181,027	200,861	-9.9%	134,648	149,676	45,141	49,701	64	75	1,174	1,408

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

Table 1.5.A. Utility Scale Facility Net Generation from Petroleum Liquids by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	20	12	61.1%	NM	2	9	6	5	3	NM	1
Connecticut	8	5	66.6%	NM	0	NM	4	1	NM	0	0
Maine	NM	2	NM	0	0	NM	0	0	0	NM	1
Massachusetts	NM	2	NM	NM	NM	NM	NM	NM	NM	0	0
New Hampshire	4	3	31.6%	2	1	NM	NM	2	2	0	0
Rhode Island	NM	NM	NM	0	0	NM	NM	1	0	0	0
Vermont	NM	NM	NM	NM	NM	0	0	0	0	0	0
Middle Atlantic	73	42	70.9%	23	13	45	23	NM	NM	4	5
New Jersey	NM	2	NM	0	0	NM	2	0	0	0	0
New York	60	32	88.9%	23	13	34	13	NM	NM	3	5
Pennsylvania	10	9	15.8%	0	0	10	8	0	1	1	NM
East North Central	40	32	23.7%	17	19	21	11	0	0	2	2
Illinois	4	3	38.4%	NM	0	3	2	NM	0	0	0
Indiana	9	7	27.8%	8	5	0	0	0	0	1	2
Michigan	6	8	-23.7%	6	7	0	0	0	0	NM	NM
Ohio	16	13	27.2%	NM	4	14	9	0	0	1	0
Wisconsin	5	2	144.7%	2	2	3	0	0	0	NM	NM
West North Central	28	29	-3.7%	27	22	NM	7	1	0	0	0
Iowa	7	10	-26.7%	7	10	NM	0	0	0	0	0
Kansas	3	4	-25.5%	3	4	0	0	0	0	0	0
Minnesota	3	9	-61.9%	3	1	NM	7	1	0	0	0
Missouri	8	4	71.4%	8	4	0	0	0	0	0	0
Nebraska	1	1	111.0%	1	1	0	0	0	0	0	0
North Dakota	6	2	137.8%	5	2	0	0	0	0	0	0
South Dakota	1	NM	NM	1	NM	0	0	NM	NM	0	0
South Atlantic	63	57	11.0%	39	42	15	7	1	2	8	5
Delaware	NM	NM	NM	0	0	NM	NM	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	9	9	-2.2%	7	9	NM	0	0	0	2	NM
Georgia	5	8	-32.8%	2	5	NM	NM	0	0	3	3
Maryland	10	3	175.3%	0	0	9	3	NM	NM	0	0
North Carolina	11	5	139.3%	10	4	NM	NM	NM	NM	NM	NM
South Carolina	4	4	23.4%	3	3	0	0	NM	NM	1	1
Virginia	13	8	49.1%	8	4	4	2	1	2	NM	NM
West Virginia	9	18	-49.8%	9	18	0	0	0	0	0	0
East South Central	19	12	56.0%	17	12	1	NM	0	0	1	NM
Alabama	1	0	-432.8%	0	-1	0	NM	0	0	NM	NM
Kentucky	8	8	-5.4%	8	8	0	0	0	0	0	0
Mississippi	0	0	27.4%	NM	0	0	0	0	0	0	0
Tennessee	10	4	129.1%	10	4	0	0	0	0	1	0
West South Central	10	10	-2.6%	8	9	1	0	0	0	1	0
Arkansas	2	5	-47.8%	2	5	0	0	0	0	0	0
Louisiana	NM	1	NM	NM	1	0	0	0	0	0	0
Oklahoma	3	1	104.3%	3	1	0	0	0	0	0	0
Texas	4	3	36.0%	3	2	1	0	0	0	0	0
Mountain	14	14	1.7%	12	13	1	0	NM	0	0	0
Arizona	4	5	-22.3%	4	5	0	0	NM	0	0	0
Colorado	1	1	18.3%	1	1	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	1	NM	NM	NM	NM	1	NM	0	0	0	0
Nevada	1	0	685.3%	1	0	0	0	0	0	0	0
New Mexico	1	1	-25.3%	1	1	0	0	0	0	0	0
Utah	2	3	-28.6%	2	3	0	0	0	0	0	0
Wyoming	3	2	4.1%	3	2	0	0	0	0	0	0
Pacific Contiguous	6	10	-43.0%	3	3	1	0	NM	NM	NM	7
California	4	9	-51.2%	3	3	0	0	0	0	1	6
Oregon	NM	NM	NM	0	0	0	0	NM	NM	0	0
Washington	NM	NM	NM	NM	NM	0	0	0	0	NM	NM
Pacific Noncontiguous	518	562	-7.8%	400	475	95	66	1	1	21	20
Alaska	64	69	-7.5%	60	64	0	0	1	1	3	4
Hawaii	454	493	-7.9%	341	411	95	66	1	0	18	16
U.S. Total	790	780	1.2%	552	609	189	122	9	8	40	41

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

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

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	89	1,024	-91.4%	NM	161	65	828	11	NM	5	NM
Connecticut	24	262	-90.7%	NM	NM	21	258	3	NM	0	1
Maine	7	166	-95.8%	0	0	3	152	0	0	4	NM
Massachusetts	44	391	-88.8%	NM	73	36	306	NM	NM	1	1
New Hampshire	8	148	-94.6%	3	83	NM	59	4	6	0	0
Rhode Island	NM	NM	NM	0	0	NM	NM	1	1	0	0
Vermont	NM	NM	NM	NM	NM	0	0	0	0	0	0
Middle Atlantic	392	1,804	-78.3%	143	509	237	1,270	NM	NM	9	12
New Jersey	37	217	-82.7%	1	1	35	212	0	3	1	1
New York	314	1,223	-74.3%	141	506	163	697	NM	NM	7	11
Pennsylvania	41	364	-88.8%	0	2	39	361	1	1	NM	NM
East North Central	84	159	-47.3%	39	63	40	89	1	1	4	6
Illinois	8	NM	NM	NM	NM	7	NM	NM	0	0	0
Indiana	20	24	-16.7%	18	19	0	0	0	0	2	5
Michigan	15	15	-0.2%	14	14	0	0	0	1	NM	NM
Ohio	30	97	-68.7%	NM	NM	26	74	0	0	1	1
Wisconsin	10	NM	NM	3	NM	7	0	0	0	NM	NM
West North Central	64	81	-21.2%	60	71	NM	NM	1	1	0	0
Iowa	14	21	-32.2%	14	21	NM	NM	0	0	0	0
Kansas	10	NM	NM	10	NM	0	0	0	0	0	0
Minnesota	10	NM	NM	6	3	NM	NM	1	1	0	0
Missouri	16	27	-40.8%	16	27	0	0	0	0	0	0
Nebraska	3	2	48.3%	3	2	0	0	0	0	0	0
North Dakota	10	4	128.7%	10	4	0	0	0	0	0	0
South Dakota	NM	NM	NM	NM	NM	0	0	NM	NM	0	0
South Atlantic	215	1,661	-87.1%	137	1,062	57	547	4	NM	17	NM
Delaware	11	137	-92.1%	0	6	11	131	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	18	169	-89.5%	14	153	NM	11	0	0	4	NM
Georgia	19	NM	NM	9	NM	NM	45	0	3	8	NM
Maryland	23	193	-88.3%	0	3	21	187	NM	NM	1	2
North Carolina	49	322	-84.8%	46	297	NM	NM	NM	NM	2	NM
South Carolina	15	197	-92.5%	12	NM	2	38	NM	NM	1	3
Virginia	64	490	-86.9%	39	372	21	108	4	9	1	NM
West Virginia	17	41	-58.7%	17	33	0	9	0	0	0	0
East South Central	58	84	-31.0%	54	55	1	24	0	0	3	NM
Alabama	5	39	-87.8%	3	11	1	24	0	0	NM	NM
Kentucky	16	17	-1.2%	16	17	0	0	0	0	0	0
Mississippi	2	NM	NM	1	NM	0	0	0	0	1	1
Tennessee	35	24	43.6%	33	24	0	0	0	0	1	0
West South Central	21	NM	NM	15	NM	5	NM	0	0	2	2
Arkansas	8	NM	NM	NM	NM	3	0	0	0	0	2
Louisiana	NM	NM	NM	NM	NM	0	0	0	0	0	0
Oklahoma	4	3	68.3%	4	2	0	0	0	0	0	0
Texas	7	NM	NM	4	NM	2	NM	0	0	1	0
Mountain	32	29	9.0%	29	27	3	2	NM	0	0	0
Arizona	9	11	-13.9%	9	11	0	0	NM	0	0	0
Colorado	2	2	-14.3%	2	2	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	2	1	76.7%	NM	NM	2	1	0	0	0	0
Nevada	2	0	548.9%	2	0	0	0	0	0	0	0
New Mexico	6	3	94.5%	6	3	0	0	0	0	0	0
Utah	5	6	-25.5%	5	6	0	0	0	0	0	0
Wyoming	5	5	5.2%	5	5	0	0	0	0	0	0
Pacific Contiguous	11	14	-19.6%	7	5	2	NM	NM	NM	NM	8
California	8	12	-36.6%	6	5	0	0	0	NM	2	6
Oregon	NM	NM	NM	1	0	0	0	NM	NM	0	0
Washington	NM	NM	NM	NM	NM	1	NM	0	0	NM	NM
Pacific Noncontiguous	1,141	1,171	-2.6%	898	975	197	154	3	3	42	40
Alaska	129	158	-18.1%	120	148	0	0	2	2	7	8
Hawaii	1,011	1,013	-0.2%	778	828	197	154	1	1	35	31
U.S. Total	2,106	6,071	-65.3%	1,389	2,969	609	2,927	23	NM	85	124

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

Table 1.6.A. Utility Scale Facility Net Generation from Petroleum Coke by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	NM	NM	NM	0	0	0	0	0	0	NM	NM
New Jersey	5	5	-16.5%	0	0	0	0	0	0	5	5
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	NM	NM	0	0	0	0	0	0	NM	NM
East North Central	165	183	-9.6%	87	112	72	69	0	0	6	2
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	83	108	-23.1%	77	106	0	0	0	0	6	2
Ohio	72	69	5.5%	0	0	72	69	0	0	0	0
Wisconsin	10	6	65.5%	10	6	0	0	0	0	0	0
West North Central	1	10	-91.4%	0	0	0	0	1	1	0	9
Iowa	1	10	-91.4%	0	0	0	0	1	1	0	9
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	145	142	2.1%	127	125	0	0	0	0	NM	NM
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	127	125	1.9%	127	125	0	0	0	0	0	0
Georgia	NM	NM	NM	0	0	0	0	0	0	NM	NM
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	359	351	2.2%	350	338	0	0	0	0	9	13
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	353	349	1.3%	350	338	0	0	0	0	3	10
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	6	NM	NM	0	0	0	0	0	0	6	NM
Mountain	39	38	3.5%	0	0	39	38	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	39	38	3.5%	0	0	39	38	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	722	738	-2.1%	564	575	111	106	1	1	46	55

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

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

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	31	31	-1.6%	0	0	0	0	0	0	31	31
New Jersey	11	11	-1.9%	0	0	0	0	0	0	11	11
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	NM	NM	0	0	0	0	0	0	NM	NM
East North Central	377	390	-3.4%	202	236	158	146	0	0	17	8
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	199	225	-11.5%	182	217	0	0	0	0	17	8
Ohio	158	147	7.9%	0	0	158	146	0	0	0	0
Wisconsin	20	19	5.5%	20	19	0	0	0	0	0	0
West North Central	2	16	-86.4%	0	0	0	0	2	2	0	14
Iowa	2	16	-86.4%	0	0	0	0	2	2	0	14
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	307	365	-15.9%	269	325	0	0	0	0	38	41
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	269	325	-17.1%	269	325	0	0	0	0	0	0
Georgia	38	41	-6.2%	0	0	0	0	0	0	38	41
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	743	812	-8.5%	727	784	0	0	0	0	16	27
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	733	803	-8.8%	727	784	0	0	0	0	6	19
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	10	9	18.6%	0	0	0	0	0	0	10	9
Mountain	82	76	8.9%	0	0	82	76	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	82	76	8.9%	0	0	82	76	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,542	1,690	-8.7%	1,198	1,345	241	222	2	2	101	121

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

Table 1.7.A. Utility Scale Facility Net Generation from Natural Gas by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	3,487	3,363	3.7%	NM	4	3,297	3,186	80	75	106	98
Connecticut	1,480	1,280	15.6%	3	3	1,396	1,201	33	31	49	45
Maine	145	72	100.2%	0	0	121	52	2	2	21	19
Massachusetts	1,425	1,581	-9.9%	NM	NM	1,361	1,523	42	37	21	21
New Hampshire	84	31	171.9%	0	0	81	28	1	1	2	2
Rhode Island	352	398	-11.5%	0	0	337	383	2	3	13	11
Vermont	0	0	66.0%	0	0	0	0	0	0	0	0
Middle Atlantic	13,922	10,865	28.1%	763	652	12,852	9,928	91	90	216	195
New Jersey	2,984	2,671	11.7%	NM	NM	2,939	2,616	7	14	30	33
New York	3,645	2,852	27.8%	755	644	2,765	2,101	73	65	52	42
Pennsylvania	7,293	5,342	36.5%	1	0	7,147	5,210	12	11	133	120
East North Central	11,499	8,860	29.8%	3,479	2,989	7,577	5,473	121	121	322	278
Illinois	985	676	45.7%	21	1	865	586	37	33	62	56
Indiana	2,408	1,642	46.6%	897	563	1,367	952	12	14	131	113
Michigan	2,301	2,156	6.7%	478	530	1,712	1,524	49	48	62	54
Ohio	4,252	3,021	40.7%	616	586	3,595	2,398	18	20	23	18
Wisconsin	1,553	1,365	13.8%	1,467	1,309	37	13	6	5	43	37
West North Central	2,088	1,557	34.1%	1,773	1,316	222	166	27	23	67	52
Iowa	521	398	30.9%	474	356	0	0	8	9	40	33
Kansas	143	142	0.3%	132	141	0	0	0	0	11	NM
Minnesota	898	518	73.3%	805	447	70	49	11	9	12	13
Missouri	380	423	-10.0%	217	296	152	117	8	5	3	5
Nebraska	NM	22	NM	NM	NM	0	0	0	1	0	0
North Dakota	53	NM	NM	NM	NM	0	0	0	0	1	1
South Dakota	NM	NM	NM	NM	NM	0	0	0	0	0	0
South Atlantic	27,795	24,522	13.3%	23,085	20,389	4,260	3,751	81	56	369	326
Delaware	267	371	-28.0%	0	0	182	320	0	0	85	50
District of Columbia	2	2	-29.1%	0	0	0	0	2	2	0	0
Florida	11,901	11,296	5.4%	11,374	10,759	406	426	2	2	120	110
Georgia	3,947	3,860	2.2%	3,110	3,101	794	712	0	0	44	47
Maryland	1,260	754	67.3%	469	208	715	493	70	44	7	8
North Carolina	3,643	3,146	15.8%	2,968	2,738	654	390	NM	NM	14	10
South Carolina	1,694	969	74.8%	1,399	910	284	50	0	0	11	9
Virginia	5,022	4,078	23.1%	3,755	2,671	1,209	1,351	1	1	56	55
West Virginia	59	47	26.1%	10	2	16	NM	0	0	33	36
East South Central	9,346	8,834	5.8%	6,313	6,202	2,806	2,430	16	19	210	183
Alabama	3,851	3,509	9.8%	1,316	1,281	2,438	2,138	0	0	97	90
Kentucky	877	1,015	-13.5%	832	988	26	7	0	0	20	19
Mississippi	3,378	3,633	-7.0%	3,003	3,310	341	283	0	2	34	38
Tennessee	1,239	678	82.8%	1,163	623	1	2	16	16	59	36
West South Central	24,270	24,086	0.8%	7,864	7,047	11,136	11,817	77	65	5,193	5,157
Arkansas	1,544	1,442	7.1%	1,407	1,308	107	105	NM	NM	27	26
Louisiana	4,592	4,419	3.9%	2,118	2,211	293	215	12	13	2,169	1,980
Oklahoma	2,883	2,423	19.0%	1,855	1,236	1,001	1,159	0	0	27	27
Texas	15,251	15,803	-3.5%	2,484	2,292	9,735	10,337	62	50	2,971	3,124
Mountain	8,041	5,856	37.3%	6,427	4,701	1,450	996	34	34	130	125
Arizona	2,595	1,430	81.5%	2,105	1,238	479	181	11	11	0	0
Colorado	1,467	1,278	14.8%	1,203	1,071	262	207	0	0	2	1
Idaho	361	139	159.5%	204	51	138	74	3	3	16	11
Montana	63	26	145.6%	33	18	29	7	0	0	1	1
Nevada	1,754	1,788	-1.9%	1,543	1,585	175	175	5	5	31	24
New Mexico	909	652	39.4%	540	297	360	347	NM	8	0	0
Utah	807	469	72.0%	762	425	6	6	7	7	33	32
Wyoming	85	75	13.9%	37	18	0	0	0	0	48	56
Pacific Contiguous	9,693	7,820	24.0%	3,712	3,310	5,034	3,581	132	153	815	777
California	7,248	6,229	16.3%	2,491	2,483	3,830	2,840	127	147	799	759
Oregon	1,794	1,063	68.8%	773	557	1,009	495	3	4	9	7
Washington	651	528	23.5%	448	269	194	246	2	2	8	11
Pacific Noncontiguous	288	237	21.4%	282	232	0	0	0	0	6	5
Alaska	288	237	21.4%	282	232	0	0	0	0	6	5
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	110,428	96,002	15.0%	53,702	46,841	48,633	41,328	661	635	7,432	7,197

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

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

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	7,490	7,033	6.5%	NM	NM	7,098	6,663	163	144	218	206
Connecticut	3,142	2,630	19.5%	6	6	2,972	2,477	66	59	99	89
Maine	301	193	55.7%	0	0	251	142	5	5	45	47
Massachusetts	3,035	3,242	-6.4%	NM	NM	2,902	3,111	84	73	45	44
New Hampshire	257	156	64.9%	0	0	250	149	2	2	5	5
Rhode Island	754	811	-7.0%	0	0	724	784	5	6	25	21
Vermont	0	0	42.2%	0	0	0	0	0	0	0	0
Middle Atlantic	28,365	21,602	31.3%	1,545	1,471	26,192	19,570	188	186	441	376
New Jersey	6,024	4,803	25.4%	NM	NM	5,930	4,683	15	31	63	67
New York	7,386	6,300	17.2%	1,528	1,447	5,604	4,646	147	126	106	80
Pennsylvania	14,956	10,500	42.4%	1	3	14,658	10,240	26	29	271	229
East North Central	23,335	19,916	17.2%	7,342	6,841	15,090	12,243	248	248	656	583
Illinois	2,057	2,019	1.9%	61	87	1,796	1,753	76	68	124	111
Indiana	4,905	3,657	34.1%	1,777	1,488	2,840	1,902	25	30	263	238
Michigan	4,942	4,832	2.3%	1,203	1,345	3,507	3,269	102	104	130	114
Ohio	8,252	6,665	23.8%	1,305	1,327	6,864	5,265	36	36	47	37
Wisconsin	3,178	2,742	15.9%	2,995	2,595	82	55	9	9	92	83
West North Central	3,995	3,530	13.2%	3,308	2,995	476	357	53	49	157	129
Iowa	1,103	833	32.5%	985	748	0	0	16	18	102	67
Kansas	299	328	-8.8%	277	303	0	0	0	0	22	25
Minnesota	1,483	1,126	31.7%	1,287	947	149	135	22	18	25	26
Missouri	826	993	-16.8%	477	750	327	222	15	11	7	9
Nebraska	60	78	-22.7%	60	77	0	0	0	1	0	0
North Dakota	105	80	30.7%	103	78	0	0	0	0	2	2
South Dakota	120	93	29.0%	120	93	0	0	0	0	0	0
South Atlantic	55,985	51,075	9.6%	46,954	42,689	8,084	7,582	180	118	768	687
Delaware	490	666	-26.5%	0	0	331	565	0	0	158	101
District of Columbia	5	5	10.4%	0	0	0	0	5	5	0	0
Florida	24,429	23,596	3.5%	23,447	22,430	718	927	4	4	260	236
Georgia	8,245	8,332	-1.0%	6,578	6,579	1,570	1,650	0	0	97	103
Maryland	2,069	1,294	59.9%	835	392	1,067	793	152	92	14	16
North Carolina	7,103	6,587	7.8%	5,709	5,708	1,350	840	16	NM	28	24
South Carolina	3,432	2,408	42.6%	2,857	2,052	553	335	0	0	22	21
Virginia	10,081	8,056	25.1%	7,502	5,498	2,457	2,443	2	2	120	113
West Virginia	131	132	-0.6%	25	30	38	NM	0	0	69	73
East South Central	19,244	21,167	-9.1%	12,997	14,655	5,754	6,080	32	38	461	393
Alabama	7,715	8,257	-6.6%	2,740	2,862	4,764	5,196	0	0	211	199
Kentucky	2,101	2,618	-19.8%	1,989	2,455	70	122	0	0	42	41
Mississippi	6,906	8,554	-19.3%	5,910	7,712	916	760	0	5	80	77
Tennessee	2,522	1,737	45.2%	2,358	1,626	3	2	32	33	129	76
West South Central	52,984	51,631	2.6%	16,485	15,537	25,016	24,984	164	132	11,318	10,979
Arkansas	2,644	2,948	-10.3%	2,357	2,663	223	216	NM	NM	58	63
Louisiana	10,030	9,849	1.8%	4,821	4,945	598	596	27	25	4,584	4,283
Oklahoma	6,217	4,873	27.6%	3,819	2,642	2,335	2,179	0	0	62	52
Texas	34,093	33,961	0.4%	5,489	5,288	21,860	21,992	131	100	6,613	6,580
Mountain	16,586	12,262	35.3%	12,892	9,886	3,359	2,043	74	72	260	262
Arizona	5,585	2,985	87.1%	4,121	2,550	1,441	412	24	23	0	0
Colorado	2,850	2,619	8.8%	2,415	2,209	431	408	1	0	3	3
Idaho	753	360	109.0%	415	125	300	203	6	7	31	25
Montana	108	56	92.7%	53	42	53	13	0	0	1	1
Nevada	3,699	3,823	-3.2%	3,279	3,400	366	366	11	10	43	47
New Mexico	1,805	1,254	43.9%	1,032	607	755	628	NM	18	0	0
Utah	1,623	1,023	58.7%	1,525	928	12	12	15	14	72	69
Wyoming	162	143	13.6%	52	25	0	0	0	0	110	117
Pacific Contiguous	20,750	17,313	19.9%	7,975	7,432	10,773	7,864	277	323	1,726	1,694
California	15,071	13,339	13.0%	5,098	5,248	8,014	6,123	266	310	1,693	1,657
Oregon	3,814	2,579	47.9%	1,740	1,372	2,050	1,185	7	8	18	15
Washington	1,865	1,395	33.7%	1,138	812	709	556	3	4	15	23
Pacific Noncontiguous	628	518	21.2%	615	510	0	0	0	0	12	8
Alaska	628	518	21.2%	615	510	0	0	0	0	12	8
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	229,362	206,048	11.3%	110,123	102,038	101,842	87,386	1,378	1,308	16,019	15,316

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

Table 1.7.C. Utility Scale Facility Net Generation from Natural Gas by Technology: Total (All Sectors), 2009-February 2019 (Thousand Megawatthours)

	Natural Gas					
Period	Natural Gas Fired Combined Cycle	Natural Gas Fired Combustion Turbine	Steam Turbine	Internal Combustion Engine	Natural Gas Other	Total
Annual Factors						
2009	743,901	76,141	99,588	1,332	18	920,979
2010	804,033	85,820	96,332	1,490	22	987,697
2011	828,554	85,392	97,578	2,125	40	1,013,689
2012	1,017,040	98,446	108,285	1,986	138	1,225,894
2013	947,172	91,272	83,746	2,328	317	1,124,836
2014	958,921	90,159	74,100	2,921	508	1,126,609
2015	1,130,617	108,655	89,796	3,760	654	1,333,482
2016	1,152,245	123,429	98,204	3,714	715	1,378,307
2017	1,094,951	111,733	84,492	4,370	869	1,296,415
2018	1,213,763	147,486	101,132	5,454	178	1,468,013
Year 2017						
January	83,813	7,936	3,325	330	71	95,473
February	72,179	7,254	2,933	269	60	82,694
March	80,222	9,299	5,134	303	65	95,022
April	74,282	8,063	5,716	304	53	88,418
May	82,415	8,806	6,458	319	69	98,067
June	97,888	9,970	9,002	380	76	117,317
July	121,419	12,091	12,908	481	94	146,994
August	118,900	11,160	10,591	464	93	141,209
Sept	98,230	10,132	9,276	398	76	118,112
October	88,194	9,451	8,749	382	75	106,852
November	81,319	8,336	4,804	359	65	94,883
December	96,089	9,235	5,595	382	71	111,373
Year 2018						
January	92,784	10,662	6,225	364	11	110,046
February	85,087	6,493	4,135	277	10	96,002
March	89,748	9,047	5,777	350	10	104,933
April	82,019	10,962	6,097	355	13	99,446
May	92,432	13,273	9,933	451	18	116,107
June	107,052	13,121	10,169	464	17	130,823
July	130,955	20,479	15,009	784	23	167,250
August	130,825	17,728	13,106	699	19	162,377
Sept	116,193	15,302	10,711	549	18	142,772
October	101,201	13,223	9,248	482	17	124,171
November	90,847	9,697	6,197	355	11	107,109
December	94,620	7,499	4,525	323	11	106,978
Year 2019						
January	104,656	8,402	5,496	371	10	118,935
February	97,378	7,604	5,041	396	9	110,428

Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary.
The 'Natural Gas Other' category consists of power plants with prime movers of Fuel Cells and Other Prime Movers that consume natural gas.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 1.8.A. Utility Scale Facility Net Generation from Other Gases by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	56	49	15.3%	0	0	0	NM	0	0	56	49
New Jersey	18	18	-0.3%	0	0	0	0	0	0	18	18
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	38	31	24.4%	0	0	0	NM	0	0	38	31
East North Central	414	351	18.1%	22	17	173	169	0	0	219	165
Illinois	40	16	145.8%	0	0	0	0	0	0	40	16
Indiana	163	141	15.7%	0	0	0	0	0	0	163	141
Michigan	145	144	0.2%	22	17	123	127	0	0	0	0
Ohio	66	49	34.8%	0	0	51	41	0	0	16	8
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	4	4	-1.0%	0	0	0	0	0	0	4	4
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	4	4	-1.0%	0	0	0	0	0	0	4	4
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	17	15	17.6%	0	0	0	0	0	0	17	15
Delaware	15	12	23.1%	0	0	0	0	0	0	15	12
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	-95.3%	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	2	2	0.0%	0	0	0	0	0	0	2	2
East South Central	1	NM	NM	0	0	0	0	0	0	1	NM
Alabama	0	NM	NM	0	0	0	0	0	0	0	NM
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	1	0	52.1%	0	0	0	0	0	0	1	0
West South Central	380	362	5.1%	0	0	153	110	0	0	226	252
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	156	167	-6.4%	0	0	0	0	0	0	156	167
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	224	195	14.9%	0	0	153	110	0	0	70	85
Mountain	22	34	-36.4%	0	0	1	1	0	0	21	33
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	1	1	5.4%	0	0	1	1	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	1	0	NM	0	0	0	0	0	0	1	0
Wyoming	20	33	-41.5%	0	0	0	0	0	0	20	33
Pacific Contiguous	120	173	-30.5%	0	0	24	30	0	0	97	143
California	97	143	-32.5%	0	0	0	0	0	0	97	143
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	24	30	-20.4%	0	0	24	30	0	0	0	0
Pacific Noncontiguous	1	3	-80.6%	0	0	0	0	0	0	1	3
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	1	3	-80.6%	0	0	0	0	0	0	1	3
U.S. Total	1,015	990	2.4%	22	17	351	309	0	0	641	665

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

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

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	112	99	14.0%	0	0	0	NM	0	0	112	99
New Jersey	38	37	1.3%	0	0	0	0	0	0	38	37
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	75	62	21.7%	0	0	0	NM	0	0	75	62
East North Central	815	710	14.8%	34	43	356	327	0	0	425	340
Illinois	63	22	188.7%	0	0	0	0	0	0	63	22
Indiana	334	303	10.1%	0	0	0	0	0	0	334	303
Michigan	290	288	0.8%	34	43	256	245	0	0	0	0
Ohio	128	97	32.5%	0	0	100	81	0	0	28	15
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	8	8	4.5%	0	0	0	0	0	0	8	8
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	8	8	4.5%	0	0	0	0	0	0	8	8
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	32	35	-6.4%	0	0	0	0	0	0	32	35
Delaware	28	30	-6.2%	0	0	0	0	0	0	28	30
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	1	-95.3%	0	0	0	0	0	0	0	1
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	4	4	5.8%	0	0	0	0	0	0	4	4
East South Central	2	2	14.5%	0	0	0	0	0	0	2	2
Alabama	0	NM	NM	0	0	0	0	0	0	0	NM
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	2	1	70.5%	0	0	0	0	0	0	2	1
West South Central	745	725	2.6%	0	0	309	219	0	0	435	507
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	291	336	-13.2%	0	0	0	0	0	0	291	336
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	453	390	16.3%	0	0	309	219	0	0	144	171
Mountain	57	71	-20.3%	0	0	2	1	0	0	55	70
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	2	1	124.5%	0	0	2	1	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	2	0	NM	0	0	0	0	0	0	2	0
Wyoming	53	70	-24.9%	0	0	0	0	0	0	53	70
Pacific Contiguous	236	328	-28.0%	0	0	49	66	0	0	187	262
California	187	262	-28.6%	0	0	0	0	0	0	187	262
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	49	66	-25.6%	0	0	49	66	0	0	0	0
Pacific Noncontiguous	1	7	-83.5%	0	0	0	0	0	0	1	7
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	1	7	-83.5%	0	0	0	0	0	0	1	7
U.S. Total	2,009	1,984	1.2%	34	43	716	612	0	0	1,258	1,330

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

Table 1.9.A. Utility Scale Facility Net Generation from Nuclear Energy by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	2,700	2,704	-0.2%	0	0	2,700	2,704	0	0	0	0
Connecticut	1,407	1,408	-0.1%	0	0	1,407	1,408	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	455	456	-0.1%	0	0	455	456	0	0	0	0
New Hampshire	838	841	-0.3%	0	0	838	841	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	12,813	12,904	-0.7%	0	0	12,813	12,904	0	0	0	0
New Jersey	2,369	2,824	-16.1%	0	0	2,369	2,824	0	0	0	0
New York	3,612	3,318	8.9%	0	0	3,612	3,318	0	0	0	0
Pennsylvania	6,832	6,762	1.0%	0	0	6,832	6,762	0	0	0	0
East North Central	12,452	12,722	-2.1%	2,291	2,284	10,161	10,438	0	0	0	0
Illinois	7,641	7,637	0.0%	0	0	7,641	7,637	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	2,840	2,836	0.2%	2,291	2,284	549	552	0	0	0	0
Ohio	1,172	1,437	-18.4%	0	0	1,172	1,437	0	0	0	0
Wisconsin	800	812	-1.5%	0	0	800	812	0	0	0	0
West North Central	3,727	3,772	-1.2%	3,316	3,362	411	410	0	0	0	0
Iowa	411	410	0.3%	0	0	411	410	0	0	0	0
Kansas	824	823	0.1%	824	823	0	0	0	0	0	0
Minnesota	1,142	1,190	-4.0%	1,142	1,190	0	0	0	0	0	0
Missouri	814	829	-1.8%	814	829	0	0	0	0	0	0
Nebraska	536	520	3.0%	536	520	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	16,245	15,981	1.7%	15,289	15,021	956	960	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,510	2,483	1.1%	2,510	2,483	0	0	0	0	0	0
Georgia	2,245	2,204	1.9%	2,245	2,204	0	0	0	0	0	0
Maryland	956	960	-0.4%	0	0	956	960	0	0	0	0
North Carolina	3,524	3,323	6.1%	3,524	3,323	0	0	0	0	0	0
South Carolina	4,537	4,532	0.1%	4,537	4,532	0	0	0	0	0	0
Virginia	2,474	2,480	-0.2%	2,474	2,480	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	7,179	6,544	9.7%	7,179	6,544	0	0	0	0	0	0
Alabama	3,389	2,796	21.2%	3,389	2,796	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	803	649	23.6%	803	649	0	0	0	0	0	0
Tennessee	2,988	3,099	-3.6%	2,988	3,099	0	0	0	0	0	0
West South Central	5,145	5,837	-11.9%	1,714	2,404	3,430	3,432	0	0	0	0
Arkansas	1,244	1,252	-0.6%	1,244	1,252	0	0	0	0	0	0
Louisiana	471	1,152	-59.2%	471	1,152	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	3,430	3,432	-0.1%	0	0	3,430	3,432	0	0	0	0
Mountain	2,686	2,556	5.1%	2,686	2,556	0	0	0	0	0	0
Arizona	2,686	2,556	5.1%	2,686	2,556	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	1,767	1,771	-0.2%	1,767	1,771	0	0	0	0	0	0
California	987	983	0.4%	987	983	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	780	788	-1.0%	780	788	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	64,715	64,790	-0.1%	34,243	33,941	30,472	30,849	0	0	0	0

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

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

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	5,635	5,590	0.8%	0	0	5,635	5,590	0	0	0	0
Connecticut	2,964	2,970	-0.2%	0	0	2,964	2,970	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	906	849	6.7%	0	0	906	849	0	0	0	0
New Hampshire	1,766	1,771	-0.3%	0	0	1,766	1,771	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	27,138	27,698	-2.0%	0	0	27,138	27,698	0	0	0	0
New Jersey	5,000	5,938	-15.8%	0	0	5,000	5,938	0	0	0	0
New York	7,643	7,347	4.0%	0	0	7,643	7,347	0	0	0	0
Pennsylvania	14,495	14,413	0.6%	0	0	14,495	14,413	0	0	0	0
East North Central	26,565	27,285	-2.6%	4,799	4,853	21,766	22,432	0	0	0	0
Illinois	16,435	16,490	-0.3%	0	0	16,435	16,490	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	5,839	6,016	-3.0%	4,799	4,853	1,040	1,163	0	0	0	0
Ohio	2,600	3,067	-15.2%	0	0	2,600	3,067	0	0	0	0
Wisconsin	1,691	1,712	-1.2%	0	0	1,691	1,712	0	0	0	0
West North Central	7,899	7,975	-0.9%	7,039	7,110	860	864	0	0	0	0
Iowa	860	864	-0.5%	0	0	860	864	0	0	0	0
Kansas	1,736	1,735	0.0%	1,736	1,735	0	0	0	0	0	0
Minnesota	2,442	2,506	-2.5%	2,442	2,506	0	0	0	0	0	0
Missouri	1,725	1,748	-1.3%	1,725	1,748	0	0	0	0	0	0
Nebraska	1,136	1,121	1.3%	1,136	1,121	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	35,038	34,708	0.9%	32,729	32,402	2,309	2,306	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	5,294	5,255	0.7%	5,294	5,255	0	0	0	0	0	0
Georgia	5,308	5,271	0.7%	5,308	5,271	0	0	0	0	0	0
Maryland	2,309	2,306	0.1%	0	0	2,309	2,306	0	0	0	0
North Carolina	7,406	7,042	5.2%	7,406	7,042	0	0	0	0	0	0
South Carolina	9,546	9,567	-0.2%	9,546	9,567	0	0	0	0	0	0
Virginia	5,174	5,266	-1.7%	5,174	5,266	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	15,740	14,313	10.0%	15,740	14,313	0	0	0	0	0	0
Alabama	7,401	6,557	12.9%	7,401	6,557	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	1,854	1,152	60.9%	1,854	1,152	0	0	0	0	0	0
Tennessee	6,486	6,604	-1.8%	6,486	6,604	0	0	0	0	0	0
West South Central	10,438	12,031	-13.2%	3,780	4,790	6,659	7,241	0	0	0	0
Arkansas	2,633	2,626	0.3%	2,633	2,626	0	0	0	0	0	0
Louisiana	1,146	2,164	-47.0%	1,146	2,164	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	6,659	7,241	-8.0%	0	0	6,659	7,241	0	0	0	0
Mountain	5,665	5,540	2.2%	5,665	5,540	0	0	0	0	0	0
Arizona	5,665	5,540	2.2%	5,665	5,540	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	4,298	4,299	0.0%	4,298	4,299	0	0	0	0	0	0
California	2,669	2,649	0.7%	2,669	2,649	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	1,629	1,650	-1.3%	1,629	1,650	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	138,416	139,439	-0.7%	74,049	73,307	64,367	66,132	0	0	0	0

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

Table 1.10.A. Utility Scale Facility Net Generation from Hydroelectric (Conventional) Power by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	686	616	11.5%	101	89	575	495	1	0	NM	31
Connecticut	36	30	18.7%	4	4	31	26	0	0	0	0
Maine	290	275	5.5%	0	0	280	244	0	0	NM	30
Massachusetts	96	86	12.2%	26	22	70	63	1	0	0	1
New Hampshire	147	121	21.6%	28	27	118	93	0	0	0	0
Rhode Island	0	0	134.1%	0	0	0	0	0	0	0	0
Vermont	117	104	12.4%	42	36	75	69	0	0	0	0
Middle Atlantic	2,637	2,608	1.1%	1,893	1,926	737	676	0	0	6	6
New Jersey	3	3	-21.1%	0	0	3	3	0	0	0	0
New York	2,331	2,342	-0.5%	1,880	1,915	445	420	0	0	6	6
Pennsylvania	303	263	15.4%	13	10	290	253	0	0	0	0
East North Central	379	505	-24.9%	323	440	45	49	0	0	NM	16
Illinois	NM	10	NM	NM	NM	NM	6	0	0	0	0
Indiana	29	25	15.4%	29	25	0	0	0	0	0	0
Michigan	113	167	-32.0%	104	153	NM	NM	0	0	NM	NM
Ohio	47	42	9.5%	26	23	NM	NM	0	0	0	0
Wisconsin	181	261	-30.7%	161	234	NM	NM	0	0	NM	14
West North Central	917	1,253	-26.8%	892	1,220	NM	23	0	0	6	10
Iowa	70	104	-32.8%	69	104	1	0	0	0	0	0
Kansas	2	2	-6.1%	0	0	2	2	0	0	0	0
Minnesota	83	121	-31.2%	61	91	NM	NM	0	0	6	10
Missouri	130	101	28.7%	130	101	0	0	0	0	0	0
Nebraska	103	151	-32.2%	103	151	0	0	0	0	0	0
North Dakota	174	257	-32.0%	174	257	0	0	0	0	0	0
South Dakota	356	517	-31.2%	356	517	0	0	0	0	0	0
South Atlantic	1,587	1,225	29.6%	1,231	893	308	286	2	1	46	45
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	NM	18	NM	NM	18	0	0	0	0	0	0
Georgia	301	203	47.8%	299	201	NM	NM	0	0	0	1
Maryland	250	236	6.2%	0	0	250	236	0	0	0	0
North Carolina	464	345	34.4%	456	339	NM	NM	2	1	NM	NM
South Carolina	265	187	41.4%	257	181	NM	6	0	0	0	0
Virginia	143	100	42.6%	138	95	NM	6	0	0	0	0
West Virginia	145	135	7.0%	62	60	38	32	0	0	46	43
East South Central	2,220	1,905	16.5%	2,219	1,904	NM	NM	0	0	0	0
Alabama	1,096	849	29.0%	1,096	849	0	0	0	0	0	0
Kentucky	316	332	-4.7%	315	331	NM	NM	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	807	723	11.6%	807	723	0	0	0	0	0	0
West South Central	791	602	31.3%	706	524	85	78	NM	NM	0	0
Arkansas	344	254	35.3%	340	252	NM	NM	0	0	0	0
Louisiana	77	73	6.1%	0	0	77	73	0	0	0	0
Oklahoma	220	175	25.8%	220	175	0	0	0	0	0	0
Texas	150	100	49.0%	146	98	4	3	NM	NM	0	0
Mountain	2,413	3,349	-28.0%	2,314	3,201	98	148	0	0	0	0
Arizona	448	583	-23.1%	448	583	0	0	0	0	0	0
Colorado	135	191	-29.2%	119	167	NM	NM	0	0	0	0
Idaho	723	1,067	-32.2%	656	965	66	101	0	0	0	0
Montana	742	1,090	-32.0%	731	1,075	NM	NM	0	0	0	0
Nevada	187	158	18.3%	183	151	NM	NM	0	0	0	0
New Mexico	NM	NM	NM	NM	NM	0	0	0	0	0	0
Utah	89	131	-32.0%	88	130	1	1	0	0	0	0
Wyoming	76	111	-31.7%	76	111	0	0	0	0	0	0
Pacific Contiguous	10,284	13,300	-22.7%	10,107	13,162	176	137	NM	NM	0	0
California	2,234	1,155	93.3%	2,106	1,090	126	64	NM	NM	0	0
Oregon	2,699	3,841	-29.7%	2,678	3,810	NM	31	0	0	0	0
Washington	5,352	8,303	-35.5%	5,323	8,261	28	41	0	0	0	0
Pacific Noncontiguous	117	171	-31.9%	100	147	1	2	NM	NM	NM	NM
Alaska	112	164	-31.5%	99	145	0	0	NM	NM	0	0
Hawaii	NM	NM	NM	0	2	1	2	0	0	NM	NM
U.S. Total	22,031	25,533	-13.7%	19,887	23,504	2,045	1,895	NM	23	81	112

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

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

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	1,536	1,193	28.8%	226	171	1,288	960	1	1	22	61
Connecticut	82	56	46.2%	10	7	72	50	0	0	0	0
Maine	637	537	18.7%	0	0	616	477	0	0	22	60
Massachusetts	215	166	29.6%	59	42	155	122	1	1	0	1
New Hampshire	339	230	47.1%	62	54	276	176	0	0	0	0
Rhode Island	1	0	136.3%	0	0	1	0	0	0	0	0
Vermont	262	203	29.1%	95	69	167	134	0	0	0	0
Middle Atlantic	5,706	5,188	10.0%	4,049	3,864	1,644	1,312	1	1	12	12
New Jersey	6	5	29.7%	0	0	6	5	0	0	0	0
New York	5,015	4,680	7.1%	4,021	3,847	981	821	1	1	12	12
Pennsylvania	685	503	36.2%	28	17	658	487	0	0	0	0
East North Central	815	1,029	-20.8%	695	896	97	98	0	0	22	34
Illinois	22	20	10.0%	NM	8	13	11	0	0	0	0
Indiana	67	49	36.2%	67	49	0	0	0	0	0	0
Michigan	239	340	-29.7%	219	313	NM	22	0	0	NM	NM
Ohio	104	83	25.9%	60	45	44	NM	0	0	0	0
Wisconsin	383	537	-28.7%	340	481	NM	27	0	0	20	29
West North Central	1,955	2,512	-22.2%	1,902	2,445	41	46	0	0	12	21
Iowa	152	220	-31.2%	150	220	1	1	0	0	0	0
Kansas	5	4	17.4%	0	0	5	4	0	0	0	0
Minnesota	178	252	-29.5%	131	190	35	42	0	0	12	21
Missouri	309	191	61.9%	309	191	0	0	0	0	0	0
Nebraska	216	309	-29.9%	216	309	0	0	0	0	0	0
North Dakota	366	519	-29.6%	366	519	0	0	0	0	0	0
South Dakota	730	1,017	-28.2%	730	1,017	0	0	0	0	0	0
South Atlantic	3,781	2,271	66.5%	2,999	1,665	676	516	4	2	102	88
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	44	35	27.6%	44	35	0	0	0	0	0	0
Georgia	736	393	87.1%	731	389	NM	NM	0	0	1	2
Maryland	548	423	29.4%	0	0	548	423	0	0	0	0
North Carolina	1,159	627	84.8%	1,142	617	NM	7	3	1	NM	NM
South Carolina	644	341	89.2%	629	329	NM	11	1	0	0	0
Virginia	328	188	74.5%	317	178	NM	10	0	0	0	0
West Virginia	321	264	21.6%	135	117	86	62	0	0	100	85
East South Central	5,043	3,629	39.0%	5,041	3,628	NM	NM	0	0	0	0
Alabama	2,481	1,531	62.0%	2,481	1,531	0	0	0	0	0	0
Kentucky	745	703	6.1%	744	701	NM	NM	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	1,817	1,395	30.2%	1,817	1,395	0	0	0	0	0	0
West South Central	1,833	1,137	61.2%	1,647	983	186	154	NM	NM	0	0
Arkansas	790	479	64.8%	782	473	8	NM	0	0	0	0
Louisiana	170	142	20.0%	0	0	170	142	0	0	0	0
Oklahoma	510	332	53.9%	510	332	0	0	0	0	0	0
Texas	363	184	96.8%	355	179	8	6	NM	NM	0	0
Mountain	4,963	6,693	-25.9%	4,754	6,393	208	300	1	1	0	0
Arizona	910	1,146	-20.6%	910	1,146	0	0	0	0	0	0
Colorado	275	364	-24.3%	242	317	33	47	1	1	0	0
Idaho	1,514	2,159	-29.9%	1,373	1,954	142	204	0	0	0	0
Montana	1,553	2,202	-29.5%	1,531	2,171	NM	31	0	0	0	0
Nevada	339	296	14.5%	330	282	NM	14	0	0	0	0
New Mexico	NM	35	NM	NM	35	0	0	0	0	0	0
Utah	188	269	-30.0%	186	266	3	3	0	0	0	0
Wyoming	158	222	-29.0%	158	222	0	0	0	0	0	0
Pacific Contiguous	20,700	27,137	-23.7%	20,384	26,834	313	301	NM	NM	0	0
California	3,734	2,717	37.4%	3,521	2,561	210	154	NM	NM	0	0
Oregon	5,656	8,022	-29.5%	5,612	7,959	45	63	0	0	0	0
Washington	11,310	16,398	-31.0%	11,251	16,315	59	84	0	0	0	0
Pacific Noncontiguous	241	339	-28.9%	206	288	2	5	NM	39	NM	NM
Alaska	232	325	-28.6%	205	286	0	0	NM	39	0	0
Hawaii	NM	14	NM	1	2	2	5	0	0	NM	NM
U.S. Total	46,574	51,129	-8.9%	41,902	47,168	4,458	3,692	38	45	176	224

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

Table 1.11.A. Utility Scale Facility Net Generation from Renewable Sources Excluding Hydroelectric by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	948	1,012	-6.3%	69	80	781	831	14	16	84	85
Connecticut	70	68	3.0%	0	0	70	68	NM	NM	NM	NM
Maine	415	450	-8.0%	0	0	326	358	5	8	83	85
Massachusetts	181	190	-4.7%	10	7	166	179	5	4	NM	0
New Hampshire	163	182	-10.1%	20	24	140	153	4	4	0	0
Rhode Island	41	33	23.3%	0	0	41	33	1	1	0	0
Vermont	78	89	-12.0%	39	48	39	41	0	0	0	0
Middle Atlantic	1,143	1,359	-15.9%	5	5	1,038	1,237	49	51	52	65
New Jersey	143	147	-2.6%	5	5	117	119	21	23	NM	NM
New York	553	651	-15.1%	0	0	523	619	15	16	15	16
Pennsylvania	447	560	-20.2%	0	0	397	500	13	12	36	49
East North Central	2,984	3,150	-5.3%	278	376	2,561	2,623	19	20	125	132
Illinois	1,255	1,287	-2.4%	4	5	1,250	1,281	NM	NM	0	0
Indiana	600	583	2.9%	32	35	561	541	2	2	5	6
Michigan	627	727	-13.7%	141	191	423	473	9	9	54	54
Ohio	246	227	8.4%	NM	NM	220	198	1	1	23	24
Wisconsin	255	326	-21.9%	99	141	107	131	6	7	43	47
West North Central	6,415	6,831	-6.1%	2,054	2,156	4,290	4,607	16	15	55	54
Iowa	1,924	1,967	-2.2%	1,253	1,250	663	711	3	4	4	2
Kansas	1,551	1,594	-2.7%	138	151	1,412	1,442	NM	NM	0	0
Minnesota	1,070	1,283	-16.6%	221	262	794	966	5	4	51	51
Missouri	241	282	-14.7%	NM	5	231	272	5	5	0	0
Nebraska	527	459	14.8%	28	22	498	436	2	1	0	0
North Dakota	872	995	-12.4%	342	392	529	603	0	0	NM	NM
South Dakota	231	251	-7.9%	68	75	163	176	0	0	0	0
South Atlantic	2,629	2,790	-5.7%	472	395	1,339	1,498	29	32	789	865
Delaware	8	9	-6.7%	NM	NM	NM	7	0	1	1	1
District of Columbia	5	5	-3.3%	0	0	NM	0	4	5	0	0
Florida	654	609	7.4%	285	198	209	243	4	4	156	164
Georgia	472	558	-15.5%	17	19	162	209	NM	NM	292	330
Maryland	95	116	-17.6%	NM	NM	84	103	3	3	8	10
North Carolina	667	686	-2.8%	24	27	537	545	7	9	98	105
South Carolina	247	250	-1.2%	44	37	73	70	0	0	130	143
Virginia	349	376	-7.0%	100	114	135	140	11	11	104	111
West Virginia	131	181	-27.4%	0	0	131	181	0	0	0	0
East South Central	545	556	-1.9%	13	14	77	77	NM	NM	455	464
Alabama	295	305	-3.1%	NM	NM	37	38	0	0	256	264
Kentucky	39	42	-5.7%	10	11	NM	NM	0	0	28	29
Mississippi	122	117	4.1%	0	0	18	17	0	0	105	100
Tennessee	89	92	-3.6%	NM	0	21	21	NM	NM	67	71
West South Central	9,460	9,083	4.1%	122	122	8,935	8,546	9	7	395	408
Arkansas	130	134	-2.4%	NM	NM	17	17	0	0	113	116
Louisiana	198	203	-2.6%	NM	NM	NM	7	0	0	191	196
Oklahoma	2,169	2,304	-5.9%	103	104	2,044	2,175	0	0	22	25
Texas	6,962	6,442	8.1%	18	17	6,868	6,346	8	7	68	72
Mountain	3,581	3,658	-2.1%	420	319	3,086	3,300	49	8	26	32
Arizona	341	384	-11.1%	35	42	306	341	NM	NM	0	0
Colorado	950	834	13.9%	184	25	765	807	NM	NM	0	0
Idaho	253	339	-25.2%	14	17	214	291	1	1	24	30
Montana	181	202	-10.6%	17	20	162	180	0	0	2	2
Nevada	620	618	0.3%	2	2	573	611	44	4	0	0
New Mexico	657	629	4.6%	14	16	643	612	NM	NM	0	0
Utah	255	246	3.5%	20	21	233	225	1	1	0	0
Wyoming	324	407	-20.4%	134	174	190	233	0	0	0	0
Pacific Contiguous	5,204	6,115	-14.9%	476	783	4,467	5,049	67	74	194	209
California	4,116	4,240	-2.9%	149	158	3,845	3,953	64	71	59	58
Oregon	477	897	-46.9%	49	122	383	727	2	2	43	46
Washington	611	978	-37.5%	278	503	240	369	1	1	92	105
Pacific Noncontiguous	124	120	3.7%	16	16	91	90	18	14	NM	NM
Alaska	13	19	-29.4%	NM	10	NM	NM	3	4	NM	NM
Hawaii	111	101	10.0%	9	6	87	84	15	10	0	0
U.S. Total	33,034	34,674	-4.7%	3,924	4,265	26,666	27,858	270	237	2,174	2,314

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

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

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	1,970	2,079	-5.2%	153	174	1,608	1,689	31	33	177	183
Connecticut	135	136	-1.2%	0	0	134	136	NM	NM	NM	NM
Maine	857	946	-9.4%	0	0	670	748	11	15	177	182
Massachusetts	374	368	1.7%	20	14	344	344	11	9	NM	1
New Hampshire	354	373	-5.1%	49	54	297	313	8	6	0	0
Rhode Island	83	68	21.5%	0	0	81	67	1	1	0	0
Vermont	168	188	-10.6%	84	106	83	82	0	0	0	0
Middle Atlantic	2,412	2,720	-11.3%	10	9	2,190	2,466	105	105	108	140
New Jersey	294	289	1.7%	10	9	239	234	44	45	NM	NM
New York	1,162	1,280	-9.3%	0	0	1,098	1,212	33	33	31	35
Pennsylvania	957	1,150	-16.8%	0	0	852	1,020	28	26	77	104
East North Central	6,434	6,924	-7.1%	596	763	5,528	5,840	41	43	269	278
Illinois	2,699	2,826	-4.5%	9	10	2,689	2,814	NM	NM	0	0
Indiana	1,269	1,327	-4.3%	67	69	1,187	1,241	4	3	11	13
Michigan	1,363	1,580	-13.7%	301	389	930	1,057	19	20	114	114
Ohio	548	514	6.5%	NM	6	492	453	3	2	48	52
Wisconsin	555	677	-18.0%	215	288	230	274	15	16	95	99
West North Central	13,914	15,030	-7.4%	4,530	4,852	9,237	10,036	33	33	115	109
Iowa	4,257	4,413	-3.5%	2,797	2,835	1,446	1,567	8	7	7	4
Kansas	3,280	3,397	-3.5%	278	311	2,999	3,083	NM	NM	0	0
Minnesota	2,323	2,740	-15.2%	489	580	1,717	2,047	9	11	107	103
Missouri	510	604	-15.6%	NM	10	491	584	10	10	0	1
Nebraska	1,102	1,056	4.4%	59	46	1,040	1,009	3	2	0	0
North Dakota	1,934	2,241	-13.7%	747	896	1,186	1,344	0	0	1	1
South Dakota	509	577	-11.8%	150	175	358	402	0	0	0	0
South Atlantic	5,455	5,649	-3.4%	947	799	2,778	2,976	62	63	1,667	1,811
Delaware	17	17	-0.6%	NM	NM	14	14	1	1	2	2
District of Columbia	10	10	8.6%	0	0	NM	0	9	10	0	0
Florida	1,314	1,242	5.8%	562	392	443	498	8	8	301	344
Georgia	1,001	1,121	-10.7%	36	34	331	408	NM	NM	633	678
Maryland	209	239	-12.3%	NM	NM	185	214	6	5	18	18
North Carolina	1,344	1,344	0.0%	48	51	1,080	1,053	14	16	202	225
South Carolina	508	510	-0.4%	81	70	153	138	0	0	274	301
Virginia	761	795	-4.3%	218	250	281	279	24	23	237	243
West Virginia	291	372	-21.8%	0	0	291	372	0	0	0	0
East South Central	1,126	1,160	-2.9%	26	28	157	155	NM	NM	942	977
Alabama	609	617	-1.2%	4	5	77	77	0	0	528	535
Kentucky	82	87	-5.6%	22	23	NM	NM	0	0	58	62
Mississippi	254	268	-5.2%	0	0	38	38	0	0	216	230
Tennessee	181	188	-3.8%	NM	0	40	38	NM	NM	140	150
West South Central	19,476	19,172	1.6%	258	260	18,382	18,054	18	15	818	844
Arkansas	270	271	-0.2%	NM	NM	36	39	1	1	233	230
Louisiana	409	426	-3.9%	NM	NM	14	14	0	0	395	411
Oklahoma	4,636	4,979	-6.9%	223	223	4,366	4,703	0	0	48	53
Texas	14,160	13,496	4.9%	35	36	13,966	13,298	17	14	142	149
Mountain	7,297	7,403	-1.4%	871	663	6,271	6,659	98	15	57	67
Arizona	669	732	-8.6%	69	80	599	651	NM	NM	0	0
Colorado	1,964	1,770	11.0%	369	53	1,592	1,714	NM	NM	1	0
Idaho	544	687	-20.9%	31	37	458	585	2	2	53	63
Montana	418	438	-4.4%	37	45	378	390	0	0	3	3
Nevada	1,247	1,198	4.1%	4	5	1,153	1,186	90	8	0	0
New Mexico	1,275	1,242	2.7%	27	30	1,248	1,211	NM	NM	0	0
Utah	479	471	1.7%	43	44	433	426	3	2	0	0
Wyoming	701	866	-19.0%	293	370	409	496	0	0	0	0
Pacific Contiguous	10,255	11,572	-11.4%	960	1,385	8,740	9,592	142	152	413	443
California	7,972	8,201	-2.8%	282	280	7,432	7,652	135	144	123	124
Oregon	985	1,513	-34.9%	92	178	797	1,233	5	5	91	97
Washington	1,298	1,858	-30.1%	586	928	511	707	2	2	199	221
Pacific Noncontiguous	249	256	-2.9%	31	37	180	185	37	34	NM	NM
Alaska	28	38	-26.5%	14	19	NM	10	6	8	NM	NM
Hawaii	221	218	1.2%	18	17	172	175	31	26	0	0
U.S. Total	68,591	71,964	-4.7%	8,383	8,970	55,071	57,652	568	491	4,568	4,850

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

Table 1.12.A. Utility Scale Facility Net Generation from Hydroelectric (Pumped Storage) Power by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	-32	-44	-28.4%	0	0	-32	-44	0	0	0	0
Connecticut	-2	-3	-13.5%	0	0	-2	-3	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-29	-41	-29.4%	0	0	-29	-41	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	-70	-82	-14.4%	-23	-37	-47	-45	0	0	0	0
New Jersey	-8	-8	-2.8%	-8	-8	0	0	0	0	0	0
New York	-15	-29	-47.6%	-15	-29	0	0	0	0	0	0
Pennsylvania	-47	-45	4.5%	0	0	-47	-45	0	0	0	0
East North Central	-39	-42	-7.6%	-39	-42	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	-39	-42	-7.6%	-39	-42	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	41	5	794.4%	41	5	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	41	5	794.4%	41	5	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	-111	-125	-11.0%	-111	-125	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	-3	-32	-91.9%	-3	-32	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	-67	-9	631.2%	-67	-9	0	0	0	0	0	0
Virginia	-42	-84	-49.8%	-42	-84	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-45	-45	0.8%	-45	-45	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	-45	-45	0.8%	-45	-45	0	0	0	0	0	0
West South Central	-6	-6	-5.8%	-6	-6	0	0	0	0	0	0
Arkansas	2	0	688.7%	2	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-8	-6	25.0%	-8	-6	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-40	-43	-5.5%	-40	-43	0	0	0	0	0	0
Arizona	-26	-14	88.2%	-26	-14	0	0	0	0	0	0
Colorado	-14	-29	-51.6%	-14	-29	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	-86	68	-226.7%	-86	68	0	0	0	0	0	0
California	-87	55	-258.9%	-87	55	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	1	13	-93.7%	1	13	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	-389	-315	23.3%	-310	-226	-79	-89	0	0	0	0

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

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

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	-59	-69	-13.3%	0	0	-59	-69	0	0	0	0
Connecticut	7	-3	-336.5%	0	0	7	-3	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-67	-65	2.1%	0	0	-67	-65	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	-149	-184	-18.8%	-54	-91	-95	-93	0	0	0	0
New Jersey	-10	-19	-45.1%	-10	-19	0	0	0	0	0	0
New York	-44	-72	-38.9%	-44	-72	0	0	0	0	0	0
Pennsylvania	-95	-93	2.0%	0	0	-95	-93	0	0	0	0
East North Central	-69	-104	-33.6%	-69	-104	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	-69	-104	-33.6%	-69	-104	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	91	-3	NM	91	-3	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	91	-3	NM	91	-3	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	-157	-335	-53.0%	-157	-335	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	39	-120	-132.1%	39	-120	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	-108	-61	77.3%	-108	-61	0	0	0	0	0	0
Virginia	-88	-154	-42.7%	-88	-154	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-95	-89	6.5%	-95	-89	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	-95	-89	6.5%	-95	-89	0	0	0	0	0	0
West South Central	-10	-14	-30.0%	-10	-14	0	0	0	0	0	0
Arkansas	7	2	242.1%	7	2	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-17	-16	4.4%	-17	-16	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-76	-90	-15.1%	-76	-90	0	0	0	0	0	0
Arizona	-42	-31	36.5%	-42	-31	0	0	0	0	0	0
Colorado	-34	-58	-42.6%	-34	-58	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	-187	24	-885.4%	-187	24	0	0	0	0	0	0
California	-189	5	NM	-189	5	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	2	19	-89.6%	2	19	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	-712	-862	-17.5%	-557	-701	-154	-162	0	0	0	0

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

Table 1.13.A. Utility Scale Facility Net Generation from Other Energy Sources by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	128	147	-12.8%	0	0	114	127	5	7	10	12
Connecticut	38	41	-7.1%	0	0	38	41	0	0	0	0
Maine	25	33	-23.7%	0	0	11	13	5	7	10	12
Massachusetts	61	69	-11.5%	0	0	61	69	0	0	0	0
New Hampshire	4	4	-6.2%	0	0	4	4	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	172	174	-1.4%	0	0	137	141	32	33	2	0
New Jersey	39	40	-1.9%	0	0	26	28	11	12	2	0
New York	68	65	5.0%	0	0	55	51	13	15	0	0
Pennsylvania	64	69	-7.1%	0	0	56	62	8	7	0	0
East North Central	45	65	-31.1%	2	2	9	10	10	10	24	43
Illinois	-1	21	-103.3%	0	0	-1	-1	0	0	0	22
Indiana	22	19	14.9%	0	0	0	0	2	2	20	17
Michigan	21	22	-5.1%	0	0	10	12	9	9	2	2
Ohio	0	1	-70.4%	0	0	0	0	0	0	0	1
Wisconsin	NM	3	NM	2	2	0	0	0	0	NM	NM
West North Central	25	34	-25.8%	11	15	9	11	NM	3	5	6
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	-0.7%	0	0	0	0	0	0	0	0
Minnesota	22	30	-27.6%	7	11	9	11	NM	3	4	5
Missouri	0	1	-100.0%	0	1	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	3	3	1.2%	3	3	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	331	352	-5.9%	0	0	190	200	10	9	132	142
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	227	237	-4.0%	0	0	127	125	0	0	100	112
Georgia	8	6	25.1%	0	0	0	0	0	0	8	6
Maryland	9	25	-62.6%	0	0	9	25	0	0	0	0
North Carolina	46	46	1.3%	0	0	26	23	0	0	20	22
South Carolina	4	3	35.0%	0	0	0	0	0	0	3	3
Virginia	37	37	2.3%	0	0	28	27	10	9	0	0
West Virginia	-1	-1	-49.3%	0	0	-1	-1	0	0	0	0
East South Central	2	4	-40.0%	1	3	0	0	0	0	NM	NM
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	1	3	-41.6%	1	3	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	NM	NM	NM	0	0	0	0	0	0	NM	NM
West South Central	86	80	8.6%	0	0	5	11	0	0	81	68
Arkansas	0	1	-48.1%	0	0	0	0	0	0	0	1
Louisiana	44	48	-8.2%	0	0	0	0	0	0	44	48
Oklahoma	0	5	-93.0%	0	0	0	4	0	0	0	0
Texas	42	27	58.5%	0	0	5	7	0	0	37	20
Mountain	50	63	-19.9%	7	7	21	26	0	0	22	29
Arizona	0	0	NM	0	0	0	0	0	0	0	0
Colorado	4	5	-25.5%	0	0	0	1	0	0	3	3
Idaho	6	5	5.3%	0	0	0	0	0	0	6	5
Montana	21	25	-14.8%	0	0	21	25	0	0	0	0
Nevada	2	3	-8.7%	2	3	0	0	0	0	0	0
New Mexico	0	0	34.5%	0	0	0	0	0	0	0	0
Utah	12	18	-34.6%	4	5	0	0	0	0	7	13
Wyoming	6	7	-14.6%	0	0	0	0	0	0	6	7
Pacific Contiguous	59	58	0.6%	0	0	15	22	0	0	44	37
California	55	51	7.6%	0	0	10	14	0	0	44	37
Oregon	0	3	-101.5%	0	0	0	3	0	0	0	0
Washington	4	5	-9.8%	0	0	4	5	0	0	0	0
Pacific Noncontiguous	26	24	7.1%	12	14	0	0	14	10	0	0
Alaska	0	0	70.2%	0	0	0	0	0	0	0	0
Hawaii	26	24	7.4%	12	14	0	0	14	10	0	0
U.S. Total	925	1,001	-7.6%	32	40	500	549	72	73	321	339

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

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

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	266	291	-8.5%	0	0	236	253	10	14	20	24
Connecticut	70	82	-14.6%	0	0	70	82	0	0	0	0
Maine	53	65	-18.5%	0	0	22	27	10	14	20	24
Massachusetts	136	136	-0.5%	0	0	136	136	0	0	0	0
New Hampshire	8	8	-0.3%	0	0	8	8	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	377	370	1.8%	0	0	297	294	71	71	8	6
New Jersey	92	95	-3.0%	0	0	59	64	24	25	8	6
New York	138	131	5.9%	0	0	109	101	30	30	0	0
Pennsylvania	146	145	1.3%	0	0	129	129	17	16	0	0
East North Central	125	147	-14.6%	4	3	20	21	22	22	80	100
Illinois	23	44	-48.2%	0	0	-2	-2	0	0	25	46
Indiana	52	48	8.9%	0	0	0	0	4	3	48	45
Michigan	44	46	-6.1%	0	0	21	24	18	19	4	4
Ohio	1	2	-76.4%	0	0	0	0	0	0	1	3
Wisconsin	6	6	6.0%	4	4	0	0	0	0	NM	NM
West North Central	63	68	-7.7%	28	28	22	23	NM	6	10	11
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	1	1	-1.0%	0	0	0	0	0	0	1	1
Minnesota	55	59	-7.8%	21	21	22	23	NM	6	9	11
Missouri	0	1	-100.0%	0	1	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	7	7	2.3%	7	7	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	731	738	-1.0%	0	0	404	416	21	20	307	303
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	509	503	1.0%	0	0	267	263	0	0	242	240
Georgia	16	13	22.5%	0	0	0	0	0	0	16	13
Maryland	29	52	-45.1%	0	0	29	52	0	0	0	0
North Carolina	91	97	-5.8%	0	0	50	52	0	0	41	45
South Carolina	9	5	57.6%	0	0	1	1	0	0	8	5
Virginia	79	70	13.7%	0	0	58	50	21	20	0	0
West Virginia	-1	-2	-47.8%	0	0	-1	-2	0	0	0	0
East South Central	7	8	-14.0%	6	6	0	0	0	0	1	2
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	6	6	-4.8%	6	6	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	1	2	-40.2%	0	0	0	0	0	0	1	2
West South Central	189	173	8.9%	0	0	14	23	0	0	174	150
Arkansas	0	1	-54.7%	0	0	0	0	0	0	0	1
Louisiana	93	92	1.0%	0	0	0	0	0	0	93	92
Oklahoma	1	9	-87.4%	0	0	1	9	0	0	0	0
Texas	94	71	32.7%	0	0	13	14	0	0	81	57
Mountain	107	132	-19.3%	12	15	48	54	0	0	47	63
Arizona	-1	0	745.5%	0	0	-1	0	0	0	0	0
Colorado	7	11	-30.0%	0	0	0	4	0	0	7	7
Idaho	12	12	2.4%	0	0	0	0	0	0	12	12
Montana	48	51	-4.7%	0	0	48	51	0	0	0	0
Nevada	2	6	-56.2%	2	6	0	0	0	0	0	0
New Mexico	0	0	-74.1%	0	0	0	0	0	0	0	0
Utah	24	40	-39.3%	9	10	0	0	0	0	15	30
Wyoming	13	14	-7.1%	0	0	0	0	0	0	13	14
Pacific Contiguous	133	132	1.3%	0	-1	32	45	0	0	101	87
California	124	115	7.1%	0	0	22	29	0	0	101	87
Oregon	0	7	-101.1%	0	0	0	7	0	0	0	0
Washington	10	10	2.8%	0	0	10	10	0	0	0	0
Pacific Noncontiguous	55	56	-1.6%	25	30	0	0	30	25	0	0
Alaska	-1	0	44.0%	-1	0	0	0	0	0	0	0
Hawaii	55	56	-1.3%	25	31	0	0	30	25	0	0
U.S. Total	2,053	2,116	-2.9%	74	82	1,074	1,129	157	158	750	746

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

Table 1.14.A. Utility Scale Facility Net Generation from Wind by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	304	363	-16.3%	17	24	284	337	3	2	NM	0
Connecticut	NM	NM	NM	0	0	NM	NM	0	0	0	0
Maine	208	239	-13.2%	0	0	208	239	0	0	0	0
Massachusetts	18	23	-21.4%	NM	NM	NM	15	2	2	NM	0
New Hampshire	29	46	-36.7%	0	0	29	46	0	0	0	0
Rhode Island	21	15	36.3%	0	0	20	15	1	1	0	0
Vermont	28	39	-28.3%	13	18	15	21	0	0	0	0
Middle Atlantic	621	822	-24.5%	0	0	621	822	NM	NM	0	0
New Jersey	NM	NM	NM	0	0	NM	NM	0	0	0	0
New York	358	459	-22.0%	0	0	358	458	NM	NM	0	0
Pennsylvania	262	361	-27.5%	0	0	262	361	0	0	0	0
East North Central	2,504	2,640	-5.1%	205	296	2,289	2,333	NM	NM	NM	7
Illinois	1,220	1,242	-1.7%	NM	NM	1,219	1,240	NM	NM	0	0
Indiana	545	524	4.0%	0	0	545	524	0	0	0	0
Michigan	414	513	-19.2%	134	185	280	327	0	0	0	0
Ohio	184	163	13.1%	NM	NM	177	154	0	0	NM	7
Wisconsin	141	199	-29.0%	70	107	69	88	NM	NM	0	1
West North Central	6,180	6,566	-5.9%	2,015	2,112	4,162	4,451	NM	NM	0	0
Iowa	1,905	1,949	-2.3%	1,251	1,247	654	701	0	0	0	0
Kansas	1,546	1,589	-2.7%	138	151	1,407	1,437	NM	NM	0	0
Minnesota	887	1,070	-17.1%	195	231	690	837	NM	NM	0	0
Missouri	223	263	-15.2%	0	0	223	263	0	0	0	0
Nebraska	518	451	14.9%	22	16	496	434	0	0	0	0
North Dakota	871	994	-12.4%	342	392	529	603	0	0	0	0
South Dakota	231	250	-7.9%	68	75	163	176	0	0	0	0
South Atlantic	221	291	-24.1%	0	0	220	290	0	1	0	0
Delaware	0	1	-15.1%	0	0	0	0	0	1	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	42	53	-20.5%	0	0	42	53	0	0	0	0
North Carolina	47	56	-17.2%	0	0	47	56	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	131	181	-27.4%	0	0	131	181	0	0	0	0
East South Central	NM	6	NM	0	0	NM	6	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	NM	6	NM	0	0	NM	6	0	0	0	0
West South Central	8,757	8,399	4.3%	117	117	8,633	8,277	5	5	NM	NM
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	2,142	2,274	-5.8%	100	100	2,042	2,174	0	0	0	0
Texas	6,615	6,126	8.0%	18	17	6,591	6,103	5	5	NM	NM
Mountain	2,314	2,294	0.9%	347	235	1,965	2,058	NM	NM	0	0
Arizona	54	47	14.4%	0	0	54	47	0	0	0	0
Colorado	872	753	15.9%	183	25	688	727	NM	0	0	0
Idaho	185	256	-27.8%	13	16	172	240	0	0	0	0
Montana	177	198	-10.6%	17	20	160	178	0	0	0	0
Nevada	32	30	8.6%	0	0	32	30	0	0	0	0
New Mexico	580	544	6.5%	0	0	579	544	NM	NM	0	0
Utah	100	60	67.3%	0	0	100	60	0	0	0	0
Wyoming	315	407	-22.6%	134	174	180	233	0	0	0	0
Pacific Contiguous	2,087	2,655	-21.4%	358	629	1,728	2,025	1	1	0	0
California	1,251	1,067	17.2%	60	50	1,190	1,016	1	1	0	0
Oregon	353	767	-53.9%	44	116	309	650	0	0	0	0
Washington	482	821	-41.3%	253	462	229	359	0	0	0	0
Pacific Noncontiguous	56	59	-4.9%	NM	10	50	49	0	0	0	0
Alaska	NM	15	NM	NM	10	NM	NM	0	0	0	0
Hawaii	46	44	5.1%	0	0	46	44	0	0	0	0
U.S. Total	23,047	24,096	-4.4%	3,067	3,422	19,955	20,648	17	16	NM	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.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

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

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	629	746	-15.6%	37	49	585	690	7	6	NM	0
Connecticut	NM	NM	NM	0	0	NM	NM	0	0	0	0
Maine	421	497	-15.4%	0	0	421	497	0	0	0	0
Massachusetts	39	48	-19.1%	NM	12	23	30	5	4	NM	0
New Hampshire	62	87	-29.4%	0	0	62	87	0	0	0	0
Rhode Island	44	32	37.9%	0	0	42	30	1	1	0	0
Vermont	62	79	-21.4%	27	37	34	42	0	0	0	0
Middle Atlantic	1,333	1,631	-18.3%	0	0	1,332	1,629	NM	NM	0	1
New Jersey	NM	NM	NM	0	0	NM	NM	0	0	0	0
New York	760	885	-14.2%	0	0	759	884	NM	NM	0	1
Pennsylvania	570	741	-23.1%	0	0	570	741	0	0	0	0
East North Central	5,421	5,859	-7.5%	442	593	4,957	5,242	NM	NM	14	16
Illinois	2,626	2,734	-4.0%	NM	NM	2,623	2,730	NM	NM	0	0
Indiana	1,156	1,211	-4.6%	0	0	1,156	1,211	0	0	0	0
Michigan	916	1,130	-19.0%	289	379	627	751	0	0	0	0
Ohio	419	382	9.7%	NM	NM	403	364	1	1	NM	14
Wisconsin	305	402	-24.1%	150	208	149	186	NM	NM	1	2
West North Central	13,419	14,515	-7.6%	4,442	4,761	8,969	9,744	NM	9	0	0
Iowa	4,217	4,376	-3.6%	2,791	2,829	1,425	1,547	1	1	0	0
Kansas	3,270	3,387	-3.5%	278	311	2,989	3,073	NM	NM	0	0
Minnesota	1,935	2,331	-17.0%	429	517	1,501	1,809	NM	NM	0	0
Missouri	473	566	-16.4%	0	0	473	566	0	0	0	0
Nebraska	1,083	1,038	4.3%	47	33	1,037	1,005	0	0	0	0
North Dakota	1,933	2,240	-13.7%	747	896	1,186	1,344	0	0	0	0
South Dakota	508	576	-11.8%	150	175	358	401	0	0	0	0
South Atlantic	484	602	-19.5%	0	0	483	601	1	1	0	0
Delaware	1	1	20.4%	0	0	0	0	1	1	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	92	114	-19.7%	0	0	92	114	0	0	0	0
North Carolina	101	115	-12.3%	0	0	101	115	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	291	372	-21.8%	0	0	291	372	0	0	0	0
East South Central	NM	10	NM	0	0	NM	10	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	NM	10	NM	0	0	NM	10	0	0	0	0
West South Central	18,036	17,768	1.5%	250	251	17,774	17,507	10	8	NM	NM
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	4,579	4,916	-6.9%	216	216	4,363	4,699	0	0	0	0
Texas	13,457	12,852	4.7%	34	35	13,411	12,807	10	8	NM	NM
Mountain	4,763	4,803	-0.8%	726	502	4,036	4,300	NM	NM	1	0
Arizona	98	96	2.3%	0	0	98	96	0	0	0	0
Colorado	1,812	1,619	11.9%	368	53	1,442	1,566	NM	0	1	0
Idaho	400	524	-23.8%	28	35	371	489	0	0	0	0
Montana	411	430	-4.4%	37	45	374	385	0	0	0	0
Nevada	61	61	-0.7%	0	0	61	61	0	0	0	0
New Mexico	1,125	1,088	3.4%	0	0	1,124	1,087	NM	NM	0	0
Utah	172	120	43.6%	0	0	172	120	0	0	0	0
Wyoming	685	866	-20.9%	293	370	393	496	0	0	0	0
Pacific Contiguous	4,010	4,903	-18.2%	715	1,086	3,293	3,816	1	1	1	0
California	2,263	2,129	6.3%	100	77	2,162	2,051	1	1	1	0
Oregon	726	1,246	-41.7%	82	167	645	1,079	0	0	0	0
Washington	1,020	1,528	-33.2%	533	842	487	687	0	0	0	0
Pacific Noncontiguous	111	121	-8.6%	14	19	97	102	0	0	0	0
Alaska	22	30	-27.5%	14	19	NM	10	0	0	0	0
Hawaii	89	92	-2.5%	0	0	89	92	0	0	0	0
U.S. Total	48,211	50,958	-5.4%	6,627	7,262	41,532	43,642	35	34	18	19

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

Table 1.15.A. Utility Scale Facility Net Generation from Biomass by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	545	564	-3.3%	44	52	407	414	11	13	83	85
Connecticut	60	63	-5.1%	0	0	60	63	0	0	0	0
Maine	206	210	-2.0%	0	0	118	118	5	8	83	85
Massachusetts	88	97	-8.4%	0	0	86	95	2	2	0	0
New Hampshire	134	136	-1.2%	20	24	111	108	4	4	0	0
Rhode Island	17	16	3.9%	0	0	17	16	0	0	0	0
Vermont	40	42	-5.1%	24	27	16	15	0	0	0	0
Middle Atlantic	417	445	-6.3%	0	0	327	340	39	41	51	64
New Jersey	71	76	-6.5%	0	0	59	63	12	14	0	0
New York	166	174	-4.5%	0	0	137	142	14	16	15	16
Pennsylvania	180	195	-7.8%	0	0	131	135	13	11	36	48
East North Central	432	468	-7.6%	56	65	243	263	15	16	118	124
Illinois	32	42	-23.8%	3	3	29	39	0	0	0	0
Indiana	34	38	-10.8%	23	26	4	4	2	2	5	6
Michigan	202	207	-2.7%	0	0	138	144	9	9	54	54
Ohio	54	56	-4.0%	NM	NM	35	37	1	1	16	17
Wisconsin	111	125	-11.0%	29	34	36	40	4	4	43	46
West North Central	153	190	-19.7%	37	43	48	83	13	11	55	54
Iowa	18	17	4.7%	NM	NM	9	10	3	3	4	2
Kansas	NM	5	NM	0	0	NM	5	0	0	0	0
Minnesota	111	147	-24.8%	25	30	32	65	3	2	51	51
Missouri	12	14	-16.1%	NM	5	NM	NM	5	5	0	0
Nebraska	8	7	14.4%	6	6	0	0	2	1	0	0
North Dakota	NM	NM	NM	0	0	0	0	0	0	NM	NM
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	1,505	1,679	-10.4%	195	192	500	600	21	22	789	865
Delaware	NM	5	NM	0	0	NM	NM	0	0	1	1
District of Columbia	4	5	-16.7%	0	0	0	0	4	5	0	0
Florida	404	439	-8.0%	63	54	181	217	3	3	156	164
Georgia	361	430	-16.0%	0	0	68	100	0	0	292	330
Maryland	26	45	-42.8%	0	0	16	33	2	2	8	10
North Carolina	198	215	-8.1%	0	0	99	109	1	1	98	105
South Carolina	208	215	-3.5%	44	37	34	35	0	0	130	143
Virginia	300	325	-7.7%	88	102	98	102	11	11	104	111
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	489	500	-2.3%	NM	8	26	28	0	0	455	464
Alabama	274	283	-3.2%	0	0	18	19	0	0	256	264
Kentucky	36	38	-5.0%	NM	8	NM	NM	0	0	28	29
Mississippi	106	101	4.4%	0	0	NM	NM	0	0	105	100
Tennessee	72	77	-6.1%	0	0	NM	7	0	0	66	71
West South Central	448	476	-5.9%	0	0	51	66	3	3	393	407
Arkansas	121	124	-2.4%	0	0	7	8	0	0	113	116
Louisiana	198	203	-2.6%	0	0	NM	7	0	0	191	196
Oklahoma	23	26	-11.1%	0	0	NM	NM	0	0	22	25
Texas	106	123	-13.9%	0	0	36	50	3	2	67	71
Mountain	78	86	-9.2%	NM	NM	50	52	2	2	25	31
Arizona	15	15	-0.4%	0	0	15	15	0	0	0	0
Colorado	12	13	-0.6%	0	0	12	13	0	0	0	0
Idaho	36	43	-16.9%	NM	NM	10	11	1	1	24	30
Montana	2	2	1.5%	0	0	0	0	0	0	2	2
Nevada	NM	6	NM	0	0	NM	6	0	0	0	0
New Mexico	2	2	-16.3%	0	0	2	2	0	0	0	0
Utah	NM	6	NM	0	0	NM	5	1	1	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	640	709	-9.8%	30	58	363	382	57	64	190	206
California	438	469	-6.6%	NM	13	328	341	54	61	55	55
Oregon	75	84	-10.8%	NM	5	25	31	2	2	43	46
Washington	127	156	-19.0%	25	41	9	10	1	1	92	105
Pacific Noncontiguous	28	22	28.6%	6	3	NM	NM	18	14	NM	NM
Alaska	3	4	-11.8%	0	0	0	0	3	4	NM	NM
Hawaii	25	18	37.3%	6	3	NM	NM	15	10	0	0
U.S. Total	4,735	5,140	-7.9%	377	423	2,019	2,232	180	185	2,160	2,299

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

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

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	1,154	1,181	-2.3%	101	118	852	854	24	26	177	182
Connecticut	115	127	-9.8%	0	0	115	127	0	0	0	0
Maine	435	447	-2.7%	0	0	247	249	11	15	177	182
Massachusetts	194	193	0.2%	0	0	189	189	5	4	0	0
New Hampshire	292	286	2.3%	49	54	235	226	8	6	0	0
Rhode Island	32	32	-0.6%	0	0	32	32	0	0	0	0
Vermont	86	95	-9.5%	52	64	33	30	0	0	0	0
Middle Atlantic	879	925	-4.9%	0	0	687	701	86	86	106	137
New Jersey	155	162	-4.2%	0	0	127	133	28	29	0	0
New York	348	362	-3.7%	0	0	286	296	32	32	31	34
Pennsylvania	376	401	-6.2%	0	0	274	273	27	25	76	103
East North Central	924	987	-6.3%	122	143	514	548	34	34	255	261
Illinois	68	86	-21.2%	6	7	61	79	0	0	0	0
Indiana	71	77	-7.5%	48	53	8	8	4	3	11	13
Michigan	428	437	-2.1%	0	0	295	303	19	20	114	114
Ohio	113	118	-4.3%	NM	NM	74	76	1	1	35	37
Wisconsin	245	269	-9.0%	65	80	76	82	10	10	94	97
West North Central	330	381	-13.2%	84	88	105	160	25	24	115	109
Iowa	38	35	10.1%	NM	4	20	19	7	7	7	4
Kansas	NM	10	NM	0	0	NM	10	0	0	0	0
Minnesota	242	293	-17.4%	60	62	70	122	5	5	107	103
Missouri	25	28	-12.2%	NM	9	NM	8	10	10	0	1
Nebraska	16	14	8.6%	12	12	0	0	3	2	0	0
North Dakota	1	1	-18.5%	0	0	0	0	0	0	1	1
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	3,193	3,504	-8.9%	412	420	1,069	1,227	46	46	1,667	1,811
Delaware	10	10	-4.5%	0	0	NM	8	0	0	2	2
District of Columbia	9	10	-5.9%	0	0	0	0	9	10	0	0
Florida	829	918	-9.7%	136	121	384	446	7	7	301	343
Georgia	776	876	-11.4%	0	0	144	198	0	0	633	678
Maryland	64	91	-29.3%	0	0	42	68	4	4	18	18
North Carolina	417	458	-9.0%	0	0	213	231	2	2	202	225
South Carolina	426	443	-3.7%	81	70	72	71	0	0	274	301
Virginia	662	698	-5.2%	194	228	207	205	24	23	237	243
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	1,013	1,050	-3.6%	16	17	55	57	0	0	942	976
Alabama	566	575	-1.5%	0	0	39	41	0	0	528	535
Kentucky	76	80	-5.1%	16	17	NM	NM	0	0	58	62
Mississippi	218	232	-5.9%	0	0	NM	NM	0	0	216	230
Tennessee	152	163	-6.7%	0	0	13	13	0	0	139	149
West South Central	933	995	-6.2%	0	0	109	146	7	6	816	842
Arkansas	250	248	0.8%	0	0	16	17	1	1	233	230
Louisiana	409	426	-3.9%	0	0	14	14	0	0	395	411
Oklahoma	51	56	-10.3%	0	0	NM	NM	0	0	48	53
Texas	223	264	-15.7%	0	0	76	112	6	5	140	148
Mountain	170	180	-5.9%	NM	NM	106	108	4	4	57	66
Arizona	33	33	0.5%	0	0	33	33	0	0	0	0
Colorado	26	26	2.0%	0	0	26	26	0	0	0	0
Idaho	80	91	-12.1%	NM	NM	23	24	2	2	53	63
Montana	3	3	4.3%	0	0	0	0	0	0	3	3
Nevada	11	12	-5.4%	0	0	11	12	0	0	0	0
New Mexico	3	4	-7.7%	0	0	3	4	0	0	0	0
Utah	13	13	4.1%	0	0	NM	11	3	2	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	1,366	1,497	-8.7%	63	123	774	804	123	134	406	436
California	931	988	-5.7%	NM	27	699	716	116	127	116	118
Oregon	161	180	-10.2%	NM	10	55	68	5	5	91	97
Washington	273	329	-17.0%	52	86	20	20	2	2	199	221
Pacific Noncontiguous	57	54	5.6%	12	11	NM	9	37	34	NM	NM
Alaska	6	8	-22.6%	0	0	0	0	6	8	NM	NM
Hawaii	51	46	10.4%	12	11	NM	9	31	26	0	0
U.S. Total	10,019	10,753	-6.8%	813	923	4,280	4,615	386	393	4,540	4,821

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

Table 1.16.A. Utility Scale Facility Net Generation from Geothermal by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0	0	0	0	0
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	0	0	--	0	0	0	0	0	0	0	0
East North Central	0	0	--	0	0	0	0	0	0	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	0	0	--	0	0	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	0	0	--	0	0	0	0	0	0	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	0	0	--	0	0	0	0	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	0	0	--	0	0	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	373	333	12.0%	20	21	312	312	41	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	6	6	-2.7%	0	0	6	6	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	325	289	12.5%	0	0	285	289	41	0	0	0
New Mexico	6	1	661.3%	0	0	6	1	0	0	0	0
Utah	36	37	-2.9%	20	21	15	16	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	941	967	-2.7%	60	64	881	903	0	0	0	0
California	927	953	-2.7%	60	64	867	889	0	0	0	0
Oregon	14	15	-3.3%	0	0	14	15	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	25	25	-3.1%	0	0	25	25	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	25	25	-3.1%	0	0	25	25	0	0	0	0
U.S. Total	1,339	1,326	1.0%	81	85	1,218	1,241	41	0	0	0

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

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

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0	0	0	0	0
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	0	0	--	0	0	0	0	0	0	0	0
East North Central	0	0	--	0	0	0	0	0	0	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	0	0	--	0	0	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	0	0	--	0	0	0	0	0	0	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	0	0	--	0	0	0	0	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	0	0	--	0	0	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	781	689	13.3%	43	44	655	645	83	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	13	13	-1.3%	0	0	13	13	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	682	598	13.9%	0	0	599	598	83	0	0	0
New Mexico	11	1	872.3%	0	0	11	1	0	0	0	0
Utah	75	77	-1.5%	43	44	32	33	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	1,962	1,991	-1.5%	128	119	1,834	1,873	0	0	0	0
California	1,932	1,961	-1.4%	128	119	1,804	1,842	0	0	0	0
Oregon	30	31	-1.9%	0	0	30	31	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	52	53	-1.7%	0	0	52	53	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	52	53	-1.7%	0	0	52	53	0	0	0	0
U.S. Total	2,795	2,733	2.3%	171	162	2,541	2,571	83	0	0	0

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

Table 1.17.A. Net Generation from Solar Photovoltaic by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors							Electric Power Sector				Commercial Sector						Industrial Sector						Residential Sector	
								Electric Utilities		Independent Power Producers															
	Estimated Generation From Utility and Small Scale Facilities			Generation at Utility Scale Facilities		Estimated Small Scale Generation		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Estimated Generation From Utility and Small Scale Facilities		Generation at Utility Scale Facilities		Estimated Small Scale Generation		Estimated Generation From Utility and Small Scale Facilities		Generation at Utility Scale Facilities		Estimated Small Scale Generation		Estimated Small Scale Generation	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	301	257	17.4%	99	85	203	172	8	4	90	81	NM	NM	NM	NM	112	98	NM	8	NM	0	9	7	83	67
Connecticut	47	34	40.0%	9	4	38	30	0	0	9	3	NM	NM	NM	NM	15	12	NM	NM	NM	NM	2	2	21	16
Maine	NM	4	NM	NM	NM	4	3	0	0	NM	NM	2	1	0	0	2	1	0	0	0	0	0	0	3	2
Massachusetts	208	189	10.1%	75	70	133	118	5	NM	69	69	NM	NM	NM	NM	82	76	6	5	0	0	6	5	45	37
New Hampshire	8	7	17.9%	0	0	8	7	0	0	0	0	2	2	0	0	2	2	1	0	0	0	1	0	5	4
Rhode Island	14	8	80.9%	4	NM	11	6	0	0	4	NM	7	3	0	0	7	3	0	0	0	0	0	0	4	3
Vermont	19	15	24.5%	10	8	9	8	NM	3	8	5	3	3	0	0	3	3	NM	NM	0	0	NM	NM	5	5
Middle Atlantic	387	322	20.5%	105	91	283	230	5	5	90	75	138	118	9	10	129	109	NM	NM	NM	NM	15	13	139	108
New Jersey	215	188	14.0%	70	69	144	120	5	5	56	54	81	73	9	9	73	64	NM	NM	NM	NM	10	9	62	47
New York	138	104	33.0%	29	18	110	86	0	0	29	18	NM	NM	NM	NM	46	35	1	1	0	0	1	1	62	50
Pennsylvania	35	29	17.8%	6	5	29	25	0	0	5	4	NM	NM	NM	NM	10	9	NM	NM	NM	NM	4	4	15	12
East North Central	83	70	18.7%	47	43	36	27	17	15	29	28	NM	NM	NM	NM	21	17	2	2	0	0	2	1	13	9
Illinois	11	8	41.2%	3	3	8	5	NM	NM	3	2	NM	NM	NM	NM	5	3	NM	0	0	0	NM	0	3	2
Indiana	30	27	10.5%	22	22	8	5	10	9	12	13	5	3	0	0	5	3	0	0	0	0	0	0	2	2
Michigan	16	11	40.2%	11	7	5	4	7	5	4	NM	2	2	0	0	2	2	0	0	0	0	0	0	2	2
Ohio	19	17	10.2%	9	8	10	8	NM	NM	8	8	NM	NM	NM	NM	7	6	1	0	0	0	0	0	3	2
Wisconsin	NM	7	NM	NM	NM	5	4	0	0	NM	NM	NM	2	NM	0	2	2	1	1	0	0	1	1	2	2
West North Central	117	103	13.6%	82	75	35	28	NM	NM	81	73	16	14	0	0	16	14	1	1	0	0	1	1	17	13
Iowa	NM	8	NM	NM	NM	9	7	NM	NM	NM	NM	6	4	0	0	6	4	0	0	0	0	0	0	3	2
Kansas	NM	2	NM	NM	NM	2	1	NM	NM	NM	NM	1	0	0	0	1	0	0	0	0	0	0	0	1	1
Minnesota	78	70	12.5%	72	65	6	4	NM	NM	72	65	2	2	0	0	2	2	1	0	0	0	1	0	3	2
Missouri	23	20	13.2%	6	6	16	15	0	0	6	5	8	7	0	0	8	7	0	0	0	0	0	0	9	7
Nebraska	NM	3	NM	NM	NM	1	1	NM	0	NM	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Dakota	0	0	52.7%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	NM	0	NM	NM	NM	0	0	0	0	NM	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Atlantic	1,078	953	13.2%	901	817	178	136	274	200	618	608	58	51	8	9	50	42	NM	NM	NM	NM	23	20	105	73
Delaware	11	10	9.9%	3	3	8	7	NM	NM	NM	3	2	NM	0	NM	2	2	1	1	0	0	1	1	5	4
District of Columbia	NM	4	NM	NM	0	5	4	0	0	NM	0	3	3	0	0	3	3	0	0	0	0	0	0	3	2
Florida	288	194	48.1%	247	167	41	27	219	141	28	25	NM	NM	NM	NM	9	7	NM	NM	NM	NM	1	1	31	19
Georgia	NM	147	NM	111	128	NM	18	17	19	93	109	NM	NM	NM	NM	NM	2	NM	NM	0	0	NM	NM	NM	1
Maryland	85	64	32.4%	28	18	57	46	NM	NM	26	17	NM	NM	NM	NM	17	14	3	2	0	0	3	2	38	30
North Carolina	440	428	2.7%	422	414	18	14	24	27	391	380	15	16	7	8	9	8	1	1	0	0	1	1	9	5
South Carolina	60	49	22.1%	40	35	20	14	NM	0	39	35	5	4	0	0	5	4	NM	1	NM	0	2	1	13	9
Virginia	57	56	1.6%	49	51	8	6	12	12	37	39	2	2	0	0	2	2	0	0	0	0	0	0	6	3
West Virginia	1	1	26.1%	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
East South Central	64	59	8.9%	54	50	10	9	5	6	48	43	NM	NM	NM	NM	7	6	NM	NM	NM	NM	0	0	3	3
Alabama	NM	22	NM	21	22	NM	NM	NM	NM	19	19	1	0	0	0	1	0	0	0	0	0	0	0	NM	NM
Kentucky	5	5	4.0%	3	3	2	2	3	3	NM	NM	1	1	0	0	1	1	0	0	0	0	0	0	1	1
Mississippi	18	17	3.2%	17	16	1	1	0	0	17	16	0	0	0	0	0	0	NM	NM	0	0	NM	NM	0	0
Tennessee	19	14	32.5%	13	9	6	6	NM	0	12	8	NM	NM	NM	NM	4	4	NM	NM	NM	NM	NM	NM	2	2
West South Central	329	266	23.7%	255	208	74	58	4	5	250	203	16	13	0	0	15	13	0	0	0	0	0	0	59	45
Arkansas	11	11	3.0%	9	9	2	1	NM	NM	9	9	1	0	0	0	1	0	0	0	0	0	0	0	1	1
Louisiana	NM	15	NM	NM	NM	16	15	NM	NM	0	0	1	1	0	0	1	1	0	0	0	0	0	0	15	14
Oklahoma	5	5	-10.4%	4	4	1	1	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Texas	298	236	26.3%	242	194	56	42	NM	NM	241	193	14	12	0	0	14	12	0	0	0	0	0	0	42	30
Mountain	1,082	1,154	-6.2%	771	898	311	255	51	61	714	831	94	89	5	6	89	83	5	4	0	0	5	4	218	169
Arizona	431	431	-0.1%	245	283	185	148	35	42	210	240	NM	NM	NM	NM	56	50	1	2	0	0	1	2	128	96
Colorado	104	105	-0.7%	66	69	39	36	NM	NM	64	67	NM	NM	NM	NM	14	14	0	0	0	0	0	0	24	22
Idaho	29	34	-15.7%	26	33	3	1	0	0	26	33	0	0	0	0	0	0	0	0	0	0	0	0	2	1
Montana	NM	4	NM	NM	NM	1	1	0	0	NM	NM	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Nevada	275	314	-12.4%	238	285	37	29	2	2	232	278	10	11	4	4	7	7	3	2	0	0	3	2	28	20
New Mexico	90	99	-9.1%	70	82	20	17	14	16	57	65	6	6	0	0	6	6	0	0	0	0	0	0	14	11
Utah	139	166	-16.0%	113	144	26	22	0	0	113	144	5	5	0	0	5	5	1	0	0	0	1	0	21	17
Wyoming	10	0	NM	9	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pacific Contiguous	2,333	2,417	-3.5%	1,454	1,642	879	775	28	32	1,413	1,597	228	201	10	9	219	191	NM	110	NM	3	123	106	537	477
California	2,274	2,367	-3.9%	1,418	1,610	857	757	28	32	1,377	1,566	222	195	10	9	212	186	NM	109	NM	3	122	106	522	465
Oregon	46	42	8.5%	34	32	12	11	NM	NM	33	31	5	5	0	0	5	5	1	1	0	0	1	1	6	5
Washington	NM	8	NM	NM	0	11	8	0	0	NM	0	2	1	0	0	2	1	0	0	0	0	0	0	9	7
Pacific Noncontiguous	92	85	8.6%	15	13	77	71	3	3	12	11	30	27	0	0	30	27	0	0	0	0	0	0	46	44
Alaska	0	0	45.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawaii	92	85	8.6%	15	13	76	71	3	3	12	11	30	27	0	0	30	27	0	0	0	0	0	0	46	44
U.S. Total	5,867	5,684	3.2%	3,782	3,922	2,085	1,762	397	332	3,346	3,549	721	635	33	35	688	599	183	160	5	5	178	154	1,219	1,008

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

Table 1.17.B. Net Generation from Solar Photovoltaic
by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors							Electric Power Sector				Commercial Sector						Industrial Sector						Residential Sector	
								Electric Utilities		Independent Power Producers															
	Estimated Generation From Utility and Small Scale Facilities			Generation at Utility Scale Facilities		Estimated Small Scale Generation		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Estimated Generation From Utility and Small Scale Facilities		Generation at Utility Scale Facilities		Estimated Small Scale Generation		Estimated Generation From Utility and Small Scale Facilities		Generation at Utility Scale Facilities		Estimated Small Scale Generation		Estimated Small Scale Generation	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	570	473	20.6%	188	153	382	320	15	7	172	145	214	184	NM	NM	213	183	17	14	NM	0	17	14	152	123
Connecticut	88	63	39.2%	18	6	70	57	0	0	17	6	29	23	NM	NM	29	23	4	3	NM	NM	3	3	38	30
Maine	10	8	25.3%	NM	NM	9	6	0	0	NM	NM	3	2	0	0	3	2	0	0	0	0	0	0	5	4
Massachusetts	393	346	13.8%	142	127	252	219	10	NM	131	124	158	144	NM	NM	157	143	12	10	0	0	12	10	83	66
New Hampshire	15	13	19.4%	0	0	15	13	0	0	0	0	5	4	0	0	5	4	1	1	0	0	1	1	10	8
Rhode Island	27	15	83.1%	7	4	20	11	0	0	7	4	13	6	0	0	13	6	0	0	0	0	0	0	7	5
Vermont	37	29	28.5%	20	14	17	15	5	5	15	9	6	5	0	0	6	5	0	0	0	0	0	0	10	9
Middle Atlantic	721	594	21.4%	200	164	521	430	10	9	171	136	260	219	18	17	242	202	30	27	NM	NM	28	25	251	203
New Jersey	401	348	15.0%	135	123	265	226	10	9	109	96	152	137	17	16	136	120	19	17	NM	NM	18	16	111	89
New York	256	191	33.8%	54	33	202	158	0	0	54	33	88	64	NM	NM	87	64	2	2	0	0	2	2	112	92
Pennsylvania	65	55	18.3%	11	8	54	47	0	0	9	7	20	18	NM	NM	19	18	9	8	NM	NM	8	7	27	22
East North Central	154	127	21.1%	90	78	64	49	31	27	57	50	39	31	NM	NM	38	30	3	3	0	0	3	3	23	16
Illinois	21	15	35.2%	6	6	15	9	NM	NM	5	5	9	7	NM	NM	9	6	0	0	0	0	0	0	6	3
Indiana	56	48	15.6%	42	39	13	9	18	16	24	23	9	6	0	0	9	6	0	0	0	0	0	0	4	3
Michigan	29	21	39.6%	20	13	9	7	12	10	8	NM	4	4	0	0	4	4	0	0	0	0	0	0	4	3
Ohio	35	30	14.4%	16	15	18	15	NM	NM	15	13	13	12	NM	NM	13	11	1	1	0	0	1	1	5	3
Wisconsin	14	13	11.4%	5	5	9	7	0	0	5	5	4	3	NM	0	3	3	2	1	0	0	2	1	4	3
West North Central	229	186	23.2%	165	134	64	52	NM	3	162	131	30	26	0	0	30	25	3	2	0	0	3	2	31	25
Iowa	18	15	21.8%	NM	NM	16	13	NM	NM	NM	NM	10	8	0	0	10	8	1	0	0	0	1	0	5	4
Kansas	5	4	32.0%	NM	NM	4	3	NM	NM	NM	NM	2	1	0	0	2	1	0	0	0	0	0	0	3	2
Minnesota	157	124	26.4%	146	116	11	8	NM	NM	146	116	4	3	0	0	4	3	1	1	0	0	1	1	6	4
Missouri	44	38	14.0%	12	11	31	28	0	0	12	10	15	14	0	0	14	13	1	0	0	0	1	0	16	14
Nebraska	5	5	12.3%	4	4	2	1	NM	0	3	4	1	0	0	0	1	0	0	0	0	0	0	0	1	1
North Dakota	0	0	53.3%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	0	0	-4.2%	NM	NM	0	0	0	0	NM	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Atlantic	2,113	1,807	17.0%	1,773	1,540	340	267	531	375	1,226	1,148	113	98	15	16	98	81	45	41	NM	NM	45	40	198	146
Delaware	21	19	9.9%	6	6	14	13	NM	NM	6	5	4	4	0	NM	4	4	1	1	0	0	1	1	9	8
District of Columbia	12	8	40.0%	NM	0	10	8	0	0	NM	0	5	5	0	0	5	5	0	0	0	0	0	0	5	3
Florida	561	374	50.2%	481	320	81	54	421	266	58	52	18	16	NM	NM	18	15	2	2	NM	NM	2	2	61	37
Georgia	265	280	-5.5%	224	244	40	36	36	34	188	210	6	5	NM	NM	5	4	32	29	0	0	32	29	3	2
Maryland	158	125	26.3%	53	34	104	91	NM	NM	51	31	34	28	NM	NM	33	27	5	5	0	0	5	5	67	60
North Carolina	861	799	7.8%	827	772	34	27	48	51	766	707	29	29	13	14	17	15	1	1	0	0	1	1	16	10
South Carolina	121	94	28.6%	81	67	39	27	NM	0	81	67	11	7	0	0	11	7	4	2	NM	0	3	2	25	17
Virginia	114	107	6.5%	98	96	16	11	24	22	74	74	5	4	0	0	5	4	0	0	0	0	0	0	10	7
West Virginia	1	1	25.8%	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
East South Central	127	117	8.7%	108	100	19	17	10	11	97	88	13	12	NM	NM	13	12	1	1	NM	NM	0	0	6	5
Alabama	44	43	3.5%	43	41	2	1	4	5	38	37	1	1	0	0	1	1	0	0	0	0	0	0	0	0
Kentucky	10	9	4.8%	5	6	4	3	5	6	NM	NM	3	2	0	0	3	2	0	0	0	0	0	0	2	1
Mississippi	38	38	0.0%	36	36	2	1	0	0	36	36	1	1	0	0	1	1	0	0	0	0	0	0	1	1
Tennessee	35	27	30.8%	23	16	11	11	NM	0	22	14	9	9	NM	NM	8	8	1	1	NM	NM	0	0	3	3
West South Central	655	525	24.7%	507	410	148	116	8	8	499	401	31	26	0	0	31	26	0	0	0	0	0	0	116	90
Arkansas	23	25	-5.3%	20	23	3	2	NM	NM	20	22	1	1	0	0	1	1	0	0	0	0	0	0	2	1
Louisiana	31	28	10.6%	NM	NM	31	28	NM	NM	0	0	2	2	0	0	2	2	0	0	0	0	0	0	29	26
Oklahoma	9	8	7.5%	7	7	2	1	7	7	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
Texas	591	464	27.5%	480	380	111	84	NM	NM	479	379	28	23	0	0	27	23	0	0	0	0	0	0	84	61
Mountain	2,115	2,154	-1.8%	1,495	1,650	621	504	100	115	1,384	1,524	189	176	10	11	179	165	9	8	0	0	9	8	432	330
Arizona	856	827	3.5%	482	532	374	295	69	80	413	452	116	102	NM	NM	115	101	2	3	0	0	2	3	256	190
Colorado	202	197	2.7%	126	125	77	72	NM	NM	123	123	30	30	NM	NM	28	29	0	0	0	0	0	0	48	43
Idaho	56	62	-9.0%	52	59	4	2	0	0	52	59	1	0	0	0	1	0	0	0	0	0	0	0	4	2
Montana	6	7	-3.3%	4	5	2	2	0	0	4	5	1	1	0	0	1	1	0	0	0	0	0	0	2	1
Nevada	532	574	-7.2%	460	518	72	56	4	5	449	505	20	21	7	8	13	13	5	4	0	0	5	4	54	39
New Mexico	175	183	-4.2%	136	149	39	34	27	30	109	119	12	12	0	0	12	12	0	0	0	0	0	0	27	22
Utah	270	305	-11.5%	218	262	51	43	0	0	218	262	10	9	0	0	10	9	1	1	0	0	1	1	40	33
Wyoming	17	1	NM	16	0	1	1	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Pacific Contiguous	4,479	4,423	1.3%	2,770	2,945	1,710	1,477	54	58	2,691	2,864	447	382	18	17	429	366	247	214	6	6	241	208	1,039	904
California	4,370	4,336	0.8%	2,698	2,889	1,672	1,447	54	57	2,620	2,808	436	373	18	17	418	356	246	213	6	6	239	207	1,015	884
Oregon	88	74	17.7%	67	57	20	18	NM	NM	67	56	9	8	0	0	9	8	2	1	0	0	2	1	10	9
Washington	22	13	71.2%	5	0	17	13	0	0	4	0	3	2	0	0	3	2	0	0	0	0	0	0	14	11
Pacific Noncontiguous	183	173	6.0%	29	28	155	145	6	6	23	22	61	56	0	0	61	56	0	0	0	0	0	0	93	89
Alaska	0	0	44.9%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawaii	183	173	6.0%	29	28	155	145	6	6	23	22	61	56	0	0	61	56	0	0	0	0	0	0	93	89
U.S. Total	11,346	10,578	7.3%	7,323	7,201	4,023	3,377	768	619	6,481	6,509	1,399	1,210	64	64	1,335	1,146	356	310	10	10	346	300	2,342	1,930

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

Table 1.18.A. Utility Scale Facility Net Generation from Solar Thermal by State, by Sector, February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0	0	0	0	0
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	0	0	--	0	0	0	0	0	0	0	0
East North Central	0	0	--	0	0	0	0	0	0	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	0	0	--	0	0	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	0	0	--	0	0	0	0	0	0	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	3	3	12.6%	3	3	0	0	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	3	3	12.6%	3	3	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	0	0	--	0	0	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	46	47	-2.5%	0	0	46	47	0	0	0	0
Arizona	27	39	-30.3%	0	0	27	39	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	8	130.1%	0	0	19	8	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	83	142	-41.5%	0	0	83	142	0	0	0	0
California	83	142	-41.5%	0	0	83	142	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	131	191	-31.3%	3	3	128	188	0	0	0	0

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

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

by State, by Sector, Year-to-Date through February 2019 and 2018 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0	0	0	0	0
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	0	0	--	0	0	0	0	0	0	0	0
East North Central	0	0	--	0	0	0	0	0	0	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	0	0	--	0	0	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	0	0	--	0	0	0	0	0	0	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	5	4	27.8%	5	4	0	0	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	5	4	27.8%	5	4	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	0	0	--	0	0	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	90	81	10.7%	0	0	90	81	0	0	0	0
Arizona	56	72	-21.9%	0	0	56	72	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	34	9	265.8%	0	0	34	9	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	148	234	-37.1%	0	0	148	234	0	0	0	0
California	148	234	-37.1%	0	0	148	234	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	242	319	-24.2%	5	4	237	315	0	0	0	0

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

Chapter 2

Consumption of Fossil Fuels

Table 2.1.A. Coal: Consumption for Electricity Generation, by Sector, 2009-February 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	934,683	695,615	234,077	317	4,674
2010	979,684	721,431	249,814	314	8,125
2011	934,938	689,316	239,541	347	5,735
2012	825,734	615,467	205,295	307	4,665
2013	860,729	638,327	217,219	513	4,670
2014	853,634	624,235	224,568	202	4,629
2015	739,594	539,506	195,927	163	3,999
2016	677,371	496,192	178,047	111	3,021
2017	663,911	484,389	176,643	95	2,783
2018	635,833	473,564	159,452	94	2,723
Year 2017					
January	63,460	46,708	16,471	11	270
February	47,985	35,491	12,240	9	245
March	48,840	35,655	12,926	9	250
April	44,279	31,403	12,656	6	214
May	50,898	37,373	13,294	6	224
June	58,852	43,744	14,881	6	221
July	69,769	51,971	17,560	7	230
August	65,761	48,954	16,574	7	227
Sept	54,713	39,390	15,098	8	218
October	50,015	36,190	13,591	7	227
November	50,882	35,778	14,873	8	222
December	58,457	41,733	16,479	9	236
Year 2018					
January	64,517	47,706	16,524	12	274
February	45,655	33,933	11,470	9	243
March	44,388	32,273	11,864	8	243
April	40,554	30,358	9,980	6	210
May	47,470	35,222	12,012	6	230
June	56,031	42,467	13,339	6	219
July	63,805	48,286	15,283	7	230
August	63,710	47,867	15,612	9	223
Sept	53,945	40,309	13,416	8	212
October	48,488	35,607	12,682	7	191
November	51,720	38,008	13,488	7	216
December	55,549	41,527	13,782	8	232
Year 2019					
January	55,769	41,294	14,239	10	226
February	44,982	33,360	11,407	8	207
Year to Date					
2017	111,445	82,199	28,711	21	514
2018	110,172	81,640	27,994	21	517
2019	100,751	74,653	25,646	18	434
Rolling 12 Months Ending in February					
2018	662,637	483,830	175,926	95	2,786
2019	626,412	466,578	157,104	91	2,640

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.1.B. Coal: Consumption for Useful Thermal Output, by Sector, 2009-February 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	20,507	0	3,935	1,481	15,091
2010	21,727	0	3,808	1,406	16,513
2011	21,532	0	3,628	1,321	16,584
2012	19,333	0	2,790	1,143	15,400
2013	18,350	0	2,416	843	15,090
2014	18,107	978	1,821	861	14,448
2015	16,632	1,032	1,980	635	12,985
2016	16,586	2,979	1,336	572	11,700
2017	14,667	2,802	1,158	515	10,192
2018	13,721	2,321	1,162	493	9,745
Year 2017					
January	1,470	300	117	59	995
February	1,198	213	104	48	832
March	1,292	238	106	57	892
April	1,129	221	78	36	794
May	1,137	209	75	34	819
June	1,153	211	84	34	823
July	1,202	254	96	40	812
August	1,214	256	100	36	823
Sept	1,103	207	86	38	773
October	1,223	223	94	35	871
November	1,260	263	98	44	855
December	1,285	208	119	56	903
Year 2018					
January	1,404	235	141	58	970
February	1,267	215	139	45	868
March	1,243	205	97	43	898
April	1,108	183	80	39	805
May	1,097	171	80	35	811
June	1,089	192	91	36	770
July	1,071	201	82	40	748
August	1,032	195	78	41	720
Sept	1,080	193	80	42	765
October	1,008	164	67	35	742
November	1,136	184	110	41	802
December	1,186	183	118	39	846
Year 2019					
January	1,274	219	134	48	873
February	1,122	207	77	45	792
Year to Date					
2017	2,668	513	221	107	1,827
2018	2,671	450	280	103	1,838
2019	2,396	426	211	94	1,665
Rolling 12 Months Ending in February					
2018	14,670	2,739	1,218	511	10,203
2019	13,446	2,297	1,093	484	9,572

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.1.C. Coal: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-February 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	955,190	695,615	238,012	1,798	19,766
2010	1,001,411	721,431	253,621	1,720	24,638
2011	956,470	689,316	243,168	1,668	22,319
2012	845,066	615,467	208,085	1,450	20,065
2013	879,078	638,327	219,635	1,356	19,761
2014	871,741	625,212	226,389	1,063	19,076
2015	756,226	540,538	197,906	798	16,984
2016	693,958	499,172	179,383	683	14,720
2017	678,578	487,192	177,801	610	12,975
2018	649,554	475,884	160,613	587	12,468
Year 2017					
January	64,930	47,008	16,588	71	1,264
February	49,183	35,705	12,344	58	1,077
March	50,132	35,893	13,032	66	1,141
April	45,408	31,624	12,735	42	1,008
May	52,034	37,582	13,370	39	1,043
June	60,005	43,955	14,965	40	1,045
July	70,971	52,225	17,656	47	1,042
August	66,975	49,209	16,673	43	1,050
Sept	55,817	39,596	15,184	45	991
October	51,238	36,413	13,686	42	1,098
November	52,142	36,042	14,971	52	1,077
December	59,743	41,940	16,598	66	1,139
Year 2018					
January	65,921	47,941	16,665	70	1,245
February	46,922	34,148	11,609	54	1,111
March	45,631	32,478	11,961	51	1,140
April	41,662	30,541	10,060	45	1,016
May	48,567	35,393	12,092	41	1,041
June	57,119	42,659	13,430	42	989
July	64,876	48,487	15,364	47	978
August	64,743	48,061	15,690	49	942
Sept	55,025	40,502	13,496	51	977
October	49,496	35,772	12,749	42	933
November	52,856	38,191	13,598	48	1,018
December	56,735	41,710	13,900	47	1,078
Year 2019					
January	57,043	41,512	14,373	58	1,099
February	46,104	33,567	11,484	53	999
Year to Date					
2017	114,113	82,712	28,931	128	2,341
2018	112,842	82,089	28,274	124	2,355
2019	103,147	75,079	25,857	112	2,099
Rolling 12 Months Ending in February					
2018	677,308	486,569	177,144	606	12,989
2019	639,858	468,874	158,196	575	12,212

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.2.A. Petroleum Liquids: Consumption for Electricity Generation, by Sector, 2009-February 2019 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	43,562	31,847	9,880	184	1,652
2010	40,103	30,806	8,278	164	855
2011	27,326	20,844	5,633	133	716
2012	22,604	17,521	4,110	272	702
2013	23,231	16,827	5,494	328	582
2014	31,531	19,652	10,689	451	739
2015	28,925	18,562	9,473	249	641
2016	22,405	16,137	5,624	108	536
2017	21,696	15,567	5,461	191	476
2018	27,245	17,733	8,692	281	539
Year 2017					
January	1,937	1,436	433	20	48
February	1,542	1,143	345	13	41
March	1,658	1,342	262	15	40
April	1,479	1,153	281	9	36
May	1,713	1,290	373	15	35
June	1,763	1,313	403	13	34
July	1,592	1,173	369	16	34
August	1,710	1,267	390	19	34
Sept	1,623	1,199	372	14	38
October	1,674	1,303	319	13	39
November	1,591	1,170	362	15	45
December	3,414	1,779	1,551	31	52
Year 2018					
January	9,046	4,361	4,541	66	78
February	1,369	1,090	219	15	44
March	1,409	1,058	297	12	42
April	1,529	1,128	349	16	37
May	1,780	1,297	421	20	42
June	1,826	1,343	421	19	43
July	1,691	1,177	430	28	56
August	1,816	1,258	495	25	38
Sept	1,775	1,346	372	20	37
October	1,732	1,318	359	17	38
November	1,654	1,207	384	23	40
December	1,618	1,150	405	20	43
Year 2019					
January	2,293	1,554	672	23	45
February	1,363	995	312	14	41
Year to Date					
2017	3,479	2,579	778	32	89
2018	10,415	5,451	4,760	81	123
2019	3,656	2,549	984	37	86
Rolling 12 Months Ending in February					
2018	28,632	18,439	9,443	240	510
2019	20,486	14,831	4,916	237	502

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.2.B. Petroleum Liquids: Consumption for Useful Thermal Output, by Sector, 2009-February 2019 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	8,128	0	1,301	293	6,534
2010	4,866	0	1,086	212	3,567
2011	3,826	0	1,004	168	2,654
2012	3,097	0	992	122	1,984
2013	3,456	0	1,050	498	1,908
2014	3,099	64	1,170	216	1,650
2015	3,142	62	1,155	282	1,643
2016	2,277	68	245	245	1,719
2017	2,012	72	220	238	1,482
2018	2,694	92	320	363	1,919
Year 2017					
January	199	13	37	36	113
February	137	9	17	24	87
March	152	5	8	26	113
April	140	3	10	12	117
May	137	3	12	15	107
June	120	4	13	10	92
July	117	3	12	12	89
August	119	3	11	15	91
Sept	134	3	18	11	102
October	142	3	16	13	110
November	242	4	19	19	200
December	373	19	47	46	262
Year 2018					
January	717	49	107	108	453
February	147	5	10	26	107
March	165	4	13	22	126
April	147	4	12	19	113
May	164	3	17	17	126
June	221	5	14	16	187
July	175	3	11	30	131
August	167	4	12	25	127
Sept	170	6	12	17	135
October	169	5	16	17	131
November	182	2	16	30	133
December	270	3	80	36	151
Year 2019					
January	377	18	40	46	272
February	187	8	18	28	133
Year to Date					
2017	337	22	54	60	200
2018	865	54	117	134	560
2019	564	26	59	74	406
Rolling 12 Months Ending in February					
2018	2,540	104	283	312	1,842
2019	2,393	64	262	303	1,764

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.2.C. Petroleum Liquids: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-February 2019 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	51,690	31,847	11,181	477	8,185
2010	44,968	30,806	9,364	376	4,422
2011	31,152	20,844	6,637	301	3,370
2012	25,702	17,521	5,102	394	2,685
2013	26,687	16,827	6,544	826	2,490
2014	34,630	19,716	11,859	667	2,389
2015	32,067	18,624	10,629	531	2,283
2016	24,682	16,205	5,869	352	2,255
2017	23,708	15,640	5,681	429	1,958
2018	29,940	17,825	9,013	644	2,457
Year 2017					
January	2,136	1,450	470	56	161
February	1,679	1,152	362	37	128
March	1,810	1,346	271	40	152
April	1,620	1,155	291	21	153
May	1,850	1,293	385	30	142
June	1,883	1,317	416	23	126
July	1,709	1,177	381	28	123
August	1,829	1,270	400	33	125
Sept	1,756	1,202	390	24	140
October	1,816	1,306	335	26	149
November	1,833	1,174	381	34	245
December	3,787	1,797	1,598	77	314
Year 2018					
January	9,764	4,410	4,648	175	531
February	1,516	1,095	229	40	151
March	1,574	1,062	310	35	168
April	1,676	1,132	361	35	149
May	1,944	1,300	438	37	169
June	2,048	1,348	435	36	229
July	1,865	1,180	441	58	187
August	1,984	1,262	508	50	165
Sept	1,945	1,352	384	36	173
October	1,900	1,323	375	34	168
November	1,836	1,210	400	53	173
December	1,888	1,153	485	57	194
Year 2019					
January	2,670	1,572	712	69	317
February	1,550	1,003	331	42	175
Year to Date					
2017	3,816	2,602	832	93	289
2018	11,280	5,505	4,877	215	683
2019	4,219	2,575	1,043	111	491
Rolling 12 Months Ending in February					
2018	31,172	18,543	9,726	552	2,351
2019	22,879	14,895	5,178	540	2,266

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.3.A. Petroleum Coke: Consumption for Electricity Generation, by Sector, 2009-February 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	4,821	2,761	1,724	1	335
2010	4,994	3,325	1,354	2	313
2011	5,012	3,449	1,277	1	286
2012	3,675	2,105	756	1	812
2013	4,852	3,409	779	1	662
2014	4,412	3,440	599	2	371
2015	4,044	3,120	669	2	253
2016	4,253	3,427	591	2	233
2017	3,490	2,731	542	3	214
2018	3,311	2,740	388	2	181
Year 2017					
January	368	301	51	0	15
February	277	217	44	0	15
March	265	214	31	0	20
April	168	110	41	0	16
May	329	264	49	0	16
June	350	282	48	0	20
July	344	271	51	0	22
August	300	226	52	0	22
Sept	276	209	50	0	16
October	228	171	40	0	18
November	293	234	40	0	18
December	292	231	44	0	16
Year 2018					
January	349	296	38	0	15
February	275	234	30	0	10
March	245	198	35	0	12
April	246	193	37	0	15
May	161	140	8	0	13
June	312	269	24	0	19
July	344	284	41	0	18
August	327	272	40	0	16
Sept	316	259	39	0	18
October	190	158	15	0	16
November	247	196	38	0	13
December	299	241	41	0	17
Year 2019					
January	312	258	39	0	14
February	269	222	35	0	12
Year to Date					
2017	645	518	95	1	30
2018	624	530	68	1	25
2019	581	481	74	1	26
Rolling 12 Months Ending in February					
2018	3,469	2,743	515	3	208
2019	3,269	2,691	394	2	182

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.3.B. Petroleum Coke: Consumption for Useful Thermal Output, by Sector, 2009-February 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	1,007	0	126	8	873
2010	1,059	0	98	11	950
2011	1,080	0	112	6	962
2012	1,346	0	113	11	1,222
2013	1,486	0	96	11	1,379
2014	1,283	3	90	16	1,174
2015	1,144	9	109	16	1,010
2016	1,099	6	113	9	971
2017	977	11	115	15	836
2018	833	12	93	10	717
Year 2017					
January	81	0	10	2	70
February	69	0	10	1	58
March	90	1	10	2	77
April	74	0	10	1	64
May	78	1	10	1	66
June	91	1	9	1	80
July	86	1	10	0	75
August	90	2	9	2	77
Sept	76	1	9	2	64
October	86	1	9	1	74
November	80	1	9	1	69
December	76	1	10	2	63
Year 2018					
January	72	1	9	2	60
February	63	1	8	2	53
March	62	1	9	1	50
April	78	1	10	1	66
May	64	1	6	0	57
June	66	1	1	0	63
July	72	1	9	0	62
August	68	1	9	0	58
Sept	72	1	7	1	63
October	75	0	9	1	64
November	65	1	8	2	55
December	76	1	8	2	65
Year 2019					
January	67	1	8	2	57
February	60	1	8	1	49
Year to Date					
2017	151	1	19	3	128
2018	136	2	17	3	113
2019	127	3	16	3	106
Rolling 12 Months Ending in February					
2018	962	13	114	15	821
2019	825	12	92	10	711

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.3.C. Petroleum Coke: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-February 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	5,828	2,761	1,850	9	1,209
2010	6,053	3,325	1,452	12	1,264
2011	6,092	3,449	1,388	6	1,248
2012	5,021	2,105	869	13	2,034
2013	6,338	3,409	875	12	2,041
2014	5,695	3,443	689	18	1,545
2015	5,188	3,128	779	18	1,263
2016	5,352	3,433	705	10	1,204
2017	4,467	2,742	657	17	1,050
2018	4,144	2,752	481	12	898
Year 2017					
January	449	301	61	2	85
February	347	218	54	1	74
March	355	215	41	2	97
April	242	110	51	1	80
May	406	265	59	1	82
June	441	283	57	1	100
July	430	272	60	0	98
August	390	228	61	2	99
Sept	352	211	60	2	80
October	314	172	49	2	92
November	373	235	49	1	87
December	368	233	54	2	80
Year 2018					
January	421	297	47	2	75
February	338	235	38	2	63
March	307	199	44	2	63
April	323	195	47	1	81
May	225	141	14	0	70
June	378	270	26	0	82
July	416	285	50	0	80
August	395	273	49	0	73
Sept	389	260	47	1	81
October	264	159	24	1	80
November	312	196	46	2	68
December	376	242	50	2	82
Year 2019					
January	380	260	47	2	71
February	329	224	43	1	61
Year to Date					
2017	795	519	115	4	158
2018	759	532	86	4	138
2019	709	483	90	3	132
Rolling 12 Months Ending in February					
2018	4,431	2,755	628	18	1,030
2019	4,094	2,703	486	12	893

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.4.A. Natural Gas: Consumption for Electricity Generation, by Sector, 2009-February 2019 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	7,121,069	2,911,279	3,655,712	34,279	519,799
2010	7,680,185	3,290,993	3,794,423	39,462	555,307
2011	7,883,865	3,446,087	3,819,107	47,170	571,501
2012	9,484,710	4,101,927	4,686,260	63,116	633,407
2013	8,596,299	3,970,447	3,917,131	66,570	642,152
2014	8,544,387	3,895,008	3,954,032	71,957	623,390
2015	10,016,576	4,745,255	4,576,683	70,092	624,545
2016	10,170,110	5,018,894	4,571,375	46,304	533,537
2017	9,507,760	4,754,883	4,161,987	50,060	540,830
2018	10,855,155	5,494,870	4,756,881	51,844	551,560
Year 2017					
January	679,456	337,365	291,293	4,212	46,587
February	587,375	291,892	250,059	3,763	41,661
March	690,237	350,941	290,725	4,044	44,527
April	646,952	331,856	268,401	3,537	43,158
May	720,458	374,380	298,341	3,820	43,917
June	872,928	436,021	386,492	4,400	46,015
July	1,104,716	552,301	498,292	4,942	49,181
August	1,043,414	516,896	474,421	4,803	47,295
Sept	877,808	433,254	397,947	4,400	42,206
October	791,673	385,327	358,763	4,105	43,478
November	686,346	340,195	298,079	3,776	44,297
December	806,395	404,455	349,174	4,259	48,508
Year 2018					
January	804,466	420,245	332,392	4,152	47,678
February	717,482	356,680	314,828	3,965	42,008
March	770,858	387,882	336,121	4,114	42,741
April	726,713	369,332	309,650	3,908	43,822
May	872,155	456,439	367,191	4,104	44,420
June	972,150	510,445	411,715	4,433	45,557
July	1,254,838	641,395	559,827	5,135	48,481
August	1,216,432	606,866	555,026	5,164	49,377
Sept	1,064,493	536,030	477,656	4,666	46,142
October	914,106	458,225	406,569	4,288	45,024
November	777,300	384,952	340,874	3,818	47,656
December	764,161	366,377	345,032	4,098	48,654
Year 2019					
January	853,956	422,019	377,276	4,446	50,215
February	786,953	398,141	341,156	4,138	43,518
Year to Date					
2017	1,266,831	629,257	541,352	7,975	88,248
2018	1,521,948	776,925	647,220	8,117	89,686
2019	1,640,909	820,160	718,432	8,584	93,733
Rolling 12 Months Ending in February					
2018	9,762,877	4,902,551	4,267,856	50,202	542,268
2019	10,974,116	5,538,104	4,828,092	52,312	555,608

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.4.B. Natural Gas: Consumption for Useful Thermal Output, by Sector, 2009-February 2019 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	816,787	0	305,542	41,275	469,970
2010	821,775	0	301,769	46,324	473,683
2011	839,681	0	308,669	39,856	491,155
2012	886,103	0	322,607	47,883	515,613
2013	882,385	0	303,177	51,057	528,151
2014	865,146	4,926	292,016	46,635	521,569
2015	935,098	8,060	283,372	46,287	597,379
2016	1,151,866	38,096	356,905	80,943	675,922
2017	1,168,850	38,740	309,945	104,324	715,842
2018	1,235,703	41,038	332,905	103,286	758,474
Year 2017					
January	101,360	3,704	27,262	9,905	60,489
February	90,127	3,216	23,614	8,341	54,956
March	97,233	3,489	27,021	8,120	58,603
April	89,236	2,985	23,807	6,830	55,614
May	92,148	3,093	24,244	7,223	57,587
June	95,359	2,722	25,799	8,475	58,363
July	103,932	3,441	27,792	9,956	62,744
August	101,846	3,216	27,487	9,983	61,161
Sept	97,464	2,980	25,078	8,964	60,443
October	97,666	3,046	25,407	8,647	60,566
November	95,578	3,119	24,763	8,391	59,305
December	106,899	3,729	27,671	9,488	66,010
Year 2018					
January	109,088	3,577	29,046	9,474	66,991
February	97,799	3,169	26,576	8,610	59,444
March	103,896	3,312	28,085	8,710	63,789
April	97,057	2,981	25,424	8,135	60,517
May	97,070	3,150	26,420	7,928	59,572
June	99,605	3,536	26,776	8,226	61,067
July	107,012	4,154	30,257	9,006	63,596
August	106,322	4,161	29,287	8,884	63,990
Sept	101,127	3,498	27,324	8,293	62,012
October	100,725	3,211	26,980	8,319	62,215
November	105,970	3,060	27,410	8,659	66,841
December	110,030	3,229	29,319	9,042	68,440
Year 2019					
January	114,580	3,570	31,252	9,527	70,231
February	102,027	3,447	26,437	8,577	63,565
Year to Date					
2017	191,487	6,920	50,876	18,245	115,446
2018	206,888	6,747	55,622	18,084	126,436
2019	216,607	7,018	57,689	18,104	133,796
Rolling 12 Months Ending in February					
2018	1,184,251	38,567	314,691	104,162	726,832
2019	1,245,422	41,309	334,972	103,307	765,834

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.4.C. Natural Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-February 2019 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	7,937,856	2,911,279	3,961,254	75,555	989,769
2010	8,501,960	3,290,993	4,096,192	85,786	1,028,990
2011	8,723,546	3,446,087	4,127,777	87,026	1,062,657
2012	10,370,812	4,101,927	5,008,867	110,999	1,149,020
2013	9,478,685	3,970,447	4,220,309	117,626	1,170,303
2014	9,409,532	3,899,934	4,246,048	118,591	1,144,959
2015	10,951,674	4,753,315	4,860,055	116,380	1,221,924
2016	11,321,975	5,056,990	4,928,280	127,246	1,209,459
2017	10,676,610	4,793,623	4,471,932	154,383	1,256,672
2018	12,090,858	5,535,908	5,089,786	155,131	1,310,034
Year 2017					
January	780,816	341,068	318,555	14,116	107,077
February	677,502	295,109	273,673	12,104	96,617
March	787,471	354,430	317,746	12,165	103,130
April	736,188	334,841	292,208	10,367	98,772
May	812,607	377,474	322,585	11,043	101,504
June	968,287	438,743	412,291	12,875	104,377
July	1,208,649	555,742	526,084	14,898	111,925
August	1,145,261	520,111	501,908	14,786	108,456
Sept	975,272	436,234	423,025	13,364	102,649
October	889,339	388,373	384,170	12,752	104,044
November	781,924	343,314	322,841	12,167	103,602
December	913,294	408,184	376,845	13,747	114,519
Year 2018					
January	913,555	423,822	361,438	13,625	114,669
February	815,281	359,850	341,404	12,575	101,452
March	874,754	391,194	364,206	12,824	106,530
April	823,770	372,313	335,075	12,043	104,340
May	969,225	459,589	393,611	12,032	103,992
June	1,071,754	513,981	438,490	12,659	106,624
July	1,361,850	645,550	590,084	14,140	112,077
August	1,322,754	611,027	584,313	14,048	113,366
Sept	1,165,621	539,527	504,980	12,959	108,154
October	1,014,832	461,437	433,550	12,607	107,239
November	883,270	388,012	368,284	12,477	114,497
December	874,192	369,606	374,352	13,139	117,094
Year 2019					
January	968,536	425,589	408,527	13,973	120,446
February	888,980	401,588	367,594	12,715	107,083
Year to Date					
2017	1,458,318	636,177	592,227	26,220	203,694
2018	1,728,836	783,672	702,842	26,201	216,122
2019	1,857,516	827,177	776,121	26,688	227,529
Rolling 12 Months Ending in February					
2018	10,947,128	4,941,118	4,582,546	154,364	1,269,100
2019	12,219,538	5,579,413	5,163,065	155,619	1,321,441

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.5.A. Landfill Gas: Consumption for Electricity Generation, by Sector, 2009-February 2019 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	206,792	19,583	180,689	5,931	589
2010	218,331	19,975	192,428	5,535	393
2011	232,795	22,086	180,856	29,469	384
2012	256,376	25,193	201,965	26,672	2,545
2013	271,967	27,259	211,942	28,143	4,623
2014	285,982	25,819	228,447	27,038	4,678
2015	282,530	25,257	227,381	25,250	4,642
2016	273,557	24,280	224,993	20,445	3,839
2017	278,112	25,074	229,050	20,121	3,866
2018	284,667	25,646	236,388	19,466	3,167
Year 2017					
January	25,272	2,182	20,948	1,784	358
February	21,912	2,167	17,878	1,529	337
March	24,177	2,303	19,774	1,742	359
April	22,941	2,145	18,844	1,620	332
May	23,879	2,202	19,651	1,731	294
June	23,091	1,921	19,163	1,670	336
July	22,896	1,983	18,932	1,702	279
August	22,923	2,030	18,919	1,668	305
Sept	22,102	1,851	18,287	1,672	292
October	22,063	2,037	18,243	1,465	318
November	22,870	2,105	18,715	1,728	322
December	23,986	2,148	19,695	1,810	333
Year 2018					
January	25,148	2,570	20,492	1,782	305
February	23,593	2,396	19,225	1,661	311
March	25,276	2,604	20,497	1,847	327
April	23,720	2,353	19,467	1,593	307
May	23,568	2,195	19,632	1,474	267
June	23,693	2,007	19,930	1,504	252
July	23,948	2,006	20,218	1,492	232
August	24,699	2,059	20,932	1,494	214
Sept	21,204	1,702	17,849	1,454	198
October	23,068	1,909	19,210	1,704	246
November	22,951	1,907	19,077	1,715	252
December	23,800	1,940	19,859	1,746	255
Year 2019					
January	23,042	1,866	19,139	1,759	278
February	20,928	1,672	17,454	1,549	253
Year to Date					
2017	47,184	4,349	38,826	3,313	696
2018	48,742	4,966	39,717	3,443	616
2019	43,970	3,538	36,593	3,307	531
Rolling 12 Months Ending in February					
2018	279,669	25,692	229,941	20,251	3,786
2019	279,895	24,218	233,264	19,331	3,083

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.5.B. Landfill Gas: Consumption for Useful Thermal Output, by Sector, 2009-February 2019 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	793	0	545	176	72
2010	1,623	0	1,195	370	58
2011	3,195	0	2,753	351	91
2012	3,189	0	2,788	340	61
2013	831	0	261	423	147
2014	1,710	176	525	674	335
2015	1,522	2	644	515	362
2016	4,163	3	2,339	1,034	788
2017	3,940	2	1,948	1,099	891
2018	4,032	8	2,242	911	871
Year 2017					
January	352	0	171	94	87
February	329	0	156	92	81
March	353	0	177	92	84
April	346	0	153	107	87
May	299	0	134	85	80
June	329	0	165	89	75
July	312	0	176	85	51
August	348	0	172	98	78
Sept	330	0	169	98	62
October	319	0	170	93	56
November	298	0	140	85	73
December	324	0	165	81	77
Year 2018					
January	411	1	259	68	83
February	400	1	238	79	82
March	435	1	262	82	90
April	351	1	179	85	87
May	272	1	127	71	73
June	248	1	135	46	67
July	264	1	126	76	62
August	282	1	138	82	61
Sept	268	0	128	82	57
October	380	1	212	95	73
November	369	0	220	73	75
December	353	0	219	71	63
Year 2019					
January	405	0	247	84	74
February	375	1	242	67	65
Year to Date					
2017	682	0	326	186	169
2018	811	1	497	147	165
2019	780	1	489	151	139
Rolling 12 Months Ending in February					
2018	4,069	3	2,118	1,060	888
2019	4,002	8	2,235	915	845

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.5.C. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-February 2019 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	207,585	19,583	181,234	6,106	661
2010	219,954	19,975	193,623	5,905	451
2011	235,990	22,086	183,609	29,820	474
2012	259,564	25,193	204,753	27,012	2,606
2013	272,798	27,259	212,203	28,566	4,770
2014	287,692	25,995	228,971	27,713	5,013
2015	284,052	25,259	228,024	25,765	5,004
2016	277,720	24,283	227,332	21,479	4,626
2017	282,051	25,076	230,998	21,220	4,757
2018	288,699	25,655	238,630	20,377	4,038
Year 2017					
January	25,625	2,182	21,119	1,878	446
February	22,241	2,167	18,034	1,621	419
March	24,530	2,303	19,951	1,834	442
April	23,287	2,146	18,996	1,727	418
May	24,178	2,202	19,785	1,816	374
June	23,419	1,921	19,329	1,759	411
July	23,208	1,983	19,108	1,786	330
August	23,271	2,030	19,092	1,766	383
Sept	22,431	1,851	18,456	1,771	354
October	22,382	2,037	18,413	1,558	374
November	23,168	2,105	18,855	1,813	395
December	24,310	2,149	19,860	1,891	410
Year 2018					
January	25,560	2,571	20,751	1,850	388
February	23,993	2,396	19,463	1,740	393
March	25,710	2,605	20,759	1,929	417
April	24,071	2,353	19,645	1,679	394
May	23,839	2,195	19,759	1,545	340
June	23,941	2,008	20,064	1,550	319
July	24,212	2,007	20,344	1,568	293
August	24,981	2,059	21,071	1,576	275
Sept	21,471	1,702	17,978	1,536	255
October	23,449	1,909	19,421	1,799	319
November	23,320	1,908	19,297	1,788	327
December	24,153	1,940	20,078	1,817	318
Year 2019					
January	23,446	1,866	19,386	1,842	352
February	21,304	1,672	17,697	1,616	318
Year to Date					
2017	47,866	4,349	39,153	3,499	865
2018	49,552	4,968	40,214	3,590	781
2019	44,750	3,539	37,082	3,459	671
Rolling 12 Months Ending in February					
2018	283,738	25,695	232,059	21,311	4,674
2019	283,897	24,226	235,498	20,246	3,927

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.6.A. Biogenic Municipal Solid Waste: Consumption for Electricity Generation, by Sector, 2009-February 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	19,669	465	17,048	2,155	0
2010	19,437	402	16,802	2,233	0
2011	16,972	388	14,625	1,955	4
2012	16,968	418	14,235	2,304	12
2013	17,007	456	14,057	2,485	8
2014	16,706	444	13,809	2,447	6
2015	16,631	452	13,797	2,375	8
2016	16,994	464	13,953	2,566	11
2017	16,348	422	13,381	2,537	8
2018	16,557	467	13,702	2,379	9
Year 2017					
January	1,434	35	1,194	205	0
February	1,244	19	1,034	191	0
March	1,330	36	1,091	204	0
April	1,288	35	1,044	209	0
May	1,410	36	1,147	226	1
June	1,421	38	1,175	207	1
July	1,440	41	1,172	226	1
August	1,453	47	1,182	223	1
Sept	1,321	41	1,072	207	1
October	1,317	33	1,065	218	1
November	1,311	30	1,074	207	1
December	1,378	32	1,132	214	1
Year 2018					
January	1,350	28	1,132	190	0
February	1,278	26	1,076	175	1
March	1,377	40	1,138	198	1
April	1,342	38	1,109	194	1
May	1,398	43	1,143	212	1
June	1,454	42	1,202	208	1
July	1,458	48	1,208	200	1
August	1,461	47	1,204	209	1
Sept	1,313	36	1,082	194	1
October	1,372	43	1,130	199	0
November	1,356	39	1,120	196	0
December	1,398	37	1,157	204	0
Year 2019					
January	1,363	31	1,131	200	1
February	1,194	21	995	177	1
Year to Date					
2017	2,678	54	2,228	397	0
2018	2,628	53	2,208	365	1
2019	2,557	52	2,126	377	2
Rolling 12 Months Ending in February					
2018	16,298	422	13,361	2,505	9
2019	16,485	465	13,620	2,391	9

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.6.B. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output, by Sector, 2009-February 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	2,426	0	823	1,466	137
2010	2,287	0	819	1,316	152
2011	2,044	0	742	1,148	154
2012	1,986	0	522	1,273	190
2013	1,865	0	517	1,160	187
2014	1,955	0	650	1,104	200
2015	1,986	0	655	1,127	203
2016	2,232	0	885	1,134	213
2017	2,124	0	814	1,102	208
2018	1,898	0	752	957	189
Year 2017					
January	203	0	72	111	20
February	171	0	64	94	12
March	187	0	75	93	19
April	173	0	69	86	18
May	182	0	69	96	18
June	185	0	68	101	16
July	185	0	72	97	17
August	196	0	77	97	22
Sept	154	0	63	74	17
October	155	0	59	78	18
November	166	0	64	88	15
December	168	0	63	88	17
Year 2018					
January	170	0	64	90	17
February	151	0	60	80	12
March	155	0	64	79	12
April	147	0	54	77	16
May	161	0	59	86	16
June	163	0	65	80	18
July	164	0	65	83	17
August	168	0	66	80	21
Sept	134	0	58	58	17
October	150	0	61	73	16
November	162	0	66	82	14
December	172	0	70	90	13
Year 2019					
January	172	0	69	87	16
February	156	0	66	74	16
Year to Date					
2017	374	0	136	205	32
2018	321	0	124	169	28
2019	328	0	135	161	32
Rolling 12 Months Ending in February					
2018	2,072	0	801	1,067	204
2019	1,904	0	764	948	193

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.6.C. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-February 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	22,095	465	17,872	3,622	137
2010	21,725	402	17,621	3,549	152
2011	19,016	388	15,367	3,103	158
2012	18,954	418	14,757	3,577	203
2013	18,871	456	14,574	3,646	195
2014	18,661	444	14,459	3,551	206
2015	18,617	452	14,452	3,502	211
2016	19,226	464	14,838	3,700	224
2017	18,473	422	14,195	3,639	216
2018	18,454	467	14,454	3,336	197
Year 2017					
January	1,637	35	1,266	316	20
February	1,415	19	1,098	286	12
March	1,517	36	1,165	297	19
April	1,461	35	1,113	294	18
May	1,592	36	1,215	322	19
June	1,606	38	1,243	309	17
July	1,625	41	1,244	323	18
August	1,649	47	1,259	320	23
Sept	1,475	41	1,135	281	18
October	1,472	33	1,124	295	19
November	1,477	30	1,138	295	15
December	1,546	32	1,195	301	18
Year 2018					
January	1,521	28	1,196	279	17
February	1,429	26	1,136	255	13
March	1,532	40	1,202	277	13
April	1,489	38	1,163	271	17
May	1,559	43	1,202	297	17
June	1,617	42	1,267	289	19
July	1,622	48	1,273	283	18
August	1,629	47	1,270	290	22
Sept	1,447	36	1,141	252	18
October	1,521	43	1,191	271	16
November	1,518	39	1,187	278	14
December	1,570	37	1,227	293	13
Year 2019					
January	1,535	31	1,201	287	17
February	1,349	21	1,061	251	17
Year to Date					
2017	3,052	54	2,364	602	32
2018	2,949	53	2,332	534	30
2019	2,885	52	2,261	538	34
Rolling 12 Months Ending in February					
2018	18,370	422	14,162	3,572	214
2019	18,390	465	14,384	3,339	201

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.7.A. Wood / Wood Waste Biomass: Consumption for Electricity Generation, by Sector, 2009-February 2019 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	320,444	29,565	130,894	274	159,712
2010	349,530	40,167	137,072	274	172,016
2011	347,623	35,474	130,108	482	181,559
2012	390,342	32,723	138,217	478	218,924
2013	397,929	43,363	143,721	536	210,308
2014	431,285	45,643	174,513	961	210,167
2015	406,650	43,919	171,387	504	190,840
2016	359,983	41,036	149,516	473	168,959
2017	363,971	42,806	151,877	460	168,828
2018	351,162	45,112	136,005	520	169,526
Year 2017					
January	31,111	4,492	12,653	56	13,910
February	28,404	3,584	11,989	50	12,781
March	31,284	4,210	13,448	26	13,601
April	27,497	3,136	11,066	34	13,261
May	28,273	2,799	11,614	43	13,817
June	30,264	3,180	12,592	38	14,454
July	32,600	3,942	13,505	41	15,112
August	33,336	3,803	14,249	41	15,244
Sept	28,574	2,090	13,001	15	13,469
October	28,951	3,387	11,782	33	13,748
November	30,458	3,608	12,600	41	14,210
December	33,219	4,575	13,378	43	15,222
Year 2018					
January	31,979	4,532	12,715	63	14,669
February	28,612	3,645	11,446	42	13,478
March	30,009	4,010	11,542	36	14,422
April	25,684	2,208	9,889	16	13,570
May	30,567	3,455	12,161	32	14,920
June	30,862	4,157	12,369	53	14,283
July	31,531	4,337	12,285	59	14,851
August	30,192	4,299	11,379	69	14,444
Sept	27,655	3,607	10,584	52	13,412
October	27,526	3,491	10,643	27	13,365
November	27,289	3,610	9,892	20	13,767
December	29,256	3,760	11,100	51	14,345
Year 2019					
January	31,235	4,596	12,490	52	14,096
February	27,338	3,844	10,578	57	12,858
Year to Date					
2017	59,515	8,076	24,642	106	26,691
2018	60,591	8,177	24,162	105	28,147
2019	58,573	8,441	23,069	109	26,954
Rolling 12 Months Ending in February					
2018	365,047	42,908	151,396	459	170,284
2019	349,144	45,375	134,912	524	168,333

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.7.B. Wood / Wood Waste Biomass: Consumption for Useful Thermal Output, by Sector, 2009-February 2019 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	816,285	0	19,587	1,135	795,563
2010	876,041	0	18,357	1,064	856,620
2011	893,314	0	16,577	1,022	875,716
2012	883,158	0	19,251	949	862,958
2013	919,631	0	20,342	950	898,339
2014	946,344	8,835	22,262	3,766	911,481
2015	943,962	9,351	19,200	3,714	911,697
2016	969,841	10,950	22,905	4,520	931,465
2017	1,036,427	11,656	22,986	4,522	997,263
2018	1,036,410	10,876	23,113	4,806	997,615
Year 2017					
January	90,099	1,206	2,090	525	86,278
February	79,451	1,037	1,879	430	76,104
March	87,759	1,170	2,113	299	84,176
April	82,426	1,044	1,548	295	79,539
May	84,129	716	1,623	301	81,490
June	85,459	1,007	1,641	322	82,490
July	89,160	683	1,963	355	86,159
August	90,434	989	2,010	365	87,071
Sept	81,960	931	2,032	233	78,763
October	86,217	893	1,972	402	82,950
November	87,430	902	1,929	473	84,126
December	91,903	1,079	2,186	524	88,115
Year 2018					
January	88,492	859	2,066	454	85,114
February	83,159	832	2,113	474	79,741
March	85,663	994	2,038	493	82,138
April	84,822	913	1,804	339	81,765
May	84,790	946	1,812	319	81,712
June	85,430	968	1,799	402	82,261
July	88,879	914	2,037	382	85,545
August	90,762	847	2,033	417	87,465
Sept	82,313	918	1,647	336	79,411
October	86,305	979	1,956	329	83,042
November	85,248	749	1,879	343	82,278
December	90,548	957	1,930	518	87,143
Year 2019					
January	88,336	1,099	1,971	544	84,722
February	79,831	936	1,714	478	76,703
Year to Date					
2017	169,550	2,243	3,969	955	162,383
2018	171,651	1,691	4,178	927	164,854
2019	168,167	2,035	3,685	1,022	161,425
Rolling 12 Months Ending in February					
2018	1,038,528	11,104	23,195	4,495	999,735
2019	1,032,926	11,221	22,619	4,901	994,186

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.7.C. Wood / Wood Waste Biomass: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-February 2019 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2009	1,136,729	29,565	150,481	1,408	955,276
2010	1,225,571	40,167	155,429	1,338	1,028,637
2011	1,240,937	35,474	146,684	1,504	1,057,275
2012	1,273,500	32,723	157,468	1,427	1,081,882
2013	1,317,560	43,363	164,063	1,486	1,108,647
2014	1,377,629	54,478	196,775	4,727	1,121,648
2015	1,350,612	53,269	190,587	4,219	1,102,537
2016	1,329,824	51,986	172,421	4,993	1,100,424
2017	1,400,397	54,462	174,862	4,982	1,166,091
2018	1,387,573	55,988	159,118	5,326	1,167,141
Year 2017					
January	121,210	5,698	14,743	581	100,188
February	107,854	4,621	13,868	480	88,885
March	119,043	5,380	15,562	325	97,777
April	109,922	4,180	12,613	328	92,800
May	112,402	3,515	13,237	344	95,306
June	115,723	4,187	14,232	360	96,944
July	121,760	4,625	15,469	395	101,271
August	123,771	4,792	16,258	406	102,315
Sept	110,535	3,021	15,033	249	92,232
October	115,168	4,281	13,754	435	96,698
November	117,888	4,509	14,529	514	98,336
December	125,122	5,654	15,564	566	103,338
Year 2018					
January	120,471	5,391	14,781	517	99,783
February	111,770	4,477	13,559	516	93,218
March	115,672	5,004	13,579	528	96,560
April	110,506	3,122	11,693	356	95,336
May	115,358	4,401	13,973	351	96,632
June	116,292	5,124	14,167	455	96,545
July	120,410	5,251	14,322	441	100,396
August	120,953	5,146	13,412	486	101,909
Sept	109,968	4,525	12,231	388	92,823
October	113,831	4,470	12,599	356	96,406
November	112,538	4,359	11,771	363	96,045
December	119,804	4,717	13,030	569	101,488
Year 2019					
January	119,571	5,696	14,461	596	98,818
February	107,168	4,781	12,292	535	89,561
Year to Date					
2017	229,064	10,318	28,612	1,061	189,073
2018	232,242	9,868	28,340	1,032	193,001
2019	226,739	10,476	26,753	1,131	188,379
Rolling 12 Months Ending in February					
2018	1,403,575	54,012	174,590	4,954	1,170,019
2019	1,382,070	56,596	157,531	5,425	1,162,519

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	15	55	-72.0%	11	38	4	16	0	0	NM	NM
Connecticut	3	14	-81.0%	0	0	3	14	0	0	0	0
Maine	1	2	-32.0%	0	0	1	1	0	0	NM	NM
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	11	38	-71.0%	11	38	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	1,784	1,857	-4.0%	0	0	1,779	1,851	0	0	4	7
New Jersey	36	36	-0.1%	0	0	36	36	0	0	0	0
New York	24	7	257.0%	0	0	24	5	0	0	0	1
Pennsylvania	1,724	1,815	-5.0%	0	0	1,720	1,810	0	0	4	5
East North Central	10,461	11,240	-6.9%	6,216	6,676	4,183	4,494	1	3	61	67
Illinois	2,752	2,838	-3.0%	201	200	2,505	2,592	1	2	45	44
Indiana	2,544	2,561	-0.6%	2,395	2,417	149	143	1	1	0	0
Michigan	2,022	1,981	2.1%	2,005	1,958	15	17	0	0	2	6
Ohio	1,734	2,209	-21.0%	221	467	1,514	1,742	0	0	0	0
Wisconsin	1,408	1,651	-15.0%	1,394	1,634	0	0	0	0	14	17
West North Central	9,786	9,508	2.9%	9,695	9,398	0	0	2	2	90	108
Iowa	1,444	1,208	19.0%	1,405	1,169	0	0	1	1	37	38
Kansas	1,313	1,073	22.0%	1,313	1,073	0	0	0	0	0	0
Minnesota	914	1,071	-15.0%	898	1,040	0	0	0	0	16	31
Missouri	2,974	3,031	-1.9%	2,974	3,031	0	0	0	0	0	0
Nebraska	1,193	1,182	0.9%	1,159	1,146	0	0	0	0	34	36
North Dakota	1,792	1,793	-0.1%	1,789	1,790	0	0	0	0	3	3
South Dakota	156	150	4.0%	156	150	0	0	0	0	0	0
South Atlantic	3,842	5,148	-25.0%	3,341	4,432	482	693	2	2	18	22
Delaware	10	3	236.0%	0	0	10	3	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	431	773	-44.0%	429	771	0	0	0	0	1	2
Georgia	655	835	-21.0%	653	832	0	0	0	0	3	3
Maryland	121	260	-54.0%	0	0	119	258	0	0	1	2
North Carolina	299	538	-44.0%	293	532	2	2	2	1	2	2
South Carolina	414	477	-13.0%	414	476	0	0	0	0	0	1
Virginia	96	228	-58.0%	82	209	4	7	0	0	10	12
West Virginia	1,817	2,035	-11.0%	1,470	1,612	347	423	0	0	0	0
East South Central	3,777	4,080	-7.4%	3,712	3,851	56	216	0	0	9	14
Alabama	1,156	1,174	-1.6%	1,154	1,174	0	0	0	0	1	1
Kentucky	2,123	1,907	11.0%	2,123	1,907	0	0	0	0	0	0
Mississippi	62	248	-75.0%	6	32	56	216	0	0	0	0
Tennessee	436	751	-42.0%	428	739	0	0	0	0	8	13
West South Central	7,133	7,262	-1.8%	3,724	4,015	3,397	3,236	0	0	12	12
Arkansas	968	1,003	-3.5%	736	777	231	225	0	0	1	1
Louisiana	463	567	-18.0%	319	384	144	183	0	0	0	0
Oklahoma	541	778	-30.0%	530	683	0	84	0	0	11	11
Texas	5,160	4,915	5.0%	2,138	2,171	3,022	2,744	0	0	0	0
Mountain	7,446	6,360	17.0%	6,468	5,503	971	848	0	0	8	9
Arizona	1,290	1,288	0.1%	1,290	1,288	0	0	0	0	0	0
Colorado	1,207	1,169	3.3%	1,207	1,168	0	0	0	0	0	0
Idaho	NM	NM	NM	0	0	0	0	0	0	NM	NM
Montana	849	753	13.0%	24	23	825	729	0	0	0	0
Nevada	209	43	388.0%	142	0	67	43	0	0	0	0
New Mexico	739	304	143.0%	739	304	0	0	0	0	0	0
Utah	1,119	913	22.0%	1,083	877	35	36	0	0	0	0
Wyoming	2,034	1,890	7.6%	1,984	1,842	43	40	0	0	7	8
Pacific Contiguous	637	51	NM	161	0	471	46	0	0	5	5
California	5	5	-2.2%	0	0	0	0	0	0	5	5
Oregon	161	0	--	161	0	0	0	0	0	0	0
Washington	471	46	928.0%	0	0	471	46	0	0	1	0
Pacific Noncontiguous	100	94	6.4%	NM	NM	65	71	3	3	0	0
Alaska	47	33	41.0%	NM	NM	12	10	3	3	0	0
Hawaii	53	61	-12.0%	0	0	53	61	0	0	0	0
U.S. Total	44,982	45,655	-1.5%	33,360	33,933	11,407	11,470	8	9	207	243

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

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

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	100	264	-62.0%	63	143	37	119	0	0	NM	NM
Connecticut	34	116	-71.0%	0	0	34	116	0	0	0	0
Maine	3	5	-25.0%	0	0	3	3	0	0	NM	NM
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	63	143	-56.0%	63	143	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	4,314	4,635	-6.9%	0	0	4,305	4,622	0	0	9	14
New Jersey	81	114	-29.0%	0	0	81	114	0	0	0	0
New York	114	108	5.1%	0	0	114	106	0	0	0	3
Pennsylvania	4,119	4,413	-6.6%	0	0	4,111	4,402	0	0	9	11
East North Central	23,207	25,898	-10.0%	13,446	15,731	9,629	10,018	4	6	128	144
Illinois	6,314	6,369	-0.9%	420	411	5,800	5,857	3	4	92	96
Indiana	5,871	6,628	-11.0%	5,528	6,310	342	317	1	1	0	0
Michigan	4,109	4,388	-6.4%	4,073	4,342	32	36	0	0	5	10
Ohio	3,940	4,878	-19.0%	485	1,070	3,455	3,807	0	0	0	0
Wisconsin	2,972	3,636	-18.0%	2,940	3,598	0	0	0	0	32	38
West North Central	20,637	20,794	-0.8%	20,443	20,563	0	0	4	4	190	227
Iowa	2,860	2,558	12.0%	2,779	2,476	0	0	3	3	78	79
Kansas	2,422	2,367	2.3%	2,422	2,367	0	0	0	0	0	0
Minnesota	2,148	2,443	-12.0%	2,116	2,377	0	0	0	0	32	66
Missouri	6,507	6,753	-3.6%	6,507	6,751	0	0	1	1	0	0
Nebraska	2,536	2,471	2.6%	2,463	2,396	0	0	0	0	74	75
North Dakota	3,845	3,892	-1.2%	3,839	3,886	0	0	0	0	7	7
South Dakota	318	311	2.3%	318	311	0	0	0	0	0	0
South Atlantic	10,669	15,216	-30.0%	9,383	13,149	1,243	2,016	4	4	39	47
Delaware	25	49	-48.0%	0	0	25	49	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,350	2,213	-39.0%	1,348	2,209	0	0	0	0	2	4
Georgia	1,797	2,670	-33.0%	1,791	2,662	0	0	0	0	6	7
Maryland	431	932	-54.0%	0	0	427	928	0	0	3	4
North Carolina	1,271	2,386	-47.0%	1,259	2,371	4	6	3	3	5	5
South Carolina	1,107	1,323	-16.0%	1,106	1,322	0	0	0	0	1	2
Virginia	303	897	-66.0%	267	820	15	51	1	1	21	25
West Virginia	4,385	4,747	-7.6%	3,614	3,764	771	982	0	0	0	0
East South Central	9,055	10,633	-15.0%	8,709	10,109	326	497	0	0	20	28
Alabama	2,711	3,061	-11.0%	2,708	3,059	0	0	0	0	3	2
Kentucky	4,766	4,587	3.9%	4,766	4,587	0	0	0	0	0	0
Mississippi	430	695	-38.0%	104	199	326	497	0	0	0	0
Tennessee	1,148	2,290	-50.0%	1,131	2,264	0	0	0	0	16	26
West South Central	15,793	18,067	-13.0%	8,744	9,863	7,028	8,177	0	0	20	27
Arkansas	2,595	2,696	-3.7%	2,225	2,206	368	488	0	0	2	2
Louisiana	931	1,442	-35.0%	616	926	315	516	0	0	0	0
Oklahoma	1,252	1,908	-34.0%	1,194	1,712	39	171	0	0	18	25
Texas	11,015	12,021	-8.4%	4,708	5,019	6,307	7,002	0	0	0	0
Mountain	15,432	13,957	11.0%	13,397	12,040	2,019	1,898	0	0	17	19
Arizona	2,499	2,780	-10.0%	2,499	2,780	0	0	0	0	0	0
Colorado	2,688	2,481	8.4%	2,687	2,480	0	0	0	0	1	1
Idaho	1	1	-18.0%	0	0	0	0	0	0	1	1
Montana	1,785	1,693	5.5%	50	41	1,734	1,651	0	0	1	1
Nevada	419	92	357.0%	294	0	125	92	0	0	0	0
New Mexico	1,474	763	93.0%	1,474	763	0	0	0	0	0	0
Utah	2,356	2,007	17.0%	2,283	1,934	74	73	0	0	0	0
Wyoming	4,211	4,140	1.7%	4,110	4,042	85	83	0	0	15	16
Pacific Contiguous	1,332	511	161.0%	393	0	928	499	0	0	11	11
California	10	10	-2.5%	0	0	0	0	0	0	10	10
Oregon	393	0	--	393	0	0	0	0	0	0	0
Washington	929	501	86.0%	0	0	928	499	0	0	1	1
Pacific Noncontiguous	213	197	7.7%	76	42	130	149	6	7	0	0
Alaska	107	71	50.0%	76	42	24	22	6	7	0	0
Hawaii	106	126	-16.0%	0	0	106	126	0	0	0	0
U.S. Total	100,751	110,172	-8.6%	74,653	81,640	25,646	27,994	18	21	434	517

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

Table 2.9.A. Consumption of Petroleum Liquids for Electricity Generation by State, by Sector, February 2019 and February 2018 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	42	26	63.0%	12	5	25	17	4	3	1	1
Connecticut	19	12	61.0%	NM	0	17	11	1	NM	0	0
Maine	2	2	38.0%	0	0	NM	0	0	0	1	1
Massachusetts	NM	5	NM	NM	NM	NM	3	NM	1	0	0
New Hampshire	9	5	72.0%	7	3	NM	NM	2	2	0	0
Rhode Island	NM	NM	NM	0	0	NM	NM	1	0	0	0
Vermont	NM	NM	NM	NM	NM	0	0	0	0	0	0
Middle Atlantic	123	77	59.0%	44	22	73	47	NM	NM	4	6
New Jersey	NM	3	NM	0	0	NM	NM	0	0	0	0
New York	94	53	77.0%	44	22	46	25	NM	NM	3	5
Pennsylvania	25	21	17.0%	0	0	23	19	1	2	1	1
East North Central	72	62	16.0%	36	38	34	23	0	0	2	2
Illinois	8	7	13.0%	NM	1	7	6	NM	0	0	0
Indiana	18	12	50.0%	16	10	0	1	0	0	1	1
Michigan	11	15	-24.0%	11	14	0	0	0	0	NM	NM
Ohio	26	23	9.8%	NM	8	22	15	0	0	1	0
Wisconsin	9	5	81.0%	4	5	5	0	0	0	NM	NM
West North Central	48	56	-13.0%	48	36	NM	19	1	0	0	0
Iowa	8	11	-33.0%	8	11	NM	0	0	0	0	0
Kansas	5	7	-29.0%	5	7	0	0	0	0	0	0
Minnesota	5	22	-76.0%	5	2	NM	19	0	0	0	0
Missouri	15	9	71.0%	15	9	0	0	0	0	0	0
Nebraska	NM	NM	NM	NM	NM	0	0	0	0	0	0
North Dakota	11	5	139.0%	11	5	0	0	0	0	0	0
South Dakota	2	NM	NM	2	NM	0	0	NM	NM	0	0
South Atlantic	120	117	2.5%	77	87	32	19	3	6	7	5
Delaware	NM	NM	NM	0	1	NM	NM	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	15	17	-8.0%	13	15	NM	0	0	0	2	1
Georgia	8	12	-36.0%	5	10	NM	NM	0	0	2	2
Maryland	22	11	107.0%	0	0	21	10	NM	NM	0	0
North Carolina	23	18	31.0%	21	16	NM	NM	NM	NM	1	1
South Carolina	8	6	32.0%	7	5	0	1	NM	NM	1	1
Virginia	25	19	31.0%	14	8	7	5	3	6	1	1
West Virginia	16	32	-48.0%	16	32	0	0	0	0	0	0
East South Central	37	27	36.0%	35	27	1	0	0	0	1	1
Alabama	2	3	-17.0%	1	2	1	NM	0	0	1	0
Kentucky	16	16	-0.4%	16	16	0	0	0	0	0	0
Mississippi	0	0	2.9%	NM	NM	0	0	0	0	0	0
Tennessee	18	8	125.0%	18	8	0	0	0	0	0	0
West South Central	18	17	4.7%	15	16	2	1	0	0	1	0
Arkansas	4	7	-43.0%	4	7	0	0	0	0	0	0
Louisiana	NM	2	NM	NM	2	0	0	0	0	0	0
Oklahoma	5	2	119.0%	5	2	0	0	0	0	0	0
Texas	7	5	38.0%	5	4	2	1	0	0	0	0
Mountain	27	27	1.1%	24	26	3	1	NM	0	0	0
Arizona	8	11	-22.0%	8	11	0	0	NM	0	0	0
Colorado	3	3	6.3%	3	3	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	3	NM	NM	NM	NM	3	NM	0	0	0	0
Nevada	3	0	564.0%	3	0	0	0	0	0	0	0
New Mexico	2	3	-25.0%	2	3	0	0	0	0	0	0
Utah	4	5	-29.0%	3	5	0	0	0	0	0	0
Wyoming	5	5	5.8%	5	5	0	0	0	0	0	0
Pacific Contiguous	10	15	-35.0%	6	5	1	1	NM	NM	3	9
California	8	14	-43.0%	5	5	1	0	0	0	2	8
Oregon	NM	NM	NM	0	0	0	0	NM	NM	0	0
Washington	NM	2	NM	NM	NM	1	1	0	0	NM	NM
Pacific Noncontiguous	865	943	-8.3%	700	829	140	92	3	2	22	21
Alaska	113	123	-8.9%	107	118	0	0	1	1	4	5
Hawaii	752	820	-8.2%	592	711	140	92	2	1	18	16
U.S. Total	1,363	1,369	-0.4%	995	1,090	312	219	14	15	41	44

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

Table 2.9.B. Consumption of Petroleum Liquids for Electricity Generation by State, by Sector, Year-to-Date through February 2019 and February 2018 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	166	1,632	-90.0%	21	289	131	1,313	11	18	4	12
Connecticut	56	408	-86.0%	NM	NM	52	403	3	NM	0	1
Maine	8	264	-97.0%	0	0	4	251	1	1	3	NM
Massachusetts	76	628	-88.0%	NM	NM	65	501	NM	NM	1	1
New Hampshire	15	239	-94.0%	9	155	NM	79	4	5	0	0
Rhode Island	NM	NM	NM	0	0	NM	NM	1	1	0	0
Vermont	NM	NM	NM	NM	NM	0	0	0	0	0	0
Middle Atlantic	634	2,990	-79.0%	253	888	366	2,073	NM	NM	10	14
New Jersey	58	320	-82.0%	3	3	55	315	0	2	0	1
New York	490	1,995	-75.0%	250	883	230	1,091	NM	NM	7	11
Pennsylvania	86	674	-87.0%	0	2	81	667	1	3	3	NM
East North Central	148	243	-39.0%	82	128	61	108	1	1	4	5
Illinois	17	NM	NM	NM	NM	14	NM	NM	0	0	0
Indiana	40	42	-4.8%	37	36	0	1	0	0	2	5
Michigan	27	29	-4.1%	26	28	0	0	1	1	0	0
Ohio	49	119	-59.0%	NM	NM	41	71	0	0	1	1
Wisconsin	15	NM	NM	9	NM	5	0	0	0	NM	NM
West North Central	114	164	-30.0%	108	139	NM	NM	1	1	0	0
Iowa	15	25	-40.0%	15	24	NM	NM	0	0	0	0
Kansas	19	NM	NM	19	NM	0	0	0	0	0	0
Minnesota	18	NM	NM	12	6	NM	NM	1	0	0	0
Missouri	34	64	-47.0%	34	64	0	0	0	0	0	0
Nebraska	6	4	41.0%	6	4	0	0	0	0	0	0
North Dakota	20	9	133.0%	20	8	0	0	0	0	0	0
South Dakota	NM	NM	NM	NM	NM	0	0	NM	NM	0	0
South Atlantic	405	3,064	-87.0%	268	2,032	109	958	14	42	15	32
Delaware	18	205	-91.0%	0	11	17	194	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	32	325	-90.0%	27	299	NM	NM	0	0	4	NM
Georgia	31	217	-86.0%	22	NM	NM	NM	0	4	6	16
Maryland	51	380	-87.0%	1	5	48	370	NM	NM	1	1
North Carolina	97	648	-85.0%	92	602	NM	NM	NM	NM	2	NM
South Carolina	28	NM	NM	24	NM	3	42	NM	NM	1	3
Virginia	119	897	-87.0%	71	680	34	184	12	31	1	NM
West Virginia	31	73	-58.0%	31	56	0	17	0	0	0	0
East South Central	100	180	-45.0%	96	119	1	57	0	0	3	NM
Alabama	8	91	-91.0%	6	30	1	57	0	0	1	NM
Kentucky	33	34	-5.1%	33	34	0	0	0	0	0	0
Mississippi	3	NM	NM	3	NM	0	0	0	0	0	1
Tennessee	56	46	21.0%	55	46	0	0	0	0	1	0
West South Central	39	NM	NM	29	NM	9	NM	0	0	2	2
Arkansas	14	NM	NM	NM	NM	5	0	0	0	0	2
Louisiana	NM	NM	NM	NM	NM	0	0	0	0	0	0
Oklahoma	8	5	83.0%	8	4	0	0	0	0	0	0
Texas	12	NM	NM	8	NM	3	NM	0	0	1	0
Mountain	63	58	10.0%	58	53	6	4	NM	0	0	0
Arizona	18	21	-13.0%	18	21	0	0	NM	0	0	0
Colorado	6	7	-9.4%	6	7	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	5	3	50.0%	NM	NM	5	3	0	0	0	0
Nevada	5	1	463.0%	4	0	1	1	0	0	0	0
New Mexico	12	6	100.0%	12	6	0	0	0	0	0	0
Utah	8	11	-27.0%	8	11	0	0	0	0	0	0
Wyoming	10	9	10.0%	10	9	0	0	0	0	0	0
Pacific Contiguous	20	22	-11.0%	12	11	4	2	NM	NM	NM	10
California	14	20	-28.0%	10	10	2	1	0	NM	2	8
Oregon	NM	NM	NM	1	0	0	0	NM	NM	0	0
Washington	NM	3	NM	NM	NM	2	NM	0	0	NM	NM
Pacific Noncontiguous	1,965	1,968	-0.1%	1,623	1,706	293	215	5	4	44	42
Alaska	270	283	-4.4%	259	269	0	0	2	2	9	11
Hawaii	1,695	1,685	0.6%	1,364	1,437	293	215	3	2	35	31
U.S. Total	3,656	10,415	-65.0%	2,549	5,451	984	4,760	37	81	86	123

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

Table 2.10.A. Consumption of Petroleum Coke for Electricity Generation by State, by Sector, February 2019 and February 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	NM	2	NM	0	0	0	0	0	0	NM	2
New Jersey	0	1	-49.0%	0	0	0	0	0	0	0	1
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	NM	NM	0	0	0	0	0	0	NM	NM
East North Central	68	76	-11.0%	44	58	21	NM	0	0	3	1
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	42	56	-24.0%	40	55	0	0	0	0	3	1
Ohio	21	17	25.0%	0	0	21	NM	0	0	0	0
Wisconsin	4	3	51.0%	4	3	0	0	0	0	0	0
West North Central	0	2	-84.0%	0	0	0	0	0	0	0	1
Iowa	0	2	-84.0%	0	0	0	0	0	0	0	1
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	48	50	-3.2%	45	47	0	0	0	0	NM	NM
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	45	47	-3.5%	45	47	0	0	0	0	0	0
Georgia	NM	NM	NM	0	0	0	0	0	0	NM	NM
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	138	132	4.1%	133	129	0	0	0	0	4	3
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	134	131	2.1%	133	129	0	0	0	0	1	2
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	4	NM	NM	0	0	0	0	0	0	4	NM
Mountain	14	13	2.0%	0	0	14	13	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	14	13	2.0%	0	0	14	13	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	269	275	-2.1%	222	234	35	30	0	0	12	10

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

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

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	4	5	-9.3%	0	0	0	0	0	0	4	5
New Jersey	1	2	-24.0%	0	0	0	0	0	0	1	2
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	NM	NM	0	0	0	0	0	0	NM	NM
East North Central	155	166	-7.0%	102	121	45	42	0	0	7	4
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	101	117	-13.0%	94	113	0	0	0	0	7	4
Ohio	45	42	8.6%	0	0	45	42	0	0	0	0
Wisconsin	9	8	6.3%	9	8	0	0	0	0	0	0
West North Central	1	3	-76.0%	0	0	0	0	1	1	0	2
Iowa	1	3	-76.0%	0	0	0	0	1	1	0	2
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	105	122	-14.0%	98	115	0	0	0	0	6	7
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	98	115	-15.0%	98	115	0	0	0	0	0	0
Georgia	6	7	-6.5%	0	0	0	0	0	0	6	7
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	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	288	301	-4.3%	280	293	0	0	0	0	8	8
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	281	296	-5.2%	280	293	0	0	0	0	1	3
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	7	5	56.0%	0	0	0	0	0	0	7	5
Mountain	29	27	7.6%	0	0	29	27	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	29	27	7.6%	0	0	29	27	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	581	624	-6.8%	481	530	74	68	1	1	26	25

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

Table 2.11.A. Consumption of Natural Gas for Electricity Generation by State, by Sector, February 2019 and February 2018 (Million Cubic Feet)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	25,163	29,483	-15.0%	NM	NM	24,076	28,419	410	379	637	582
Connecticut	10,325	9,830	5.0%	26	25	9,833	9,380	175	167	291	257
Maine	1,008	NM	NM	0	0	898	NM	12	11	98	87
Massachusetts	10,303	13,251	-22.0%	NM	NM	9,975	12,883	205	182	113	113
New Hampshire	624	242	158.0%	3	3	603	220	5	3	13	16
Rhode Island	2,901	NM	NM	0	0	2,767	NM	12	15	122	110
Vermont	1	1	32.0%	1	1	0	0	1	0	0	0
Middle Atlantic	96,936	89,508	8.3%	6,864	8,009	88,225	79,774	632	611	1,215	1,113
New Jersey	20,391	20,899	-2.4%	NM	NM	20,112	20,386	52	86	157	169
New York	27,191	28,926	-6.0%	6,785	7,748	19,553	20,427	521	470	332	281
Pennsylvania	49,354	39,683	24.0%	8	4	48,560	38,962	59	54	726	663
East North Central	82,880	69,892	19.0%	26,472	23,506	53,483	43,687	686	659	2,239	2,041
Illinois	9,364	NM	NM	190	15	8,581	NM	231	207	362	388
Indiana	16,775	12,991	29.0%	6,412	5,139	9,142	6,741	61	74	1,160	1,037
Michigan	16,588	15,211	9.1%	4,007	4,141	11,994	10,518	256	248	332	303
Ohio	28,814	22,117	30.0%	5,125	4,732	23,490	17,203	88	98	111	84
Wisconsin	11,339	9,829	15.0%	10,739	9,478	276	91	51	32	274	228
West North Central	15,549	15,470	0.5%	13,254	13,744	1,850	1,377	137	117	309	231
Iowa	3,631	2,729	33.0%	3,427	2,547	0	0	40	43	164	140
Kansas	1,179	1,152	2.3%	1,116	1,149	0	0	0	0	62	4
Minnesota	6,480	3,900	66.0%	5,694	3,321	673	481	53	41	59	58
Missouri	2,858	6,789	-58.0%	1,627	5,848	1,177	897	42	28	12	17
Nebraska	NM	279	NM	NM	274	0	0	1	6	0	0
North Dakota	544	341	59.0%	532	NM	0	0	0	0	12	13
South Dakota	NM	NM	NM	NM	NM	0	0	0	0	0	0
South Atlantic	197,641	177,679	11.0%	164,592	145,474	30,065	29,651	847	680	2,137	1,875
Delaware	1,758	2,629	-33.0%	3	1	1,313	2,370	0	0	442	258
District of Columbia	40	55	-27.0%	0	0	0	0	40	55	0	0
Florida	86,453	82,407	4.9%	82,645	78,368	3,169	3,450	10	9	630	580
Georgia	27,610	26,563	3.9%	21,811	21,498	5,527	4,773	0	0	271	292
Maryland	8,713	8,126	7.2%	3,091	1,488	4,868	6,066	721	535	34	37
North Carolina	26,452	22,608	17.0%	21,754	19,681	4,555	2,799	NM	NM	71	53
South Carolina	12,313	6,989	76.0%	10,430	6,502	1,813	429	0	0	69	58
Virginia	33,928	28,086	21.0%	24,777	17,921	8,656	9,705	5	5	490	454
West Virginia	373	NM	NM	82	15	NM	NM	0	0	129	142
East South Central	65,285	64,270	1.6%	44,783	46,548	19,328	16,667	80	96	1,094	959
Alabama	26,578	23,894	11.0%	9,139	8,702	16,896	14,683	0	0	542	509
Kentucky	6,100	7,587	-20.0%	5,839	7,426	180	83	0	0	81	78
Mississippi	23,837	25,977	-8.2%	21,433	23,894	2,241	1,885	0	16	164	183
Tennessee	8,769	6,812	29.0%	8,373	6,526	11	17	80	80	306	190
West South Central	170,881	167,416	2.1%	63,593	55,826	77,065	81,823	402	342	29,820	29,425
Arkansas	10,950	10,161	7.8%	10,194	9,420	593	580	NM	NM	132	130
Louisiana	33,148	30,732	7.9%	18,237	17,518	1,883	1,457	54	56	12,974	11,701
Oklahoma	21,249	17,638	20.0%	13,870	9,335	7,157	8,083	0	0	222	220
Texas	105,534	108,884	-3.1%	21,292	19,553	67,432	71,703	317	254	16,492	17,375
Mountain	60,581	46,068	32.0%	48,379	37,183	10,915	7,650	180	178	1,106	1,058
Arizona	19,935	12,079	65.0%	16,280	10,747	3,606	1,286	49	46	0	0
Colorado	10,841	9,612	13.0%	8,579	7,812	2,235	1,778	0	0	28	21
Idaho	2,518	1,231	105.0%	1,494	405	940	759	13	14	72	53
Montana	634	290	119.0%	372	218	259	69	0	0	2	3
Nevada	12,959	12,914	0.3%	11,450	11,469	1,224	1,224	22	20	262	202
New Mexico	7,129	5,719	25.0%	4,478	3,187	2,611	2,489	NM	43	0	0
Utah	5,975	3,706	61.0%	5,449	3,204	41	41	56	55	430	407
Wyoming	589	518	14.0%	277	142	0	3	0	0	311	373
Pacific Contiguous	69,105	55,280	25.0%	27,257	23,894	36,148	25,779	763	904	4,936	4,702
California	51,602	43,767	18.0%	18,342	17,899	27,680	20,383	736	876	4,844	4,608
Oregon	12,333	7,327	68.0%	5,232	3,724	7,029	3,543	20	19	52	41
Washington	5,170	4,186	24.0%	3,684	2,272	1,439	1,853	7	9	41	52
Pacific Noncontiguous	2,933	2,416	21.0%	2,907	2,393	0	0	0	1	25	22
Alaska	2,933	2,416	21.0%	2,907	2,393	0	0	0	1	25	22
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	786,953	717,482	9.7%	398,141	356,680	341,156	314,828	4,138	3,965	43,518	42,008

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

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

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	54,246	56,386	-3.8%	NM	NM	51,978	54,152	829	732	1,310	1,220
Connecticut	22,023	19,464	13.0%	56	64	21,029	18,572	352	313	587	516
Maine	2,170	3,254	-33.0%	0	0	1,938	NM	24	22	207	224
Massachusetts	22,110	25,332	-13.0%	NM	NM	21,390	24,527	416	360	237	232
New Hampshire	1,892	1,179	61.0%	4	4	1,850	1,135	9	6	28	33
Rhode Island	6,048	NM	NM	0	0	5,771	NM	27	30	250	216
Vermont	3	2	74.0%	2	1	0	0	2	1	0	0
Middle Atlantic	199,471	168,589	18.0%	13,852	15,251	181,833	149,960	1,302	1,234	2,484	2,144
New Jersey	41,743	36,627	14.0%	NM	NM	41,156	35,721	112	174	327	337
New York	55,778	55,375	0.7%	13,695	14,833	40,342	39,078	1,065	915	677	548
Pennsylvania	101,951	76,587	33.0%	11	22	100,334	75,161	126	146	1,480	1,258
East North Central	170,639	155,294	9.9%	56,584	55,482	108,042	94,261	1,404	1,337	4,608	4,213
Illinois	20,065	22,838	-12.0%	578	909	18,243	20,746	471	415	774	768
Indiana	34,636	28,994	19.0%	13,160	13,246	19,016	13,464	129	157	2,330	2,127
Michigan	35,858	35,096	2.2%	10,015	11,130	24,614	22,796	533	530	697	638
Ohio	57,011	48,155	18.0%	10,872	10,958	45,731	36,843	182	178	227	175
Wisconsin	23,069	20,211	14.0%	21,959	19,239	439	412	90	56	581	504
West North Central	30,103	30,675	-1.9%	25,141	27,110	3,965	2,720	282	248	715	596
Iowa	7,553	5,909	28.0%	7,056	5,539	0	NM	81	90	415	280
Kansas	2,441	2,625	-7.0%	2,312	2,487	0	0	0	0	129	138
Minnesota	11,038	8,508	30.0%	9,377	7,215	1,420	1,093	118	83	122	117
Missouri	6,270	11,161	-44.0%	3,619	9,434	2,545	1,627	80	65	26	35
Nebraska	758	770	-1.4%	755	759	0	0	3	10	0	0
North Dakota	1,154	875	32.0%	1,131	849	0	0	0	0	23	27
South Dakota	890	827	7.6%	890	827	0	0	0	0	0	0
South Atlantic	398,319	370,449	7.5%	334,111	306,685	58,030	58,398	1,752	1,399	4,426	3,967
Delaware	3,331	4,861	-31.0%	3	1	2,501	4,341	0	0	827	519
District of Columbia	113	108	4.7%	0	0	0	0	113	108	0	0
Florida	177,105	173,141	2.3%	169,999	164,312	5,718	7,563	19	21	1,369	1,245
Georgia	57,964	58,103	-0.2%	46,229	46,082	11,139	11,382	0	0	596	639
Maryland	14,566	12,408	17.0%	5,591	2,788	7,463	8,444	1,444	1,099	68	77
North Carolina	51,246	46,829	9.4%	41,483	40,521	9,457	6,024	163	160	144	124
South Carolina	24,546	18,179	35.0%	20,950	15,339	3,454	2,708	0	1	142	131
Virginia	68,515	55,939	22.0%	49,592	37,317	17,901	17,667	13	10	1,009	944
West Virginia	932	881	5.8%	263	324	398	NM	0	0	272	289
East South Central	136,690	157,200	-13.0%	94,293	112,666	39,842	42,265	154	197	2,402	2,073
Alabama	53,502	56,757	-5.7%	19,215	19,769	33,112	35,849	0	0	1,175	1,139
Kentucky	15,610	22,166	-30.0%	14,743	20,700	695	1,298	0	0	172	167
Mississippi	49,382	62,003	-20.0%	42,991	56,506	6,011	5,092	0	33	381	371
Tennessee	18,196	16,275	12.0%	17,344	15,691	25	26	154	164	674	396
West South Central	373,134	362,127	3.0%	134,118	124,402	173,207	174,111	857	686	64,952	62,928
Arkansas	18,970	20,894	-9.2%	17,382	19,324	1,236	1,196	NM	NM	284	305
Louisiana	72,309	69,003	4.8%	40,833	39,103	3,899	4,411	119	110	27,459	25,379
Oklahoma	46,254	35,852	29.0%	28,949	20,149	16,780	15,276	0	0	525	426
Texas	235,602	236,378	-0.3%	46,955	45,825	151,293	153,228	669	508	36,685	36,818
Mountain	125,035	94,810	32.0%	97,835	76,818	24,601	15,419	387	376	2,212	2,197
Arizona	42,234	24,069	75.0%	31,678	21,003	10,453	2,969	103	97	0	0
Colorado	21,122	19,723	7.1%	17,528	16,190	3,530	3,490	7	0	58	43
Idaho	5,256	2,767	90.0%	3,063	980	2,023	1,640	26	29	143	117
Montana	1,102	630	75.0%	621	507	473	116	0	0	7	6
Nevada	27,262	27,478	-0.8%	24,284	24,475	2,562	2,564	44	42	372	397
New Mexico	14,824	11,159	33.0%	9,265	6,518	5,470	4,549	90	92	0	0
Utah	12,111	7,999	51.0%	10,991	6,942	86	86	117	115	917	856
Wyoming	1,123	986	14.0%	404	203	3	5	0	0	716	779
Pacific Contiguous	146,924	121,106	21.0%	57,801	52,953	76,934	55,934	1,618	1,906	10,571	10,313
California	106,694	93,316	14.0%	37,227	37,688	57,517	43,663	1,566	1,847	10,384	10,117
Oregon	26,145	17,689	48.0%	11,727	9,185	14,273	8,376	38	41	107	88
Washington	14,085	10,100	39.0%	8,847	6,080	5,144	3,894	14	18	81	108
Pacific Noncontiguous	6,348	5,313	19.0%	6,295	5,275	0	0	0	2	52	36
Alaska	6,348	5,313	19.0%	6,295	5,275	0	0	0	2	52	36
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,640,909	1,521,948	7.8%	820,160	776,925	718,432	647,220	8,584	8,117	93,733	89,686

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

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

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	817	845	-3.3%	0	0	796	826	21	19	0	0
Connecticut	NM	NM	NM	0	0	NM	NM	0	0	0	0
Maine	NM	NM	NM	0	0	NM	NM	0	0	0	0
Massachusetts	282	308	-8.6%	0	0	282	308	0	0	0	0
New Hampshire	90	91	-2.0%	0	0	NM	NM	21	19	0	0
Rhode Island	334	322	3.8%	0	0	334	322	0	0	0	0
Vermont	NM	NM	NM	0	0	NM	NM	0	0	0	0
Middle Atlantic	4,133	4,527	-8.7%	0	0	3,975	4,308	NM	NM	76	131
New Jersey	642	680	-5.7%	0	0	613	650	NM	NM	0	0
New York	1,311	1,345	-2.5%	0	0	1,311	1,345	0	0	0	0
Pennsylvania	2,180	2,502	-13.0%	0	0	2,052	2,314	NM	NM	76	131
East North Central	4,693	5,219	-10.0%	621	734	4,027	4,434	23	30	22	21
Illinois	710	956	-26.0%	NM	76	643	880	0	0	0	0
Indiana	638	747	-15.0%	553	658	85	89	0	0	0	0
Michigan	1,681	1,751	-4.0%	0	0	1,681	1,751	0	0	0	0
Ohio	842	870	-3.3%	0	0	842	870	0	0	0	0
Wisconsin	822	894	-8.2%	0	0	777	844	23	30	22	21
West North Central	816	1,018	-20.0%	327	360	488	658	0	0	0	0
Iowa	192	210	-8.5%	0	0	192	210	0	0	0	0
Kansas	NM	NM	NM	0	0	NM	NM	0	0	0	0
Minnesota	NM	319	NM	NM	NM	NM	229	0	0	0	0
Missouri	NM	233	NM	NM	NM	NM	NM	0	0	0	0
Nebraska	NM	139	NM	NM	139	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	4,130	4,553	-9.3%	407	437	3,434	3,818	134	139	155	159
Delaware	NM	NM	NM	0	0	NM	NM	0	0	NM	NM
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	684	738	-7.4%	131	132	552	607	0	0	0	0
Georgia	575	649	-11.0%	0	0	565	640	0	0	11	9
Maryland	226	264	-14.0%	0	0	NM	173	90	91	0	0
North Carolina	849	931	-8.9%	0	0	823	904	NM	NM	0	0
South Carolina	438	478	-8.4%	269	300	NM	NM	0	0	136	142
Virginia	1,256	1,380	-9.0%	7	5	1,232	1,355	NM	NM	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	455	491	-7.2%	NM	205	268	286	0	0	0	0
Alabama	NM	NM	NM	0	0	NM	NM	0	0	0	0
Kentucky	NM	223	NM	NM	205	NM	NM	0	0	0	0
Mississippi	NM	NM	NM	0	0	NM	NM	0	0	0	0
Tennessee	NM	158	NM	0	0	NM	158	0	0	0	0
West South Central	1,078	1,219	-12.0%	0	0	1,026	1,178	52	41	0	0
Arkansas	NM	NM	NM	0	0	NM	NM	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	NM	NM	NM	0	0	NM	NM	0	0	0	0
Texas	918	1,046	-12.0%	0	0	867	1,005	52	41	0	0
Mountain	548	570	-3.9%	NM	NM	478	514	49	32	0	0
Arizona	NM	NM	NM	0	0	NM	NM	0	0	0	0
Colorado	NM	NM	NM	0	0	NM	NM	0	0	0	0
Idaho	NM	NM	NM	NM	NM	NM	NM	17	17	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	NM	157	NM	0	0	NM	157	0	0	0	0
New Mexico	NM	NM	NM	0	0	NM	NM	0	0	0	0
Utah	NM	NM	NM	0	0	NM	NM	32	15	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	4,199	5,086	-17.0%	NM	636	2,960	3,204	1,129	1,246	0	0
California	3,682	4,238	-13.0%	NM	224	2,583	2,807	1,092	1,207	0	0
Oregon	417	459	-9.1%	NM	NM	278	309	NM	NM	0	0
Washington	NM	390	NM	0	302	NM	NM	0	0	0	0
Pacific Noncontiguous	60	67	-9.8%	0	0	0	0	60	67	0	0
Alaska	60	67	-9.8%	0	0	0	0	60	67	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	20,928	23,593	-11.0%	1,672	2,396	17,454	19,225	1,549	1,661	253	311

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

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

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	1,645	1,710	-3.8%	0	0	1,602	1,676	43	33	0	0
Connecticut	NM	NM	NM	0	0	NM	NM	0	0	0	0
Maine	NM	NM	NM	0	0	NM	NM	0	0	0	0
Massachusetts	594	634	-6.3%	0	0	594	634	0	0	0	0
New Hampshire	185	185	-0.1%	0	0	NM	152	43	33	0	0
Rhode Island	633	639	-0.9%	0	0	633	639	0	0	0	0
Vermont	NM	NM	NM	0	0	NM	NM	0	0	0	0
Middle Atlantic	8,655	9,272	-6.7%	0	0	8,328	8,843	171	184	156	244
New Jersey	1,330	1,377	-3.4%	0	0	1,270	1,313	NM	NM	0	0
New York	2,765	2,822	-2.0%	0	0	2,765	2,822	0	0	0	0
Pennsylvania	4,560	5,073	-10.0%	0	0	4,294	4,708	111	121	156	244
East North Central	9,912	10,755	-7.8%	1,344	1,532	8,455	9,112	68	68	45	43
Illinois	1,481	1,963	-25.0%	133	157	1,348	1,806	0	0	0	0
Indiana	1,395	1,559	-10.0%	1,211	1,375	184	184	0	0	0	0
Michigan	3,550	3,566	-0.4%	0	0	3,550	3,566	0	0	0	0
Ohio	1,743	1,801	-3.2%	0	0	1,743	1,801	0	0	0	0
Wisconsin	1,743	1,867	-6.7%	0	0	1,630	1,756	68	68	45	43
West North Central	1,716	2,099	-18.0%	677	750	1,040	1,348	0	0	0	0
Iowa	413	428	-3.5%	0	0	413	428	0	0	0	0
Kansas	NM	242	NM	0	0	NM	242	0	0	0	0
Minnesota	413	657	-37.0%	NM	186	NM	471	0	0	0	0
Missouri	387	479	-19.0%	NM	271	NM	208	0	0	0	0
Nebraska	275	293	-6.3%	275	293	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	8,669	9,529	-9.0%	851	883	7,203	8,027	284	291	331	328
Delaware	215	231	-6.8%	0	0	NM	212	0	0	NM	NM
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,431	1,497	-4.4%	275	252	1,156	1,245	0	0	0	0
Georgia	1,180	1,434	-18.0%	0	0	1,158	1,423	0	0	22	11
Maryland	478	547	-13.0%	0	0	NM	356	192	191	0	0
North Carolina	1,789	1,907	-6.2%	0	0	1,736	1,849	NM	NM	0	0
South Carolina	921	990	-7.0%	563	618	NM	NM	0	0	289	298
Virginia	2,654	2,923	-9.2%	14	12	2,602	2,868	NM	NM	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	950	1,007	-5.7%	392	420	558	588	0	0	0	0
Alabama	NM	183	NM	0	0	NM	183	0	0	0	0
Kentucky	430	457	-5.8%	392	420	NM	NM	0	0	0	0
Mississippi	NM	NM	NM	0	0	NM	NM	0	0	0	0
Tennessee	306	325	-5.8%	0	0	306	325	0	0	0	0
West South Central	2,248	2,521	-11.0%	0	0	2,139	2,431	109	90	0	0
Arkansas	NM	274	NM	0	0	NM	274	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	NM	NM	NM	0	0	NM	NM	0	0	0	0
Texas	1,910	2,165	-12.0%	0	0	1,801	2,076	109	90	0	0
Mountain	1,150	1,184	-2.9%	NM	NM	1,008	1,061	100	75	0	0
Arizona	NM	166	NM	0	0	NM	166	0	0	0	0
Colorado	NM	191	NM	0	0	NM	191	0	0	0	0
Idaho	NM	152	NM	NM	NM	NM	NM	35	36	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	299	322	-7.2%	0	0	299	322	0	0	0	0
New Mexico	NM	NM	NM	0	0	NM	NM	0	0	0	0
Utah	352	330	6.8%	0	0	NM	290	64	40	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	8,915	10,526	-15.0%	NM	1,334	6,262	6,629	2,422	2,563	0	0
California	7,806	8,764	-11.0%	NM	476	5,446	5,807	2,343	2,481	0	0
Oregon	899	951	-5.4%	NM	227	606	642	79	82	0	0
Washington	NM	811	NM	0	630	NM	181	0	0	0	0
Pacific Noncontiguous	110	138	-21.0%	0	0	0	0	110	138	0	0
Alaska	110	138	-21.0%	0	0	0	0	110	138	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	43,970	48,742	-9.8%	3,538	4,966	36,593	39,717	3,307	3,443	531	616

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

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

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	257	291	-12.0%	0	0	243	272	14	19	0	0
Connecticut	88	96	-7.9%	0	0	88	96	0	0	0	0
Maine	24	28	-15.0%	0	0	10	9	14	19	0	0
Massachusetts	135	157	-14.0%	0	0	135	157	0	0	0	0
New Hampshire	9	10	-6.3%	0	0	9	10	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	397	400	-0.7%	0	0	318	320	79	80	0	0
New Jersey	99	110	-10.0%	0	0	72	83	26	27	0	0
New York	147	141	4.0%	0	0	115	107	32	35	0	0
Pennsylvania	152	149	1.7%	0	0	130	131	21	18	0	0
East North Central	18	18	0.7%	3	2	0	0	15	15	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	2	2	1.0%	0	0	0	0	2	2	0	0
Michigan	13	14	-2.0%	0	0	0	0	13	14	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	3	2	16.0%	3	2	0	0	0	0	0	0
West North Central	33	41	-19.0%	18	23	15	18	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	33	41	-19.0%	18	23	15	18	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	400	443	-9.6%	0	0	368	411	33	33	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	263	303	-13.0%	0	0	263	303	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	44	49	-11.0%	0	0	44	49	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	94	90	3.4%	0	0	61	58	33	33	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	1	1	-5.2%	0	0	0	0	0	0	1	1
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	1	1	-5.2%	0	0	0	0	0	0	1	1
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	0	0	--	0	0	0	0	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	50	56	-9.3%	0	0	50	56	0	0	0	0
California	30	35	-13.0%	0	0	30	35	0	0	0	0
Oregon	9	9	6.3%	0	0	9	9	0	0	0	0
Washington	11	12	-8.8%	0	0	11	12	0	0	0	0
Pacific Noncontiguous	37	28	30.0%	0	0	0	0	37	28	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	37	28	30.0%	0	0	0	0	37	28	0	0
U.S. Total	1,194	1,278	-6.6%	21	26	995	1,076	177	175	1	1

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

Table 2.13.B. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State, by Sector, Year-to-Date through February 2019 and February 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	533	585	-8.9%	0	0	504	548	29	37	0	0
Connecticut	164	191	-14.0%	0	0	164	191	0	0	0	0
Maine	49	58	-15.0%	0	0	20	21	29	37	0	0
Massachusetts	299	315	-5.0%	0	0	299	315	0	0	0	0
New Hampshire	20	21	-2.9%	0	0	20	21	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	844	828	1.9%	0	0	671	657	173	170	0	0
New Jersey	218	232	-6.2%	0	0	162	176	56	57	0	0
New York	302	285	5.8%	0	0	231	213	71	72	0	0
Pennsylvania	324	310	4.4%	0	0	278	268	46	42	0	0
East North Central	38	38	0.7%	6	5	0	0	32	33	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	3	3	0.5%	0	0	0	0	3	3	0	0
Michigan	29	29	-1.6%	0	0	0	0	29	29	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	6	5	15.0%	6	5	0	0	0	0	0	0
West North Central	83	86	-3.2%	46	49	37	37	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	83	86	-3.2%	46	49	37	37	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	876	913	-4.1%	0	0	807	850	69	63	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	584	635	-8.1%	0	0	584	635	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	95	102	-7.0%	0	0	95	102	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	197	176	12.0%	0	0	128	113	69	63	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	2	1	9.3%	0	0	0	0	0	0	2	1
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	2	1	9.3%	0	0	0	0	0	0	2	1
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	0	0	--	0	0	0	0	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	108	115	-6.4%	0	0	108	115	0	0	0	0
California	64	71	-11.0%	0	0	64	71	0	0	0	0
Oregon	19	19	3.6%	0	0	19	19	0	0	0	0
Washington	25	25	-0.8%	0	0	25	25	0	0	0	0
Pacific Noncontiguous	74	62	20.0%	0	0	0	0	74	62	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	74	62	20.0%	0	0	0	0	74	62	0	0
U.S. Total	2,557	2,628	-2.7%	52	53	2,126	2,208	377	365	2	1

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

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

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	4,243	4,239	0.1%	741	786	3,102	3,044	1	2	399	408
Connecticut	201	202	-0.3%	0	0	201	202	0	0	0	0
Maine	1,596	1,609	-0.8%	0	0	1,197	1,200	0	1	399	408
Massachusetts	176	167	5.4%	0	0	176	167	0	0	0	0
New Hampshire	1,722	1,705	1.0%	368	396	1,353	1,308	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	549	558	-1.5%	373	389	175	168	1	1	0	0
Middle Atlantic	695	1,008	-31.0%	0	0	435	501	0	0	259	507
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	516	587	-12.0%	0	0	435	500	0	0	81	87
Pennsylvania	179	421	-58.0%	0	0	0	0	0	0	179	420
East North Central	1,916	1,962	-2.4%	380	403	971	964	0	0	565	596
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	1,249	1,245	0.3%	0	0	959	952	0	0	290	293
Ohio	86	92	-7.5%	0	0	12	12	0	0	74	80
Wisconsin	581	625	-7.0%	380	403	0	0	0	0	201	222
West North Central	521	870	-40.0%	150	152	104	467	45	28	223	223
Iowa	7	0	NM	0	0	0	0	7	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	487	842	-42.0%	150	152	104	467	11	0	223	223
Missouri	27	28	-4.1%	0	0	0	0	27	28	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	9,565	10,110	-5.4%	2,236	1,978	2,519	2,982	12	12	4,799	5,138
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,932	1,686	15.0%	707	460	572	539	0	0	653	687
Georgia	2,424	2,976	-19.0%	0	0	647	972	0	0	1,776	2,005
Maryland	55	62	-11.0%	0	0	0	0	12	12	44	50
North Carolina	1,079	1,272	-15.0%	0	0	568	733	0	0	511	539
South Carolina	1,438	1,472	-2.3%	188	144	500	505	0	0	750	823
Virginia	2,637	2,640	-0.1%	1,341	1,374	231	232	0	0	1,064	1,034
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	2,844	2,942	-3.3%	0	0	159	168	0	0	2,685	2,774
Alabama	1,894	1,981	-4.4%	0	0	159	168	0	0	1,735	1,813
Kentucky	131	138	-5.1%	0	0	0	0	0	0	131	138
Mississippi	490	472	3.8%	0	0	0	0	0	0	490	472
Tennessee	329	350	-6.2%	0	0	0	0	0	0	329	350
West South Central	2,153	2,343	-8.1%	0	0	0	111	0	0	2,153	2,233
Arkansas	565	578	-2.2%	0	0	0	0	0	0	565	578
Louisiana	1,125	1,158	-2.9%	0	0	0	0	0	0	1,125	1,158
Oklahoma	125	141	-11.0%	0	0	0	0	0	0	125	141
Texas	339	467	-27.0%	0	0	0	111	0	0	339	357
Mountain	440	451	-2.5%	0	0	316	299	0	0	124	152
Arizona	203	196	3.9%	0	0	203	196	0	0	0	0
Colorado	93	79	17.0%	0	0	93	79	0	0	0	0
Idaho	125	158	-21.0%	0	0	19	24	0	0	106	134
Montana	19	18	1.2%	0	0	0	0	0	0	19	18
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	4,960	4,686	5.9%	337	327	2,973	2,912	0	0	1,650	1,447
California	3,478	3,114	12.0%	0	0	2,786	2,724	0	0	691	390
Oregon	512	546	-6.2%	0	0	187	188	0	0	325	358
Washington	970	1,026	-5.4%	337	327	0	0	0	0	633	699
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	27,338	28,612	-4.5%	3,844	3,645	10,578	11,446	57	42	12,858	13,478

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

Table 2.14.B. Consumption of Wood / Wood Waste Biomass for Electricity Generation by State, by Sector, Year-to-Date through February 2019 and February 2018 (Billion Btus)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	9,305	9,126	2.0%	1,692	1,752	6,766	6,490	2	10	846	874
Connecticut	444	446	-0.5%	0	0	444	446	0	0	0	0
Maine	3,456	3,480	-0.7%	0	0	2,610	2,598	0	8	846	874
Massachusetts	381	340	12.0%	0	0	381	340	0	0	0	0
New Hampshire	3,835	3,598	6.6%	885	840	2,950	2,757	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	1,189	1,262	-5.7%	806	912	381	348	2	2	0	0
Middle Atlantic	1,546	2,217	-30.0%	0	0	1,002	1,141	0	0	544	1,077
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	1,169	1,326	-12.0%	0	0	1,002	1,140	0	0	167	187
Pennsylvania	377	891	-58.0%	0	0	0	1	0	0	377	890
East North Central	4,200	4,282	-1.9%	860	943	2,130	2,091	0	0	1,210	1,248
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	2,716	2,681	1.3%	0	0	2,106	2,066	0	0	610	615
Ohio	180	196	-8.0%	0	0	24	25	0	0	157	172
Wisconsin	1,304	1,405	-7.2%	860	943	0	0	0	0	444	462
West North Central	1,096	1,605	-32.0%	326	323	218	760	83	71	469	451
Iowa	15	1	NM	0	0	0	0	15	1	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	1,024	1,548	-34.0%	326	323	218	760	11	14	469	451
Missouri	57	56	0.8%	0	0	0	0	57	56	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	20,459	21,349	-4.2%	4,828	4,466	5,545	6,125	25	24	10,062	10,734
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	4,005	3,625	10.0%	1,511	1,087	1,238	1,096	0	0	1,255	1,442
Georgia	5,221	6,048	-14.0%	0	0	1,374	1,903	0	0	3,847	4,145
Maryland	120	120	0.2%	0	0	0	0	25	24	95	96
North Carolina	2,397	2,738	-12.0%	0	0	1,347	1,589	0	0	1,050	1,149
South Carolina	2,997	3,027	-1.0%	338	275	1,076	1,023	0	0	1,584	1,728
Virginia	5,719	5,792	-1.3%	2,978	3,104	510	514	0	0	2,230	2,174
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	5,871	6,076	-3.4%	0	0	334	352	0	0	5,537	5,725
Alabama	3,883	3,960	-1.9%	0	0	334	352	0	0	3,549	3,608
Kentucky	277	293	-5.5%	0	0	0	0	0	0	277	293
Mississippi	1,025	1,082	-5.3%	0	0	0	0	0	0	1,025	1,082
Tennessee	687	741	-7.3%	0	0	0	0	0	0	687	741
West South Central	4,463	5,001	-11.0%	0	0	0	380	0	0	4,463	4,622
Arkansas	1,161	1,153	0.7%	0	0	0	0	0	0	1,161	1,153
Louisiana	2,325	2,419	-3.9%	0	0	0	0	0	0	2,325	2,419
Oklahoma	268	305	-12.0%	0	0	0	0	0	0	268	305
Texas	709	1,124	-37.0%	0	0	0	380	0	0	709	744
Mountain	957	959	-0.2%	0	0	681	638	0	0	277	321
Arizona	442	409	8.1%	0	0	442	409	0	0	0	0
Colorado	190	178	6.8%	0	0	190	178	0	0	0	0
Idaho	285	333	-15.0%	0	0	48	51	0	0	236	282
Montana	40	39	4.2%	0	0	0	0	0	0	40	39
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	10,675	9,975	7.0%	736	693	6,392	6,186	0	0	3,547	3,095
California	7,467	6,639	12.0%	0	0	5,980	5,771	0	0	1,487	867
Oregon	1,116	1,167	-4.4%	0	0	412	415	0	0	704	752
Washington	2,092	2,169	-3.6%	736	693	0	0	0	0	1,356	1,476
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	58,573	60,591	-3.3%	8,441	8,177	23,069	24,162	109	105	26,954	28,147

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

Chapter 3

Fossil-Fuel Stocks for Electricity Generation

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

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

Notes: See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary.
See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms. Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Table 3.2 Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, by State, February 2019 and 2018

Census Division and State	Coal (Thousand Tons)			Petroleum Liquids (Thousand Barrels)			Petroleum Coke (Thousand Tons)		
	February 2019	February 2018	Percentage Change	February 2019	February 2018	Percentage Change	February 2019	February 2018	Percentage Change
New England	508	736	-31.0%	2,963	3,210	-7.7%	0	0	--
Connecticut	W	W	W	862	1,124	-23.4%	0	0	--
Maine	0	0	--	292	305	-4.2%	0	0	--
Massachusetts	W	W	W	1,271	1,346	-5.6%	0	0	--
New Hampshire	W	W	W	364	249	46.1%	0	0	--
Rhode Island	W	W	W	134	139	-3.9%	0	0	--
Vermont	0	0	--	41	47	-12.3%	0	0	--
Middle Atlantic	3,293	3,220	2.3%	4,783	4,721	1.3%	0	0	--
New Jersey	W	136	W	615	665	-7.6%	0	0	--
New York	W	W	W	2,957	3,057	-3.3%	0	0	--
Pennsylvania	3,075	W	W	1,212	998	21.4%	0	0	--
East North Central	17,776	23,076	-23.0%	991	1,098	-9.7%	58	W	W
Illinois	4,470	5,078	-12.0%	91	76	18.9%	0	0	--
Indiana	5,986	7,565	-20.9%	95	108	-12.0%	W	W	W
Michigan	2,567	3,869	-33.7%	289	337	-14.1%	W	W	W
Ohio	2,385	3,724	-36.0%	328	362	-9.4%	0	W	W
Wisconsin	2,367	2,839	-16.6%	189	215	-12.3%	W	W	W
West North Central	17,110	26,115	-34.5%	855	947	-9.7%	0	0	--
Iowa	2,736	6,202	-55.9%	124	142	-12.5%	0	0	--
Kansas	2,872	3,910	-26.5%	103	109	-5.4%	0	0	--
Minnesota	2,225	2,885	-22.9%	115	127	-9.7%	0	0	--
Missouri	6,088	8,238	-26.1%	333	363	-8.3%	0	0	--
Nebraska	1,757	3,065	-42.7%	107	121	-11.5%	0	0	--
North Dakota	W	W	W	31	34	-9.4%	0	0	--
South Dakota	W	W	W	42	50	-17.0%	0	0	--
South Atlantic	19,029	20,924	-9.1%	9,740	10,956	-11.1%	W	W	W
Delaware	W	W	W	353	368	-4.0%	0	0	--
District of Columbia	0	0	--	0	0	--	0	0	--
Florida	3,379	3,986	-15.2%	4,089	5,221	-21.7%	W	55	W
Georgia	4,169	4,633	-10.0%	663	716	-7.3%	0	0	--
Maryland	1,636	1,270	28.9%	687	597	15.2%	0	0	--
North Carolina	3,549	3,432	3.4%	1,093	1,171	-6.6%	0	0	--
South Carolina	1,943	3,567	-45.5%	517	581	-11.1%	0	0	--
Virginia	931	788	18.2%	2,194	2,164	1.4%	0	0	--
West Virginia	W	W	W	143	138	3.3%	W	W	W
East South Central	9,522	10,125	-6.0%	1,441	1,639	-12.1%	0	W	W
Alabama	W	2,511	W	208	195	7.0%	0	0	--
Kentucky	4,724	4,626	2.1%	230	254	-9.4%	0	W	W
Mississippi	W	921	W	166	485	-65.8%	0	0	--
Tennessee	2,435	2,068	17.8%	836	705	18.6%	0	0	--
West South Central	15,685	17,560	-10.7%	1,366	1,616	-15.5%	W	W	W
Arkansas	3,184	2,880	10.5%	142	168	-15.7%	0	0	--
Louisiana	2,170	2,253	-3.7%	322	375	-14.1%	W	W	W
Oklahoma	2,969	3,763	-21.1%	90	98	-7.4%	0	0	--
Texas	7,363	8,663	-15.0%	812	976	-16.8%	0	0	--
Mountain	15,101	18,164	-16.9%	368	401	-8.2%	W	W	W
Arizona	2,812	2,902	-3.1%	140	133	4.9%	0	0	--
Colorado	3,804	4,247	-10.4%	117	136	-13.5%	0	0	--
Idaho	0	0	--	0	0	-28.0%	0	0	--
Montana	W	W	W	18	20	-13.3%	W	W	W
Nevada	W	W	W	2	3	-21.1%	0	0	--
New Mexico	W	W	W	18	38	-52.3%	0	0	--
Utah	2,846	4,443	-35.9%	44	34	31.7%	0	0	--
Wyoming	3,546	4,081	-13.1%	29	37	-23.0%	0	0	--
Pacific Contiguous	W	W	W	328	335	-2.0%	0	0	--
California	0	0	--	165	156	5.5%	0	0	--
Oregon	W	W	W	70	77	-8.8%	0	0	--
Washington	W	W	W	93	102	-8.3%	0	0	--
Pacific Noncontiguous	W	W	W	2,122	2,316	-8.3%	0	0	--
Alaska	0	W	W	51	218	-76.5%	0	0	--
Hawaii	W	W	W	2,071	2,098	-1.3%	0	0	--
U.S. Total	98,744	121,019	-18.4%	24,958	27,239	-8.4%	507	689	-26.4%

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

Table 3.3 Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, by Census Divison, February 2019 and 2018

	Electric Power Sector			Electric Utilities		Independent Power Producers	
Census Division	**February 2019**	**February 2018**	**Percentage Change**	**February 2019**	**February 2018**	**February 2019**	**February 2018**
Coal (Thousand Tons)							
New England	508	736	-31.0%	W	W	W	W
Middle Atlantic	3,293	3,220	2.3%	0	W	3,293	W
East North Central	17,776	23,076	-23.0%	12,006	15,698	5,770	7,379
West North Central	17,110	26,115	-34.5%	17,110	26,115	0	0
South Atlantic	19,029	20,924	-9.1%	16,454	18,902	2,575	2,022
East South Central	9,522	10,125	-6.0%	9,522	10,125	0	0
West South Central	15,685	17,560	-10.7%	11,394	12,962	4,291	4,598
Mountain	15,101	18,164	-16.9%	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	**98,744**	**121,019**	**-18.4%**	**81,099**	**101,983**	**17,645**	**19,035**
Petroleum Liquids (Thousand Barrels)							
New England	2,963	3,210	-7.7%	467	449	2,496	2,761
Middle Atlantic	4,783	4,721	1.3%	1,845	1,834	2,938	2,887
East North Central	991	1,098	-9.7%	652	777	339	321
West North Central	855	947	-9.7%	835	934	20	13
South Atlantic	9,740	10,956	-11.1%	7,813	9,199	1,926	1,757
East South Central	1,441	1,639	-12.1%	1,349	1,566	92	74
West South Central	1,366	1,616	-15.5%	1,062	1,272	304	344
Mountain	368	401	-8.2%	339	369	29	32
Pacific Contiguous	328	335	-2.0%	252	233	76	102
Pacific Noncontiguous	2,122	2,316	-8.3%	2,103	2,292	19	24
U.S. Total	**24,958**	**27,239**	**-8.4%**	**16,717**	**18,924**	**8,242**	**8,315**
Petroleum Coke (Thousand Tons)							
New England	0	0	--	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0
East North Central	58	W	W	58	W	0	W
West North Central	0	0	--	0	0	0	0
South Atlantic	W	W	W	W	55	W	W
East South Central	0	W	W	0	W	0	0
West South Central	W	W	W	W	W	0	0
Mountain	W	W	W	0	0	W	W
Pacific Contiguous	0	0	--	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0
U.S. Total	**507**	**689**	**-26.4%**	**497**	**562**	**11**	**127**

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

Table 3.4. Stocks of Coal by Coal Rank: Electric Power Sector, 2009 - February 2019

	Electric Power Sector			
Period	Bituminous Coal	Subbituminous Coal	Lignite Coal	Total
End of Year Stocks				
2009	91,922	92,448	5,097	189,467
2010	81,108	86,915	6,894	174,917
2011	82,056	85,151	5,179	172,387
2012	86,437	93,833	4,846	185,116
2013	73,113	69,720	5,051	147,884
2014	72,771	72,552	6,225	151,548
2015	82,004	108,614	4,931	195,548
2016	67,241	90,376	4,393	162,009
2017	56,140	77,875	3,672	137,687
2018	42,006	57,742	3,039	102,786
Year 2017, End of Month Stocks				
January	65,797	86,082	4,335	156,214
February	67,752	88,326	4,424	160,502
March	67,783	89,381	4,651	161,815
April	68,195	90,736	5,005	163,937
May	68,333	89,005	5,204	162,542
June	66,591	86,722	4,701	158,014
July	60,766	80,765	4,281	145,811
August	59,208	77,758	4,238	141,204
Sept	58,453	77,173	3,945	139,571
October	59,122	78,821	3,519	141,463
November	59,427	79,916	4,081	143,424
December	56,140	77,875	3,672	137,687
Year 2018, End of Month Stocks				
January	48,395	72,254	3,074	123,723
February	48,130	69,980	2,909	121,019
March	49,518	73,801	3,213	126,532
April	50,964	74,782	3,324	129,071
May	51,794	73,448	3,212	128,454
June	48,853	69,484	3,191	121,529
July	44,916	63,030	2,847	110,794
August	42,779	58,578	2,816	104,172
Sept	40,787	57,150	2,845	100,781
October	43,017	59,176	3,016	105,209
November	42,833	58,383	3,108	104,324
December	42,006	57,742	3,039	102,786
Year 2019, End of Month Stocks				
January	40,430	55,888	2,883	99,201
February	41,719	54,287	2,738	98,744

Notes: See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923. and predecessor forms. Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms. Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following:
Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Chapter 4

Receipts and Cost of Fossil Fuels

Table 4.1. Receipts, Average Cost, and Quality of Fossil Fuels: Total (All Sectors), 2009 - February 2019

	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
2009	19,437,966	981,477	2.21	43.74	1.01	102.8	330,043	54,181	10.25	62.47	0.54	104.8
2010	19,289,661	979,918	2.27	44.64	1.16	97.9	275,058	45,472	14.02	84.80	0.51	101.1
2011	18,675,843	956,538	2.39	46.65	1.19	100.0	216,752	36,158	19.94	119.54	0.60	116.1
2012	16,265,578	841,183	2.38	46.09	1.25	99.5	116,937	19,464	21.85	131.28	0.51	75.7
2013	15,906,809	823,222	2.34	45.33	1.29	93.7	123,964	20,413	20.56	124.90	0.46	76.5
2014	16,594,722	854,560	2.37	45.96	1.32	98.0	172,421	28,514	19.87	120.26	0.46	82.3
2015	15,086,208	782,929	2.22	42.86	1.29	103.5	147,647	24,320	11.49	69.79	0.48	75.8
2016	12,516,272	650,770	2.11	40.64	1.34	93.8	101,810	16,807	9.39	56.89	0.49	68.1
2017	12,261,029	642,364	2.06	39.27	1.28	94.7	96,977	16,127	11.86	71.35	0.49	68.0
2018	11,357,521	594,683	2.06	39.38	1.31	91.6	118,873	19,717	14.26	86.12	0.42	65.9
Year 2017												
January	1,111,151	58,266	2.09	39.82	1.26	89.7	9,669	1,609	11.97	72.02	0.46	75.3
February	1,007,951	52,810	2.06	39.28	1.30	107.4	6,294	1,044	11.67	70.33	0.49	62.2
March	976,663	50,872	2.07	39.71	1.35	101.5	12,196	2,053	11.62	69.03	0.54	113.5
April	901,976	46,731	2.08	40.06	1.33	102.9	6,356	1,055	11.62	69.98	0.48	65.2
May	957,276	49,830	2.09	40.13	1.33	95.8	6,638	1,108	11.44	68.50	0.47	59.9
June	1,042,460	54,220	2.07	39.86	1.31	90.4	7,471	1,241	10.91	65.68	0.47	65.9
July	1,095,129	57,572	2.06	39.15	1.22	81.1	6,695	1,121	10.90	65.08	0.48	65.6
August	1,187,341	62,125	2.05	39.16	1.29	92.8	7,022	1,162	11.12	67.19	0.47	63.6
Sept	1,015,150	53,538	2.02	38.29	1.23	95.9	6,518	1,083	11.68	70.30	0.49	61.6
October	999,170	52,462	2.03	38.70	1.27	102.4	7,578	1,255	11.93	72.04	0.52	69.1
November	984,968	52,087	2.04	38.56	1.26	99.9	9,787	1,622	12.29	74.17	0.47	88.5
December	981,795	51,851	2.04	38.66	1.26	86.8	10,753	1,773	13.99	84.87	0.46	46.8
Year 2018												
January	951,750	50,275	2.07	39.16	1.24	76.3	29,693	4,947	13.68	82.51	0.48	50.7
February	849,609	44,615	2.07	39.43	1.26	95.1	10,931	1,797	12.60	76.84	0.47	118.6
March	939,471	48,770	2.04	39.36	1.33	106.9	7,265	1,210	13.39	80.46	0.42	76.8
April	818,670	42,632	2.07	39.74	1.32	102.3	6,423	1,060	13.73	83.20	0.41	63.2
May	892,834	46,150	2.05	39.61	1.37	95.0	8,730	1,441	14.29	86.69	0.34	74.1
June	931,118	48,533	2.05	39.26	1.35	85.0	8,103	1,346	15.01	90.40	0.32	65.8
July	991,966	52,164	2.06	39.10	1.28	80.4	6,858	1,129	14.69	89.18	0.33	60.6
August	1,075,669	56,419	2.06	39.28	1.30	87.1	6,522	1,079	15.26	92.25	0.38	54.4
Sept	945,615	49,944	2.05	38.87	1.25	90.8	7,457	1,240	15.31	92.07	0.38	63.8
October	1,000,696	52,323	2.05	39.19	1.35	105.7	8,675	1,435	15.61	94.37	0.42	75.5
November	948,007	49,881	2.06	39.21	1.32	94.4	7,922	1,325	15.73	94.08	0.46	72.2
December	1,012,118	52,977	2.12	40.45	1.30	93.4	10,295	1,708	13.83	83.38	0.47	90.5
Year 2019												
January	1,003,542	52,346	2.10	40.34	1.32	91.8	8,642	1,430	12.41	74.98	0.46	53.6
February	847,217	44,418	2.07	39.54	1.28	96.3	8,421	1,380	13.15	80.25	0.48	89.1
Year to Date												
2017	2,119,102	111,076	2.07	39.56	1.28	97.3	15,963	2,653	11.85	71.35	0.47	69.5
2018	1,801,358	94,890	2.07	39.28	1.25	84.1	40,624	6,745	13.38	80.92	0.48	59.8
2019	1,850,759	96,764	2.09	39.97	1.30	93.8	17,063	2,810	12.78	77.57	0.47	66.6
Rolling 12 Months Ending in February												
2018	11,943,286	626,177	2.06	39.22	1.28	92.5	121,638	20,219	12.37	74.57	0.48	64.9
2019	11,406,922	596,557	2.07	39.50	1.31	93.2	95,312	15,783	14.34	86.61	0.41	69.0

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

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

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

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

Table 4.1. Receipts, Average Cost, and Quality of Fossil Fuels: Total (All Sectors), 2009 - February 2019 (continued)

	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMbtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)
Annual Totals												
2009	197,921	6,954	1.61	45.89	4.63	119.3	8,319,329	8,118,550	4.74	4.86	102.3	3.04
2010	169,508	5,963	2.28	64.85	4.79	98.5	8,867,396	8,673,070	5.09	5.20	102.0	3.26
2011	171,100	5,980	3.03	86.78	5.01	98.2	9,250,652	9,056,164	4.72	4.83	103.8	3.29
2012	119,667	4,180	2.24	64.14	5.55	83.3	9,746,691	9,531,389	3.42	3.50	91.9	2.83
2013	132,474	4,660	2.18	61.95	5.41	73.5	8,721,114	8,503,424	4.33	4.44	89.7	3.09
2014	147,310	5,195	1.98	56.23	5.56	91.2	8,679,286	8,431,423	5.00	5.14	89.6	3.31
2015	138,668	4,897	1.84	52.11	5.25	94.4	10,173,502	9,842,581	3.23	3.34	89.9	2.65
2016	116,942	4,166	1.65	46.30	5.40	77.9	10,619,105	10,271,180	2.87	2.97	90.7	2.47
2017	92,837	3,309	2.13	59.90	5.56	74.1	9,951,815	9,628,733	3.37	3.49	90.2	2.65
2018	85,122	3,010	2.54	71.76	5.74	72.6	10,366,144	10,039,232	3.55	3.67	83.0	2.80
Year 2017												
January	7,058	251	2.14	60.16	5.67	55.9	715,582	691,578	4.11	4.25	88.6	2.88
February	7,593	271	2.00	56.03	5.85	78.1	628,949	608,845	3.56	3.67	89.9	2.63
March	8,628	309	2.06	57.51	5.29	87.2	734,674	711,169	3.35	3.46	90.3	2.66
April	5,835	208	2.00	55.96	5.34	86.1	689,233	667,137	3.38	3.49	90.6	2.65
May	6,776	242	2.05	57.46	5.57	59.6	766,572	742,712	3.48	3.59	91.4	2.70
June	8,657	308	2.11	59.32	5.55	69.9	910,687	881,511	3.29	3.40	91.0	2.64
July	8,498	302	2.09	58.85	5.50	70.1	1,133,095	1,095,411	3.21	3.32	90.6	2.64
August	7,972	284	2.08	58.24	5.47	72.8	1,076,917	1,041,412	3.13	3.23	90.9	2.56
Sept	7,915	284	2.10	58.73	5.43	80.6	910,005	879,186	3.16	3.27	90.2	2.56
October	8,347	297	2.31	64.88	5.61	94.6	823,614	797,394	3.13	3.24	89.7	2.54
November	7,469	266	2.49	69.77	5.67	71.4	720,648	697,890	3.35	3.46	89.3	2.62
December	8,088	287	2.17	60.99	5.74	78.0	841,838	814,486	3.63	3.75	89.2	2.80
Year 2018												
January	7,009	248	2.38	67.41	5.31	58.8	779,006	754,166	5.02	5.19	82.6	3.50
February	7,769	277	2.43	68.09	5.49	81.9	688,539	667,072	3.61	3.72	81.8	2.79
March	7,841	281	2.54	70.89	5.54	91.6	749,405	725,132	3.18	3.29	82.9	2.57
April	6,564	232	2.56	72.38	6.09	71.7	706,952	685,216	3.13	3.23	83.2	2.58
May	4,344	152	2.41	68.58	6.09	67.7	814,786	789,317	3.04	3.14	81.4	2.56
June	7,382	260	2.73	77.61	5.97	68.7	927,153	897,864	3.11	3.21	83.8	2.61
July	8,307	293	2.71	76.81	5.73	70.4	1,149,841	1,113,981	3.29	3.39	81.8	2.73
August	8,443	298	2.79	78.94	5.67	75.4	1,130,270	1,095,233	3.28	3.38	82.8	2.69
Sept	8,158	288	2.94	83.35	5.63	74.1	1,002,984	970,993	3.11	3.21	83.3	2.62
October	5,892	208	2.48	70.32	5.77	78.8	881,837	854,142	3.39	3.50	84.2	2.71
November	6,696	235	2.21	63.10	5.87	75.3	764,243	740,250	4.16	4.29	83.8	3.01
December	6,718	238	2.03	57.24	5.90	63.5	771,128	745,864	4.73	4.89	85.3	3.25
Year 2019												
January	5,447	192	2.08	59.13	5.93	50.5	858,607	831,137	4.01	4.14	85.8	2.98
February	4,486	155	2.27	65.75	5.78	47.2	786,645	758,901	3.64	3.77	85.4	2.85
Year to Date												
2017	14,652	522	2.07	58.01	5.77	65.6	1,344,531	1,300,424	3.85	3.98	89.2	2.77
2018	14,778	525	2.41	67.77	5.41	69.1	1,467,545	1,421,238	4.36	4.51	82.2	3.17
2019	9,934	347	2.17	62.09	5.86	49.0	1,645,252	1,590,038	3.83	3.96	85.6	2.92
Rolling 12 Months Ending in February												
2018	92,963	3,312	2.19	61.44	5.50	74.7	10,074,830	9,749,548	3.45	3.57	89.1	2.71
2019	80,278	2,832	2.52	71.31	5.81	69.2	10,543,850	10,208,032	3.48	3.59	83.5	2.76

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

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

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

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

Table 4.2. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2009 - February 2019

	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
2009	14,402,019	719,253	2.22	44.47	0.99	103.4	202,598	32,959	10.44	64.18	0.51	103.5
2010	14,226,995	713,094	2.27	45.33	1.14	98.8	189,790	31,099	13.94	85.07	0.48	101.0
2011	13,871,559	699,353	2.40	47.67	1.16	101.5	144,255	23,859	20.30	122.72	0.53	114.5
2012	11,939,543	609,445	2.43	47.51	1.18	99.0	86,030	14,252	22.11	133.44	0.41	81.3
2013	11,595,328	592,772	2.38	46.51	1.23	92.9	78,101	12,814	21.09	128.57	0.43	76.2
2014	12,064,810	614,728	2.39	46.95	1.21	98.3	98,357	16,161	19.90	121.14	0.44	82.0
2015	11,088,631	571,707	2.25	43.71	1.17	105.8	90,041	14,747	11.32	69.13	0.46	79.2
2016	9,256,878	476,207	2.16	42.01	1.21	95.4	73,294	11,985	9.16	56.02	0.45	74.0
2017	9,011,629	467,595	2.12	40.81	1.16	96.0	70,422	11,640	11.60	70.19	0.47	74.4
2018	8,386,175	438,023	2.11	40.39	1.18	92.0	74,884	12,324	14.22	86.46	0.37	69.1
Year 2017												
January	797,433	41,477	2.14	41.15	1.14	88.2	6,680	1,100	11.15	67.71	0.44	75.9
February	737,614	38,372	2.11	40.53	1.20	107.5	4,658	770	11.60	70.11	0.46	66.9
March	706,986	36,570	2.12	41.05	1.20	101.9	10,582	1,778	11.59	68.99	0.53	132.1
April	650,562	33,339	2.14	41.82	1.22	105.4	4,760	788	11.41	68.97	0.46	68.2
May	702,581	36,058	2.16	42.07	1.21	95.9	4,694	778	11.40	68.79	0.45	60.1
June	786,845	40,393	2.13	41.51	1.20	91.9	5,771	951	10.93	66.29	0.47	72.2
July	821,488	42,591	2.11	40.78	1.11	81.6	4,826	803	10.96	65.87	0.45	68.3
August	890,849	46,092	2.11	40.79	1.18	93.7	5,210	855	11.12	67.72	0.46	67.4
Sept	741,814	38,857	2.08	39.69	1.10	98.1	4,823	792	11.80	71.87	0.48	65.9
October	733,109	38,175	2.09	40.12	1.15	104.8	5,030	825	12.05	73.47	0.49	63.2
November	726,042	38,128	2.11	40.23	1.13	105.8	7,044	1,156	12.00	73.12	0.41	98.5
December	716,306	37,543	2.11	40.20	1.11	89.5	6,345	1,043	12.93	78.67	0.42	58.0
Year 2018												
January	690,227	36,292	2.08	39.64	1.11	75.7	12,565	2,096	13.91	83.50	0.43	47.5
February	638,278	33,348	2.10	40.24	1.16	97.7	8,008	1,303	12.43	76.46	0.46	119.0
March	699,005	36,379	2.10	40.26	1.17	112.0	5,017	827	13.19	79.99	0.36	77.9
April	605,929	31,436	2.12	40.90	1.22	102.9	5,034	826	13.61	83.01	0.36	73.0
May	658,792	34,012	2.09	40.57	1.23	96.1	6,271	1,028	14.30	87.27	0.29	79.0
June	693,365	36,117	2.10	40.34	1.20	84.7	5,985	986	14.68	89.15	0.28	73.1
July	745,064	39,045	2.10	40.14	1.14	80.5	5,128	836	14.29	87.66	0.27	70.9
August	806,053	42,128	2.11	40.46	1.18	87.7	4,686	769	15.08	91.87	0.34	60.9
Sept	701,123	36,855	2.12	40.31	1.14	91.0	5,414	897	15.44	93.24	0.35	66.3
October	718,353	37,512	2.10	40.23	1.21	104.9	5,772	942	15.64	95.78	0.39	71.2
November	688,957	36,216	2.10	40.01	1.17	94.8	4,765	789	15.74	94.99	0.41	65.3
December	741,030	38,682	2.17	41.58	1.17	92.7	6,239	1,026	13.70	83.32	0.43	89.0
Year 2019												
January	735,197	38,212	2.16	41.64	1.18	92.1	6,100	1,008	12.56	76.05	0.42	64.1
February	628,506	32,866	2.14	40.93	1.15	97.9	6,343	1,033	12.99	79.78	0.46	103.0
Year to Date												
2017	1,535,047	79,850	2.13	40.85	1.17	96.5	11,338	1,871	11.34	68.70	0.45	71.9
2018	1,328,505	69,640	2.09	39.92	1.14	84.8	20,573	3,398	13.33	80.77	0.44	61.7
2019	1,363,702	71,079	2.15	41.31	1.16	94.7	12,443	2,040	12.78	77.94	0.44	79.3
Rolling 12 Months Ending in February												
2018	8,805,087	457,386	2.11	40.67	1.16	94.0	79,657	13,167	12.09	73.14	0.46	71.0
2019	8,421,373	439,461	2.12	40.61	1.18	93.7	66,754	10,966	14.22	86.59	0.36	73.6

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

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

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

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

Table 4.2. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2009 - February 2019 (continued)

	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMbtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)
Annual Totals												
2009	109,126	3,833	1.68	47.84	5.02	138.8	3,033,133	2,962,640	5.50	5.63	101.8	2.87
2010	103,152	3,628	2.38	67.65	5.03	109.1	3,395,962	3,327,919	5.43	5.54	101.1	2.99
2011	99,208	3,445	3.08	88.73	5.17	99.9	3,571,348	3,507,613	5.00	5.09	101.8	3.08
2012	72,782	2,521	2.30	66.40	5.46	119.8	4,083,579	4,003,457	3.74	3.81	97.6	2.86
2013	99,088	3,463	2.11	60.30	5.34	101.6	3,939,408	3,851,241	4.49	4.59	97.0	2.99
2014	123,793	4,349	1.89	53.77	5.56	126.3	3,876,549	3,772,596	5.17	5.31	96.7	3.16
2015	115,929	4,069	1.77	50.44	5.23	130.1	4,717,748	4,565,040	3.52	3.64	96.0	2.67
2016	99,706	3,538	1.52	42.85	5.38	103.1	5,075,337	4,907,538	3.15	3.26	97.0	2.54
2017	90,481	3,224	2.15	60.31	5.55	117.6	4,794,383	4,640,827	3.62	3.74	96.8	2.68
2018	83,211	2,940	2.56	72.34	5.74	106.8	4,976,093	4,822,698	3.69	3.81	87.1	2.76
Year 2017												
January	7,058	251	2.14	60.16	5.67	83.3	337,596	326,324	4.31	4.46	95.7	2.82
February	7,593	271	2.00	56.03	5.85	124.3	294,616	285,401	3.80	3.92	96.7	2.62
March	8,628	309	2.06	57.51	5.29	143.9	355,096	343,820	3.53	3.64	97.0	2.67
April	5,835	208	2.00	55.96	5.34	188.7	338,000	327,213	3.52	3.63	97.7	2.65
May	6,776	242	2.05	57.46	5.57	91.5	383,433	371,812	3.68	3.80	98.5	2.73
June	8,386	298	2.14	60.07	5.55	105.5	442,214	428,256	3.55	3.66	97.6	2.67
July	8,245	292	2.11	59.61	5.49	107.5	554,383	536,001	3.45	3.57	96.5	2.68
August	7,676	273	2.11	59.17	5.45	119.8	519,749	502,748	3.42	3.53	96.7	2.62
Sept	7,658	274	2.12	59.07	5.42	130.2	435,093	420,539	3.54	3.66	96.4	2.65
October	7,454	265	2.37	66.84	5.58	154.2	389,312	377,140	3.54	3.66	97.1	2.63
November	7,084	252	2.52	70.93	5.66	107.1	342,138	331,585	3.64	3.76	96.6	2.66
December	8,088	287	2.17	60.99	5.74	123.5	402,754	389,987	3.71	3.83	95.5	2.74
Year 2018												
January	7,009	248	2.38	67.41	5.31	83.4	386,450	374,413	5.13	5.29	88.3	3.29
February	7,769	277	2.43	68.09	5.49	117.9	330,518	320,418	3.81	3.93	89.0	2.76
March	7,841	281	2.54	70.89	5.54	141.5	360,699	349,214	3.48	3.60	89.3	2.61
April	6,564	232	2.56	72.38	6.09	119.0	342,450	332,235	3.30	3.40	89.2	2.60
May	4,344	152	2.41	68.58	6.09	108.3	400,819	388,233	3.24	3.35	84.5	2.60
June	7,382	260	2.73	77.61	5.97	96.2	464,827	450,427	3.27	3.38	87.6	2.63
July	8,147	287	2.73	77.48	5.73	100.4	552,025	534,990	3.28	3.38	82.9	2.65
August	8,183	288	2.82	80.03	5.67	105.4	534,991	518,832	3.34	3.45	84.9	2.65
Sept	7,493	263	3.05	86.74	5.59	101.2	476,033	460,962	3.28	3.39	85.4	2.65
October	5,415	191	2.55	72.24	5.80	120.4	421,712	408,928	3.56	3.67	88.6	2.71
November	6,524	229	2.23	63.55	5.88	116.4	355,558	345,025	4.25	4.38	88.9	2.89
December	6,541	232	2.04	57.52	5.91	96.0	350,009	339,020	4.95	5.11	91.7	3.12
Year 2019												
January	5,447	192	2.08	59.13	5.93	73.8	401,692	389,481	4.19	4.32	91.5	2.93
February	4,486	155	2.27	65.75	5.78	69.4	377,502	363,249	3.80	3.94	90.5	2.82
Year to Date												
2017	14,652	522	2.07	58.01	5.77	100.5	632,211	611,725	4.07	4.21	96.2	2.73
2018	14,778	525	2.41	67.77	5.41	98.6	716,969	694,831	4.52	4.67	88.7	3.04
2019	9,934	347	2.17	62.09	5.86	71.8	779,194	752,731	4.00	4.14	91.0	2.88
Rolling 12 Months Ending in February												
2018	90,607	3,227	2.20	61.90	5.49	117.1	4,879,141	4,723,933	3.69	3.81	95.6	2.72
2019	78,367	2,762	2.54	71.92	5.81	102.2	5,038,318	4,880,598	3.62	3.73	87.5	2.74

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

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

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

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

Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2009 - February 2019

	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
2009	4,563,080	240,687	2.11	39.94	1.06	101.1	68,030	11,408	10.02	59.76	0.37	102.0
2010	4,555,898	243,585	2.20	41.15	1.21	96.0	49,598	8,420	14.80	87.19	0.35	89.9
2011	4,292,284	233,295	2.28	41.95	1.25	95.9	41,599	7,096	20.30	119.01	0.50	106.9
2012	4,036,436	218,341	2.21	40.92	1.42	104.9	23,922	4,073	22.34	131.28	0.44	79.8
2013	4,032,431	217,572	2.20	40.95	1.48	99.1	43,432	7,205	19.71	118.88	0.45	110.1
2014	4,243,949	226,600	2.25	42.20	1.61	100.1	71,774	11,980	19.90	119.36	0.45	101.0
2015	3,731,508	198,982	2.10	39.39	1.66	100.5	55,248	9,189	11.69	70.36	0.46	86.5
2016	3,047,358	164,648	1.93	35.69	1.73	91.8	25,975	4,410	9.93	58.56	0.48	75.1
2017	3,056,215	165,567	1.85	34.19	1.64	93.1	24,704	4,190	12.67	74.73	0.46	73.8
2018	2,805,911	148,687	1.89	35.76	1.70	92.6	41,671	7,021	14.38	85.59	0.45	77.9
Year 2017												
January	297,849	16,042	1.92	35.75	1.59	96.7	2,862	488	13.96	82.04	0.47	103.9
February	254,381	13,690	1.88	34.92	1.59	110.9	1,514	254	11.89	70.84	0.50	70.2
March	251,712	13,439	1.88	35.27	1.75	103.1	1,436	247	11.97	69.71	0.44	91.2
April	235,324	12,633	1.85	34.48	1.66	99.2	1,436	242	12.28	72.85	0.44	83.2
May	238,355	12,976	1.86	34.11	1.67	97.1	1,790	306	11.55	67.69	0.45	79.3
June	239,687	13,070	1.86	34.15	1.67	87.3	1,559	267	10.88	63.53	0.42	64.2
July	257,789	14,218	1.85	33.64	1.55	80.5	1,775	303	10.73	62.88	0.48	79.4
August	279,845	15,249	1.83	33.52	1.64	91.5	1,702	289	11.16	65.68	0.43	72.3
Sept	258,366	13,963	1.82	33.65	1.63	92.0	1,543	267	11.35	65.70	0.42	68.5
October	250,339	13,545	1.83	33.87	1.60	99.0	2,399	406	11.71	69.17	0.50	121.1
November	243,578	13,224	1.79	33.00	1.64	88.3	2,544	434	13.15	77.15	0.56	113.8
December	248,991	13,519	1.83	33.70	1.68	81.5	4,145	688	15.82	95.35	0.43	43.1
Year 2018												
January	246,150	13,243	2.00	37.16	1.60	79.5	16,721	2,787	13.51	81.73	0.48	60.0
February	197,472	10,603	1.94	36.08	1.58	91.3	2,735	465	13.30	78.46	0.44	202.6
March	225,377	11,669	1.85	35.75	1.83	97.6	2,014	345	14.02	81.94	0.43	111.2
April	199,704	10,574	1.88	35.52	1.61	105.1	1,236	210	14.27	83.89	0.44	58.3
May	219,931	11,454	1.87	36.00	1.78	94.7	2,311	389	14.24	85.04	0.48	88.7
June	223,656	11,737	1.85	35.21	1.84	87.4	2,011	344	16.11	94.38	0.43	79.1
July	232,451	12,416	1.88	35.17	1.73	80.8	1,592	271	15.97	93.81	0.45	61.5
August	256,223	13,648	1.87	35.05	1.68	87.0	1,701	288	15.85	93.45	0.41	56.8
Sept	232,368	12,512	1.82	33.92	1.56	92.7	1,887	318	15.00	88.95	0.39	82.9
October	270,387	14,235	1.89	35.93	1.72	111.7	2,723	464	15.61	91.70	0.40	123.7
November	245,201	12,983	1.92	36.34	1.73	95.5	2,951	503	15.83	93.00	0.42	125.6
December	256,990	13,613	1.95	36.83	1.68	97.9	3,789	639	14.06	83.33	0.46	131.7
Year 2019												
January	255,058	13,482	1.90	36.07	1.76	93.8	2,359	393	11.93	71.58	0.50	55.3
February	205,832	10,934	1.83	34.49	1.67	95.2	1,879	314	13.63	81.50	0.46	95.1
Year to Date												
2017	552,229	29,732	1.90	35.37	1.59	102.8	4,376	742	13.24	78.15	0.48	89.2
2018	443,622	23,846	1.97	36.68	1.59	84.3	19,456	3,251	13.48	81.25	0.47	66.7
2019	460,890	24,416	1.87	35.36	1.72	94.4	4,238	708	12.69	76.00	0.48	67.9
Rolling 12 Months Ending in February												
2018	2,947,608	159,681	1.86	34.34	1.64	90.1	39,785	6,700	13.01	77.53	0.47	68.9
2019	2,823,179	149,257	1.88	35.55	1.72	94.3	26,452	4,478	14.67	86.72	0.44	86.5

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

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

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

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

Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2009 - February 2019 (continued)

	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMbtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)
Annual Totals												
2009	49,619	1,732	1.31	37.63	3.87	93.6	4,087,573	3,987,721	4.30	4.41	100.7	3.18
2010	30,079	1,050	1.74	49.80	3.84	72.3	4,212,611	4,119,103	4.94	5.05	100.6	3.57
2011	33,643	1,175	2.54	72.85	4.55	84.6	4,252,040	4,158,617	4.62	4.72	100.8	3.52
2012	23,024	801	0.82	23.98	5.49	92.1	4,810,553	4,696,637	3.17	3.25	93.8	2.74
2013	16,150	575	W	W	5.39	65.6	4,025,263	3,917,898	4.25	4.36	92.8	W
2014	13,781	488	2.48	70.31	5.33	70.9	4,054,540	3,934,672	4.90	5.05	92.7	3.52
2015	14,550	524	2.45	68.22	5.26	67.3	4,683,291	4,530,195	2.94	3.04	93.2	2.57
2016	13,573	492	2.50	68.88	5.44	69.9	4,791,729	4,634,518	2.54	2.63	94.0	2.29
2017	0	0	--	--	--	0.0	4,346,156	4,201,573	3.08	3.19	94.0	2.54
2018	0	0	--	--	--	0.0	4,608,011	4,456,582	3.41	3.52	87.6	2.82
Year 2017												
January	0	0	--	--	--	0.0	308,232	297,759	3.99	4.13	93.5	2.92
February	0	0	--	--	--	0.0	266,747	257,955	3.34	3.45	94.3	2.58
March	0	0	--	--	--	0.0	308,990	298,914	3.22	3.33	94.1	2.58
April	0	0	--	--	--	0.0	284,267	275,005	3.20	3.31	94.1	2.55
May	0	0	--	--	--	0.0	315,859	305,704	3.21	3.31	94.8	2.58
June	0	0	--	--	--	0.0	401,526	388,362	2.93	3.02	94.2	2.49
July	0	0	--	--	--	0.0	510,414	493,178	2.88	2.98	93.8	2.50
August	0	0	--	--	--	0.0	490,671	474,207	2.74	2.84	94.5	2.37
Sept	0	0	--	--	--	0.0	411,228	396,942	2.66	2.75	93.8	2.30
October	0	0	--	--	--	0.0	370,640	358,457	2.60	2.69	93.3	2.29
November	0	0	--	--	--	0.0	310,865	300,737	3.03	3.13	93.2	2.47
December	0	0	--	--	--	0.0	366,717	354,352	3.64	3.77	94.0	2.91
Year 2018												
January	0	0	--	--	--	0.0	323,796	313,096	5.25	5.43	86.6	3.95
February	0	0	--	--	--	0.0	297,893	288,320	3.36	3.48	84.5	2.78
March	0	0	--	--	--	0.0	328,275	317,199	2.86	2.96	87.1	2.44
April	0	0	--	--	--	0.0	303,547	293,740	2.94	3.04	87.7	2.49
May	0	0	--	--	--	0.0	351,345	340,277	2.77	2.86	86.5	2.43
June	0	0	--	--	--	0.0	397,507	384,422	2.87	2.96	87.7	2.49
July	0	0	--	--	--	0.0	530,641	513,551	3.34	3.45	87.0	2.85
August	0	0	--	--	--	0.0	527,203	510,315	3.21	3.32	87.3	2.74
Sept	0	0	--	--	--	0.0	460,133	444,978	2.88	2.98	88.1	2.51
October	0	0	--	--	--	0.0	395,265	382,024	3.16	3.27	88.1	2.64
November	0	0	--	--	--	0.0	338,095	326,516	4.09	4.24	88.7	3.15
December	0	0	--	--	--	0.0	354,311	342,143	4.48	4.64	91.4	3.37
Year 2019												
January	0	0	--	--	--	0.0	383,596	370,465	3.83	3.96	90.7	3.01
February	0	0	--	--	--	0.0	344,458	333,039	3.47	3.60	90.6	2.83
Year to Date												
2017	0	0	--	--	--	0.0	574,979	555,715	3.69	3.81	93.8	2.77
2018	0	0	--	--	--	0.0	621,689	601,416	4.36	4.51	85.6	3.42
2019	0	0	--	--	--	0.0	728,055	703,504	3.66	3.79	90.6	2.92
Rolling 12 Months Ending in February												
2018	0	0	--	--	--	0.0	4,392,865	4,247,274	3.17	3.28	92.7	2.63
2019	0	0	--	--	--	0.0	4,714,378	4,558,670	3.31	3.43	88.3	2.75

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

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

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

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

Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector, 2009 - February 2019

	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
2009	41,182	1,876	2.90	63.68	1.67	104.3	3,517	583	10.82	65.26	0.45	122.1
2010	37,778	1,747	2.82	61.06	1.77	101.6	2,395	400	15.24	91.25	0.38	106.3
2011	35,892	1,686	2.92	62.24	1.78	101.1	1,959	325	19.67	118.66	0.55	108.0
2012	4,427	192	3.41	78.71	2.75	13.2	247	43	W	W	0.00	11.0
2013	3,507	151	W	W	3.05	11.2	0	0	--	--	--	0.0
2014	4,096	182	3.12	70.30	2.50	17.1	0	0	--	--	--	0.0
2015	2,439	109	2.85	63.90	2.55	13.6	0	0	--	--	--	0.0
2016	1,288	57	2.69	60.89	3.03	8.3	0	0	--	--	--	0.0
2017	548	24	2.78	63.31	2.99	3.9	0	0	--	--	--	0.0
2018	290	13	2.94	66.52	3.04	2.2	0	0	--	--	--	0.0
Year 2017												
January	111	5	2.77	62.82	2.99	6.9	0	0	--	--	--	0.0
February	91	4	2.77	63.46	2.95	6.9	0	0	--	--	--	0.0
March	104	5	2.77	63.24	3.02	7.0	0	0	--	--	--	0.0
April	1	0	2.77	63.60	2.96	0.1	0	0	--	--	--	0.0
May	11	0	2.77	63.54	3.23	1.2	0	0	--	--	--	0.0
June	17	1	2.77	63.65	3.02	1.8	0	0	--	--	--	0.0
July	0	0	--	--	--	0.0	0	0	--	--	--	0.0
August	4	0	2.77	63.24	2.77	0.4	0	0	--	--	--	0.0
Sept	72	3	2.77	63.24	2.96	6.9	0	0	--	--	--	0.0
October	35	2	2.79	64.50	2.96	3.6	0	0	--	--	--	0.0
November	13	1	2.79	63.70	3.04	1.1	0	0	--	--	--	0.0
December	89	4	2.79	63.31	3.01	6.0	0	0	--	--	--	0.0
Year 2018												
January	95	4	2.92	66.58	3.11	6.0	0	0	--	--	--	0.0
February	31	1	2.92	66.05	3.19	2.5	0	0	--	--	--	0.0
March	5	0	2.92	66.20	3.16	0.4	0	0	--	--	--	0.0
April	0	0	--	--	--	0.0	0	0	--	--	--	0.0
May	0	0	--	--	--	0.0	0	0	--	--	--	0.0
June	0	0	--	--	--	0.0	0	0	--	--	--	0.0
July	0	0	--	--	--	0.0	0	0	--	--	--	0.0
August	0	0	--	--	--	0.0	0	0	--	--	--	0.0
Sept	0	0	--	--	--	0.0	0	0	--	--	--	0.0
October	52	2	2.94	66.53	2.87	5.4	0	0	--	--	--	0.0
November	62	3	2.94	66.44	2.99	5.6	0	0	--	--	--	0.0
December	46	2	2.97	66.83	3.05	4.3	0	0	--	--	--	0.0
Year 2019												
January	27	1	2.90	65.89	3.00	2.1	0	0	--	--	--	0.0
February	37	2	2.90	65.51	2.95	3.1	0	0	--	--	--	0.0
Year to Date												
2017	202	9	2.77	63.11	2.97	6.9	0	0	--	--	--	0.0
2018	125	6	2.92	66.45	3.13	4.5	0	0	--	--	--	0.0
2019	65	3	2.90	65.67	2.97	2.6	0	0	--	--	--	0.0
Rolling 12 Months Ending in February												
2018	471	21	2.82	64.24	3.04	3.4	0	0	--	--	--	0.0
2019	229	10	2.93	66.32	2.97	1.8	0	0	--	--	--	0.0

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

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

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

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

Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commerical Sector, 2009 - February 2019 (continued)

	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMbtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)
Annual Totals												
2009	252	9	1.65	46.54	5.11	102.8	81,134	79,308	5.18	5.30	105.0	4.58
2010	410	15	2.19	60.59	5.67	122.5	92,055	90,130	5.39	5.51	105.1	4.83
2011	268	9	W	W	5.46	147.4	95,287	93,306	5.20	5.31	107.2	W
2012	0	0	--	--	--	0.0	18,315	18,008	5.88	5.98	16.2	W
2013	0	0	--	--	--	0.0	5,497	5,450	W	W	4.6	W
2014	0	0	--	--	--	0.0	5,849	5,795	5.42	5.47	4.9	4.47
2015	0	0	--	--	--	0.0	6,499	6,371	4.11	4.19	5.5	3.76
2016	0	0	--	--	--	0.0	8,005	7,766	3.85	3.97	6.1	3.69
2017	0	0	--	--	--	0.0	7,841	7,593	3.82	3.95	4.9	3.75
2018	0	0	--	--	--	0.0	9,090	8,823	3.49	3.59	5.7	3.47
Year 2017												
January	0	0	--	--	--	0.0	662	639	4.02	4.17	4.5	3.84
February	0	0	--	--	--	0.0	646	624	4.01	4.15	5.2	3.86
March	0	0	--	--	--	0.0	680	662	3.96	4.06	5.4	3.80
April	0	0	--	--	--	0.0	502	490	3.90	3.99	4.7	3.89
May	0	0	--	--	--	0.0	497	483	3.92	4.04	4.4	3.90
June	0	0	--	--	--	0.0	615	595	3.82	3.95	4.6	3.79
July	0	0	--	--	--	0.0	636	613	3.64	3.77	4.1	3.64
August	0	0	--	--	--	0.0	809	778	3.70	3.85	5.3	3.70
Sept	0	0	--	--	--	0.0	707	685	3.72	3.84	5.1	3.63
October	0	0	--	--	--	0.0	605	588	3.77	3.88	4.6	3.72
November	0	0	--	--	--	0.0	749	725	3.72	3.84	6.0	3.70
December	0	0	--	--	--	0.0	734	711	3.77	3.89	5.2	3.67
Year 2018												
January	0	0	--	--	--	0.0	844	818	3.63	3.74	6.0	3.56
February	0	0	--	--	--	0.0	709	688	3.72	3.84	5.5	3.69
March	0	0	--	--	--	0.0	768	746	3.59	3.69	5.8	3.58
April	0	0	--	--	--	0.0	732	713	3.49	3.58	5.9	3.49
May	0	0	--	--	--	0.0	776	758	3.47	3.55	6.3	3.47
June	0	0	--	--	--	0.0	670	650	3.57	3.67	5.1	3.57
July	0	0	--	--	--	0.0	790	760	3.39	3.52	5.4	3.39
August	0	0	--	--	--	0.0	786	764	3.42	3.52	5.4	3.42
Sept	0	0	--	--	--	0.0	744	723	3.38	3.48	5.6	3.38
October	0	0	--	--	--	0.0	792	770	3.36	3.45	6.1	3.33
November	0	0	--	--	--	0.0	723	701	3.41	3.52	5.6	3.37
December	0	0	--	--	--	0.0	756	732	3.41	3.52	5.6	3.39
Year 2019												
January	0	0	--	--	--	0.0	778	751	3.40	3.52	5.4	3.38
February	0	0	--	--	--	0.0	772	745	3.37	3.50	5.9	3.35
Year to Date												
2017	0	0	--	--	--	0.0	1,308	1,263	4.01	4.16	4.8	3.85
2018	0	0	--	--	--	0.0	1,553	1,506	3.67	3.79	5.8	3.62
2019	0	0	--	--	--	0.0	1,550	1,496	3.38	3.51	5.6	3.37
Rolling 12 Months Ending in February												
2018	0	0	--	--	--	0.0	8,086	7,836	3.76	3.88	5.1	3.71
2019	0	0	--	--	--	0.0	9,087	8,813	3.44	3.54	5.7	3.42

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

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

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

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

Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2009 - February 2019

	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
2009	431,686	19,661	2.81	61.68	1.22	99.5	55,899	9,232	9.83	59.52	0.83	112.8
2010	468,991	21,492	2.75	60.08	1.26	87.2	33,276	5,554	13.21	79.15	0.93	125.6
2011	476,108	22,204	2.93	62.86	1.33	99.5	28,939	4,878	17.67	104.83	1.08	144.8
2012	285,172	13,206	3.02	65.24	1.33	65.8	6,739	1,095	W	W	1.52	40.8
2013	275,543	12,727	W	W	1.32	64.4	2,431	394	18.20	112.29	1.43	15.8
2014	281,867	13,050	2.97	64.15	1.33	68.4	2,290	373	17.91	109.99	1.43	15.6
2015	263,630	12,132	2.72	59.17	1.35	71.4	2,359	385	13.45	82.47	1.42	16.9
2016	210,749	9,859	2.67	57.01	1.30	67.0	2,541	412	10.51	64.79	1.27	18.3
2017	192,637	9,178	2.49	52.29	1.35	70.7	1,850	297	11.18	69.57	1.42	15.2
2018	165,145	7,960	2.49	51.58	1.24	63.8	2,319	372	13.46	83.97	1.35	15.1
Year 2017												
January	15,758	742	2.51	53.37	1.38	58.7	128	21	11.64	72.27	1.06	12.8
February	15,865	744	2.57	54.74	1.18	69.1	121	19	11.56	72.24	1.36	15.1
March	17,861	858	2.48	51.66	1.34	75.2	178	29	10.66	66.36	1.22	18.7
April	16,089	759	2.62	55.59	1.23	75.3	160	26	11.82	74.12	1.27	16.7
May	16,329	796	2.44	50.13	1.16	76.3	155	25	11.19	69.26	1.21	17.7
June	15,911	757	2.41	50.55	1.37	72.5	142	23	10.34	64.95	1.11	17.9
July	15,852	763	2.46	51.07	1.30	73.3	95	15	10.75	66.88	1.30	12.4
August	16,644	784	2.51	53.36	1.36	74.7	110	18	10.55	65.94	1.55	14.1
Sept	14,897	715	2.52	52.38	1.17	72.2	151	24	11.07	69.03	1.51	17.3
October	15,687	741	2.52	53.40	1.36	67.5	149	24	11.43	71.09	1.58	16.1
November	15,335	734	2.46	51.43	1.43	68.2	199	32	11.67	72.03	1.71	13.2
December	16,408	785	2.40	50.09	1.89	68.9	263	42	11.14	69.14	1.79	13.5
Year 2018												
January	15,278	735	2.47	51.33	1.12	59.1	408	65	12.64	79.32	1.32	12.2
February	13,828	662	2.49	52.04	1.26	59.6	187	30	11.38	71.32	1.20	19.7
March	15,083	722	2.52	52.66	1.24	63.3	234	38	12.59	78.52	1.32	22.4
April	13,037	622	2.53	53.03	1.29	61.3	153	24	13.24	83.77	1.23	16.2
May	14,112	684	2.53	52.15	1.18	65.7	149	24	14.33	87.27	1.47	14.5
June	14,097	679	2.50	51.83	1.23	68.7	107	17	13.54	84.39	1.48	7.5
July	14,451	703	2.42	49.82	1.26	71.8	138	22	14.64	89.87	1.42	12.0
August	13,393	643	2.50	52.09	1.23	68.2	135	22	14.45	89.97	1.39	13.2
Sept	12,124	578	2.55	53.48	1.28	59.1	155	25	14.38	89.73	1.12	14.4
October	11,903	574	2.47	51.33	1.30	61.5	180	29	14.50	91.01	1.37	17.0
November	13,787	679	2.52	51.10	1.08	66.7	206	33	14.01	87.74	1.58	19.0
December	14,052	680	2.35	48.52	1.41	63.0	268	43	13.75	85.58	1.46	22.2
Year 2019												
January	13,260	650	2.54	51.79	1.12	59.1	183	29	13.34	83.33	1.29	9.2
February	12,842	617	2.61	54.43	1.16	61.7	199	33	13.77	82.99	1.45	18.9
Year to Date												
2017	31,623	1,486	2.54	54.05	1.28	63.5	249	40	11.60	72.26	1.22	13.8
2018	29,106	1,397	2.48	51.66	1.19	59.3	595	95	12.25	76.80	1.28	13.9
2019	26,102	1,266	2.58	53.07	1.14	60.3	382	62	13.56	83.15	1.36	12.7
Rolling 12 Months Ending in February												
2018	190,120	9,090	2.48	51.90	1.34	70.0	2,196	352	11.42	71.21	1.41	15.0
2019	162,141	7,829	2.50	51.81	1.23	64.1	2,106	339	13.82	85.82	1.39	15.0

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

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

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

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

Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2009 - February 2019 (continued)

	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMbtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)
Annual Totals												
2009	38,924	1,381	1.80	50.82	4.51	114.2	1,117,489	1,088,880	4.27	4.38	110.0	4.02
2010	35,866	1,269	2.46	69.38	4.90	100.5	1,166,768	1,135,917	4.64	4.77	110.4	4.24
2011	37,981	1,351	W	W	5.03	108.3	1,331,977	1,296,628	4.28	4.40	122.0	W
2012	23,861	858	2.62	72.96	5.86	42.2	834,245	813,288	2.97	3.05	70.8	W
2013	17,236	623	W	W	5.82	30.5	750,946	728,835	W	W	62.3	W
2014	9,736	358	2.56	69.67	5.83	23.2	742,347	718,360	4.54	4.69	62.7	4.12
2015	8,189	304	1.73	46.72	5.50	24.1	765,964	740,975	2.83	2.93	60.6	2.82
2016	3,664	135	2.00	54.12	5.84	11.2	744,034	721,358	2.65	2.74	59.6	2.68
2017	2,356	85	1.59	44.08	5.84	8.1	803,435	778,741	3.18	3.28	62.0	3.06
2018	1,911	71	1.75	47.47	5.74	7.9	772,950	751,129	3.36	3.46	57.3	3.23
Year 2017												
January	0	0	--	--	--	0.0	69,093	66,857	3.62	3.75	62.4	3.43
February	0	0	--	--	--	0.0	66,939	64,865	3.19	3.29	67.1	3.08
March	0	0	--	--	--	0.0	69,909	67,773	2.90	3.00	65.7	2.83
April	0	0	--	--	--	0.0	66,465	64,429	3.26	3.36	65.2	3.15
May	0	0	--	--	--	0.0	66,784	64,714	3.30	3.41	63.8	3.15
June	271	9	1.25	35.84	5.75	9.5	66,331	64,299	3.26	3.36	61.6	3.10
July	253	9	1.25	34.50	5.85	9.4	67,662	65,619	3.21	3.31	58.6	3.07
August	296	11	1.25	34.50	5.85	10.9	65,688	63,679	3.08	3.17	58.7	2.97
Sept	257	9	1.77	48.91	5.85	11.7	62,978	61,019	3.10	3.20	59.4	3.00
October	893	32	1.77	48.91	5.85	35.3	63,058	61,209	3.08	3.17	58.8	2.97
November	386	14	1.77	48.91	5.85	16.1	66,895	64,843	3.01	3.11	62.6	2.93
December	0	0	--	--	--	0.0	71,633	69,435	3.11	3.21	60.6	3.00
Year 2018												
January	0	0	--	--	--	0.0	67,916	65,839	3.57	3.69	57.4	3.42
February	0	0	--	--	--	0.0	59,419	57,646	3.42	3.52	56.8	3.26
March	0	0	--	--	--	0.0	59,663	57,973	2.85	2.93	54.4	2.81
April	0	0	--	--	--	0.0	60,223	58,528	2.92	3.00	56.1	2.87
May	0	0	--	--	--	0.0	61,846	60,048	2.98	3.07	57.7	2.92
June	0	0	--	--	--	0.0	64,149	62,365	3.13	3.22	58.5	3.03
July	160	6	1.70	45.10	5.83	7.5	66,384	64,680	3.02	3.10	57.7	2.93
August	260	10	1.78	46.99	5.55	13.4	67,289	65,321	3.11	3.21	57.6	3.03
Sept	664	25	1.78	47.54	6.02	30.8	66,074	64,330	3.11	3.19	59.5	3.04
October	477	17	1.76	48.96	5.45	21.3	64,068	62,421	3.40	3.49	58.2	3.27
November	172	6	1.69	46.62	5.85	9.2	69,866	68,008	3.97	4.07	59.4	3.75
December	178	6	1.70	47.00	5.53	7.8	66,052	63,969	4.70	4.85	54.6	4.31
Year 2019												
January	0	0	--	--	--	0.0	72,541	70,439	3.77	3.89	58.5	3.60
February	0	0	--	--	--	0.0	63,912	61,868	3.45	3.56	57.8	3.34
Year to Date												
2017	0	0	--	--	--	0.0	136,032	131,721	3.41	3.52	64.7	3.26
2018	0	0	--	--	--	0.0	127,335	123,485	3.50	3.61	57.1	3.34
2019	0	0	--	--	--	0.0	136,453	132,307	3.62	3.74	58.2	3.48
Rolling 12 Months Ending in February												
2018	2,356	85	1.59	44.08	5.84	8.3	794,738	770,504	3.19	3.29	60.7	3.07
2019	1,911	71	1.75	47.47	5.74	7.9	782,068	759,951	3.38	3.48	57.5	3.25

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

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

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

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

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

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	6	8	-24.0%	0	0	6	8	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	6	8	-24.0%	0	0	6	8	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	1,513	1,604	-5.7%	0	0	1,513	1,593	0	0	0	11
New Jersey	62	56	11.0%	0	0	62	56	0	0	0	0
New York	26	54	-52.0%	0	0	26	54	0	0	0	0
Pennsylvania	1,425	1,493	-4.6%	0	0	1,425	1,482	0	0	0	11
East North Central	8,893	9,753	-8.8%	5,016	5,808	3,719	3,778	0	0	159	168
Illinois	2,993	3,353	-11.0%	646	585	2,188	2,600	0	0	159	168
Indiana	2,410	2,436	-1.0%	2,247	2,284	163	151	0	0	0	0
Michigan	951	1,139	-16.0%	951	1,139	0	0	0	0	0	0
Ohio	1,576	1,514	4.1%	209	487	1,367	1,027	0	0	0	0
Wisconsin	962	1,311	-27.0%	962	1,311	0	0	0	0	0	0
West North Central	8,364	9,074	-7.8%	8,129	8,840	0	0	2	1	233	232
Iowa	1,101	1,017	8.2%	930	850	0	0	0	0	171	167
Kansas	920	901	2.1%	920	901	0	0	0	0	0	0
Minnesota	802	990	-19.0%	802	990	0	0	0	0	0	0
Missouri	2,714	3,098	-12.0%	2,713	3,096	0	0	2	1	0	0
Nebraska	921	968	-4.8%	859	903	0	0	0	0	62	65
North Dakota	1,803	1,968	-8.4%	1,803	1,968	0	0	0	0	0	0
South Dakota	103	132	-22.0%	103	132	0	0	0	0	0	0
South Atlantic	5,853	5,551	5.4%	5,152	4,772	612	674	0	0	89	105
Delaware	35	0	--	0	0	35	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	699	764	-8.4%	685	756	0	0	0	0	14	8
Georgia	1,241	1,076	15.0%	1,226	1,055	0	0	0	0	15	21
Maryland	288	345	-16.0%	0	0	270	325	0	0	18	20
North Carolina	932	998	-6.6%	912	970	1	6	0	0	19	21
South Carolina	561	416	35.0%	561	416	0	0	0	0	0	0
Virginia	197	337	-42.0%	140	257	33	45	0	0	24	35
West Virginia	1,899	1,615	18.0%	1,628	1,317	271	298	0	0	0	0
East South Central	3,915	4,362	-10.0%	3,800	4,061	56	216	0	0	59	85
Alabama	1,160	1,278	-9.3%	1,160	1,278	0	0	0	0	0	0
Kentucky	2,218	2,162	2.6%	2,218	2,162	0	0	0	0	0	0
Mississippi	187	352	-47.0%	131	136	56	216	0	0	0	0
Tennessee	349	570	-39.0%	290	485	0	0	0	0	59	85
West South Central	8,473	7,810	8.5%	4,690	4,476	3,761	3,295	0	0	22	39
Arkansas	1,605	1,411	14.0%	1,402	1,155	196	247	0	0	7	9
Louisiana	516	635	-19.0%	386	356	131	279	0	0	0	0
Oklahoma	542	875	-38.0%	528	802	0	43	0	0	15	30
Texas	5,810	4,888	19.0%	2,375	2,163	3,435	2,725	0	0	0	0
Mountain	6,908	6,177	12.0%	5,958	5,375	950	802	0	0	0	0
Arizona	1,359	1,315	3.4%	1,359	1,315	0	0	0	0	0	0
Colorado	1,197	1,216	-1.6%	1,197	1,216	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	853	718	19.0%	24	23	829	695	0	0	0	0
Nevada	137	31	346.0%	95	0	42	31	0	0	0	0
New Mexico	713	297	140.0%	713	297	0	0	0	0	0	0
Utah	865	855	1.2%	830	819	35	36	0	0	0	0
Wyoming	1,782	1,745	2.1%	1,740	1,705	43	40	0	0	0	0
Pacific Contiguous	467	199	135.0%	95	0	318	177	0	0	55	22
California	55	22	150.0%	0	0	0	0	0	0	55	22
Oregon	95	0	--	95	0	0	0	0	0	0	0
Washington	318	177	79.0%	0	0	318	177	0	0	0	0
Pacific Noncontiguous	27	77	-64.0%	27	16	0	61	0	0	0	0
Alaska	27	16	72.0%	27	16	0	0	0	0	0	0
Hawaii	0	61	-100.0%	0	0	0	61	0	0	0	0
U.S. Total	44,418	44,615	-0.4%	32,866	33,348	10,934	10,603	2	1	617	662

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

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

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

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	16	63	-74.0%	0	45	16	18	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	16	18	-8.4%	0	0	16	18	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	45	-100.0%	0	45	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	3,475	3,507	-0.9%	0	0	3,475	3,487	0	0	0	20
New Jersey	123	121	1.4%	0	0	123	121	0	0	0	0
New York	69	160	-57.0%	0	0	69	151	0	0	0	9
Pennsylvania	3,283	3,226	1.8%	0	0	3,283	3,215	0	0	0	11
East North Central	19,929	20,055	-0.6%	11,235	11,807	8,396	7,919	0	0	298	329
Illinois	6,577	6,903	-4.7%	1,329	1,278	4,950	5,295	0	0	298	329
Indiana	5,033	4,757	5.8%	4,717	4,468	317	289	0	0	0	0
Michigan	2,261	2,148	5.2%	2,261	2,148	0	0	0	0	0	0
Ohio	3,563	3,313	7.5%	433	979	3,129	2,334	0	0	0	0
Wisconsin	2,495	2,933	-15.0%	2,495	2,933	0	0	0	0	0	0
West North Central	17,466	19,428	-10.0%	16,952	18,906	0	0	3	6	511	517
Iowa	2,295	2,353	-2.4%	1,913	1,982	0	0	0	0	383	370
Kansas	1,833	2,141	-14.0%	1,833	2,141	0	0	0	0	0	0
Minnesota	1,728	1,855	-6.9%	1,728	1,855	0	0	0	0	0	0
Missouri	5,435	6,545	-17.0%	5,432	6,540	0	0	3	6	0	0
Nebraska	1,993	2,053	-2.9%	1,865	1,906	0	0	0	0	128	147
North Dakota	3,928	4,214	-6.8%	3,928	4,214	0	0	0	0	0	0
South Dakota	253	268	-5.3%	253	268	0	0	0	0	0	0
South Atlantic	13,220	11,963	11.0%	11,648	9,982	1,397	1,791	0	0	176	190
Delaware	59	0	--	0	0	59	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,711	1,761	-2.9%	1,697	1,744	0	0	0	0	14	18
Georgia	2,721	2,265	20.0%	2,701	2,236	0	0	0	0	20	29
Maryland	585	745	-21.0%	0	0	546	705	0	0	39	40
North Carolina	1,828	1,768	3.4%	1,786	1,708	3	15	0	0	40	45
South Carolina	1,773	850	109.0%	1,765	850	0	0	0	0	8	0
Virginia	443	770	-42.0%	320	631	68	79	0	0	56	59
West Virginia	4,099	3,805	7.7%	3,379	2,813	721	992	0	0	0	0
East South Central	8,836	8,730	1.2%	8,409	8,053	325	496	0	0	102	180
Alabama	2,342	2,484	-5.7%	2,342	2,484	0	0	0	0	0	0
Kentucky	5,125	4,363	17.0%	5,125	4,363	0	0	0	0	0	0
Mississippi	566	737	-23.0%	240	241	325	496	0	0	0	0
Tennessee	804	1,146	-30.0%	702	965	0	0	0	0	102	180
West South Central	17,970	17,136	4.9%	10,024	9,472	7,887	7,591	0	0	60	73
Arkansas	3,322	2,903	14.0%	2,881	2,385	427	505	0	0	15	14
Louisiana	1,163	1,220	-4.7%	836	778	327	443	0	0	0	0
Oklahoma	1,296	1,965	-34.0%	1,237	1,764	14	142	0	0	45	60
Texas	12,189	11,048	10.0%	5,069	4,545	7,120	6,502	0	0	0	0
Mountain	14,475	13,215	9.5%	12,471	11,342	2,003	1,873	0	0	0	0
Arizona	2,786	2,667	4.5%	2,786	2,667	0	0	0	0	0	0
Colorado	2,527	2,323	8.8%	2,527	2,323	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	1,778	1,667	6.7%	50	41	1,728	1,626	0	0	0	0
Nevada	320	91	250.0%	203	0	117	91	0	0	0	0
New Mexico	1,430	751	90.0%	1,430	751	0	0	0	0	0	0
Utah	1,949	1,860	4.7%	1,875	1,787	74	73	0	0	0	0
Wyoming	3,685	3,855	-4.4%	3,599	3,772	85	83	0	0	0	0
Pacific Contiguous	1,252	634	98.0%	274	0	858	547	0	0	120	87
California	120	87	38.0%	0	0	0	0	0	0	120	87
Oregon	274	0	--	274	0	0	0	0	0	0	0
Washington	858	547	57.0%	0	0	858	547	0	0	0	0
Pacific Noncontiguous	125	158	-21.0%	66	33	59	125	0	0	0	0
Alaska	66	33	100.0%	66	33	0	0	0	0	0	0
Hawaii	59	125	-53.0%	0	0	59	125	0	0	0	0
U.S. Total	96,764	94,890	2.0%	71,079	69,640	24,416	23,846	3	6	1,266	1,397

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

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

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

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	57	79	-28.0%	3	13	54	66	0	0	0	0
Connecticut	2	3	-29.0%	0	0	2	3	0	0	0	0
Maine	2	2	1.5%	0	0	2	2	0	0	0	0
Massachusetts	50	74	-32.0%	0	12	50	62	0	0	0	0
New Hampshire	3	1	185.0%	3	1	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	224	590	-62.0%	97	406	120	173	0	0	6	11
New Jersey	1	1	-52.0%	0	0	1	1	0	0	0	0
New York	150	462	-68.0%	97	406	52	51	0	0	0	5
Pennsylvania	74	127	-42.0%	0	0	68	121	0	0	6	6
East North Central	63	44	43.0%	33	27	25	17	0	0	5	0
Illinois	10	5	101.0%	0	0	10	5	0	0	0	0
Indiana	15	11	38.0%	15	10	0	1	0	0	0	0
Michigan	5	8	-41.0%	5	8	0	0	0	0	0	0
Ohio	26	15	71.0%	14	9	7	6	0	0	5	0
Wisconsin	8	5	53.0%	0	0	8	5	0	0	0	0
West North Central	53	27	98.0%	53	27	0	0	0	0	0	0
Iowa	7	8	-11.0%	7	8	0	0	0	0	0	0
Kansas	12	7	80.0%	12	7	0	0	0	0	0	0
Minnesota	4	1	148.0%	4	1	0	0	0	0	0	0
Missouri	12	7	72.0%	12	7	0	0	0	0	0	0
Nebraska	3	0	--	3	0	0	0	0	0	0	0
North Dakota	15	3	338.0%	15	3	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	88	288	-70.0%	61	161	7	109	0	0	20	18
Delaware	1	17	-95.0%	0	0	1	17	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	24	34	-30.0%	15	32	0	0	0	0	9	2
Georgia	19	17	11.0%	13	14	0	0	0	0	5	3
Maryland	6	66	-92.0%	0	0	6	66	0	0	0	0
North Carolina	27	30	-12.0%	22	29	0	0	0	0	4	2
South Carolina	1	28	-95.0%	1	18	0	0	0	0	0	10
Virginia	4	68	-93.0%	2	47	1	20	0	0	2	2
West Virginia	7	27	-76.0%	7	21	0	6	0	0	0	0
East South Central	19	14	36.0%	17	14	0	0	0	0	2	1
Alabama	0	2	-81.0%	0	2	0	0	0	0	0	0
Kentucky	14	7	86.0%	14	7	0	0	0	0	0	0
Mississippi	0	1	-71.0%	0	1	0	0	0	0	0	0
Tennessee	5	3	32.0%	2	3	0	0	0	0	2	1
West South Central	8	11	-29.0%	6	9	1	2	0	0	0	0
Arkansas	3	3	8.9%	3	3	0	0	0	0	0	0
Louisiana	0	3	-100.0%	0	3	0	0	0	0	0	0
Oklahoma	1	1	40.0%	1	1	0	0	0	0	0	0
Texas	3	3	-12.0%	2	2	1	2	0	0	0	0
Mountain	40	29	35.0%	37	28	3	1	0	0	0	0
Arizona	23	9	158.0%	23	9	0	0	0	0	0	0
Colorado	0	1	-100.0%	0	1	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	3	1	456.0%	0	0	3	1	0	0	0	0
Nevada	4	1	596.0%	3	0	0	1	0	0	0	0
New Mexico	3	3	-6.4%	3	3	0	0	0	0	0	0
Utah	2	9	-80.0%	2	9	0	0	0	0	0	0
Wyoming	6	7	-16.0%	6	7	0	0	0	0	0	0
Pacific Contiguous	1	0	--	0	0	1	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	1	0	--	0	0	1	0	0	0	0	0
Pacific Noncontiguous	829	715	16.0%	726	618	103	97	0	0	0	0
Alaska	1	0	--	1	0	0	0	0	0	0	0
Hawaii	828	715	16.0%	725	618	103	97	0	0	0	0
U.S. Total	1,380	1,797	-23.0%	1,033	1,303	314	465	0	0	33	30

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

Notes:
See Glossary for definitions. Values are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Petroleum Liquids includes distillate and residual fuel oils.
See the Technical Notes for fuel conversion factors.

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

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	176	1,002	-82.0%	5	112	171	890	0	0	0	0
Connecticut	4	104	-96.0%	0	0	4	104	0	0	0	0
Maine	116	250	-54.0%	0	0	116	250	0	0	0	0
Massachusetts	50	368	-86.0%	0	12	50	356	0	0	0	0
New Hampshire	5	180	-97.0%	5	100	0	80	0	0	0	0
Rhode Island	0	100	-100.0%	0	0	0	100	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	436	2,208	-80.0%	187	637	237	1,548	0	0	12	23
New Jersey	21	133	-84.0%	0	0	21	133	0	0	0	0
New York	264	1,651	-84.0%	187	637	78	1,004	0	0	0	10
Pennsylvania	151	423	-64.0%	0	0	139	411	0	0	12	12
East North Central	163	135	20.0%	75	91	78	39	0	0	10	6
Illinois	19	11	69.0%	0	0	19	11	0	0	0	0
Indiana	35	36	-4.2%	35	36	0	1	0	0	0	0
Michigan	26	19	38.0%	24	18	0	0	0	0	2	1
Ohio	74	43	71.0%	15	23	51	16	0	0	8	5
Wisconsin	9	25	-66.0%	1	15	8	11	0	0	0	0
West North Central	101	101	-0.9%	101	101	0	0	0	0	0	0
Iowa	15	25	-42.0%	15	25	0	0	0	0	0	0
Kansas	17	13	31.0%	17	13	0	0	0	0	0	0
Minnesota	7	3	149.0%	7	3	0	0	0	0	0	0
Missouri	30	45	-33.0%	30	45	0	0	0	0	0	0
Nebraska	6	1	391.0%	6	1	0	0	0	0	0	0
North Dakota	26	14	81.0%	26	14	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	257	1,785	-86.0%	190	1,204	29	516	0	0	38	66
Delaware	1	38	-98.0%	0	0	1	38	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	31	88	-65.0%	18	83	0	0	0	0	13	6
Georgia	41	105	-61.0%	32	60	0	25	0	0	9	20
Maryland	20	314	-94.0%	0	0	20	314	0	0	0	0
North Carolina	70	561	-88.0%	61	554	0	0	0	0	9	7
South Carolina	11	225	-95.0%	10	159	0	43	0	0	1	23
Virginia	47	373	-87.0%	33	288	8	75	0	0	6	10
West Virginia	36	81	-55.0%	36	61	0	20	0	0	0	0
East South Central	60	125	-51.0%	50	66	8	58	0	0	2	1
Alabama	12	84	-85.0%	4	26	8	58	0	0	0	0
Kentucky	28	20	41.0%	28	20	0	0	0	0	0	0
Mississippi	2	5	-50.0%	2	5	0	0	0	0	0	0
Tennessee	17	16	11.0%	15	15	0	0	0	0	2	1
West South Central	17	15	12.0%	10	12	7	3	0	0	0	0
Arkansas	8	3	176.0%	3	3	5	0	0	0	0	0
Louisiana	0	3	-100.0%	0	3	0	0	0	0	0	0
Oklahoma	4	1	313.0%	4	1	0	0	0	0	0	0
Texas	5	8	-35.0%	3	5	2	3	0	0	0	0
Mountain	85	45	88.0%	79	43	6	2	0	0	0	0
Arizona	33	16	102.0%	33	16	0	0	0	0	0	0
Colorado	0	2	-100.0%	0	2	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	5	1	438.0%	0	0	5	1	0	0	0	0
Nevada	5	1	580.0%	5	0	1	1	0	0	0	0
New Mexico	6	7	-4.8%	6	7	0	0	0	0	0	0
Utah	27	12	130.0%	27	11	0	0	0	0	0	0
Wyoming	8	7	8.4%	8	7	0	0	0	0	0	0
Pacific Contiguous	2	0	--	0	0	2	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	2	0	--	0	0	2	0	0	0	0	0
Pacific Noncontiguous	1,514	1,328	14.0%	1,345	1,132	169	195	0	0	0	0
Alaska	3	0	--	3	0	0	0	0	0	0	0
Hawaii	1,511	1,328	14.0%	1,342	1,132	169	195	0	0	0	0
U.S. Total	2,810	6,745	-58.0%	2,040	3,398	708	3,251	0	0	62	95

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

Notes:
See Glossary for definitions. Values are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Petroleum Liquids includes distillate and residual fuel oils.
See the Technical Notes for fuel conversion factors.

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

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0	0	0	0	0
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	0	0	--	0	0	0	0	0	0	0	0
East North Central	1	56	-99.0%	1	56	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	50	-100.0%	0	50	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	1	6	-90.0%	1	6	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	37	110	-66.0%	37	110	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	37	110	-66.0%	37	110	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	117	111	5.9%	117	111	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	117	111	5.9%	117	111	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	0	0	--	0	0	0	0	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	155	277	-44.0%	155	277	0	0	0	0	0	0

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

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

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

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0	0	0	0	0
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	0	0	--	0	0	0	0	0	0	0	0
East North Central	35	113	-69.0%	35	113	0	0	0	0	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	29	99	-71.0%	29	99	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	6	14	-56.0%	6	14	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	75	177	-57.0%	75	177	0	0	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	75	177	-57.0%	75	177	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	236	234	0.8%	236	234	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	236	234	0.8%	236	234	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	0	0	--	0	0	0	0	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	347	525	-34.0%	347	525	0	0	0	0	0	0

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

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

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

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

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	21,720	20,811	4.4%	4	3	21,716	20,807	0	0	0	0
Connecticut	9,699	8,361	16.0%	0	0	9,699	8,361	0	0	0	0
Maine	790	340	132.0%	0	0	790	340	0	0	0	0
Massachusetts	9,056	10,057	-9.9%	1	0	9,056	10,057	0	0	0	0
New Hampshire	612	228	169.0%	3	3	609	224	0	0	0	0
Rhode Island	1,562	1,825	-14.0%	0	0	1,562	1,825	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	93,398	73,563	27.0%	6,881	5,877	85,623	66,859	0	0	894	827
New Jersey	20,189	17,849	13.0%	0	0	20,189	17,849	0	0	0	0
New York	25,898	20,273	28.0%	6,881	5,877	18,388	13,841	0	0	629	556
Pennsylvania	47,310	35,440	33.0%	0	0	47,045	35,169	0	0	265	271
East North Central	75,929	59,563	27.0%	23,720	21,314	50,270	36,417	596	549	1,342	1,282
Illinois	4,868	2,551	91.0%	190	15	4,676	2,533	0	0	3	4
Indiana	15,357	10,411	48.0%	6,014	4,036	9,343	6,374	0	0	0	0
Michigan	16,985	16,451	3.2%	2,827	3,523	12,979	11,772	596	549	584	607
Ohio	28,568	20,669	38.0%	5,047	4,602	22,958	15,627	0	0	563	440
Wisconsin	10,150	9,482	7.1%	9,643	9,139	314	111	0	0	193	232
West North Central	12,534	9,973	26.0%	10,941	8,685	1,084	835	149	139	360	313
Iowa	3,843	3,160	22.0%	3,492	2,848	0	0	0	0	350	312
Kansas	1,048	1,111	-5.6%	1,048	1,111	0	0	0	0	0	0
Minnesota	4,600	2,553	80.0%	4,547	2,529	43	22	1	1	10	1
Missouri	2,796	3,024	-7.5%	1,607	2,072	1,041	813	148	139	0	0
Nebraska	123	110	12.0%	123	110	0	0	0	0	0	0
North Dakota	123	14	784.0%	123	14	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	190,474	168,039	13.0%	159,629	139,931	27,962	25,108	0	0	2,883	3,000
Delaware	1,308	2,345	-44.0%	0	0	1,308	2,345	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	82,379	77,947	5.7%	79,916	75,249	2,115	2,434	0	0	348	264
Georgia	26,329	26,430	-0.4%	20,679	20,976	5,053	4,750	0	0	597	704
Maryland	8,214	3,673	124.0%	3,092	0	4,895	3,461	0	0	227	212
North Carolina	25,933	22,131	17.0%	21,574	19,557	4,118	2,307	0	0	240	267
South Carolina	12,378	6,808	82.0%	10,430	6,508	1,835	190	0	0	113	109
Virginia	33,229	27,992	19.0%	23,829	17,626	8,489	9,560	0	0	912	807
West Virginia	703	713	-1.4%	109	15	148	61	0	0	447	637
East South Central	63,339	60,245	5.1%	41,833	41,774	19,235	17,025	0	0	2,271	1,446
Alabama	24,985	22,597	11.0%	8,175	7,544	16,809	15,053	0	0	0	0
Kentucky	5,724	6,513	-12.0%	5,543	6,430	180	83	0	0	0	0
Mississippi	22,088	24,807	-11.0%	19,843	22,918	2,246	1,889	0	0	0	0
Tennessee	10,542	6,328	67.0%	8,271	4,882	0	0	0	0	2,271	1,446
West South Central	194,057	190,278	2.0%	55,626	49,855	86,574	91,554	0	0	51,857	48,870
Arkansas	11,123	10,383	7.1%	9,755	9,123	1,129	1,094	0	0	239	165
Louisiana	35,513	34,024	4.4%	15,365	15,750	2,243	1,931	0	0	17,905	16,343
Oklahoma	20,558	16,867	22.0%	12,918	8,819	7,340	7,797	0	0	301	250
Texas	126,863	129,004	-1.7%	17,588	16,162	75,862	80,731	0	0	33,412	32,111
Mountain	53,257	39,170	36.0%	45,627	33,864	7,630	5,249	0	0	0	57
Arizona	19,082	9,554	100.0%	15,584	8,285	3,498	1,268	0	0	0	0
Colorado	10,010	9,340	7.2%	8,344	7,786	1,666	1,554	0	0	0	0
Idaho	1,298	356	265.0%	1,298	356	0	0	0	0	0	0
Montana	327	199	64.0%	327	199	0	0	0	0	0	0
Nevada	11,255	11,459	-1.8%	11,255	11,459	0	0	0	0	0	0
New Mexico	5,705	5,137	11.0%	3,238	2,713	2,467	2,424	0	0	0	0
Utah	5,313	2,981	78.0%	5,312	2,924	0	0	0	0	0	57
Wyoming	268	144	86.0%	268	141	0	3	0	0	0	0
Pacific Contiguous	54,171	45,298	20.0%	18,966	18,983	32,945	24,465	0	0	2,260	1,851
California	41,277	37,319	11.0%	13,585	15,669	25,432	19,799	0	0	2,260	1,851
Oregon	10,418	5,880	77.0%	3,452	2,339	6,966	3,540	0	0	0	0
Washington	2,477	2,100	18.0%	1,929	974	547	1,126	0	0	0	0
Pacific Noncontiguous	23	133	-82.0%	23	133	0	0	0	0	0	0
Alaska	23	133	-82.0%	23	133	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	758,901	667,072	14.0%	363,249	320,418	333,039	288,320	745	688	61,868	57,646

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

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

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

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

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	47,081	43,151	9.1%	19	4	47,062	43,146	0	0	0	0
Connecticut	20,814	17,100	22.0%	0	0	20,814	17,100	0	0	0	0
Maine	1,567	754	108.0%	0	0	1,567	754	0	0	0	0
Massachusetts	19,553	20,545	-4.8%	14	0	19,539	20,545	0	0	0	0
New Hampshire	1,866	1,150	62.0%	4	4	1,862	1,145	0	0	0	0
Rhode Island	3,281	3,602	-8.9%	0	0	3,281	3,602	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	192,345	144,615	33.0%	13,820	12,488	176,663	130,343	0	0	1,862	1,784
New Jersey	40,843	31,567	29.0%	0	0	40,843	31,567	0	0	0	0
New York	53,267	43,314	23.0%	13,820	12,488	38,147	29,605	0	0	1,300	1,222
Pennsylvania	98,235	69,734	41.0%	0	0	97,673	69,171	0	0	562	562
East North Central	156,321	132,179	18.0%	50,807	47,811	101,453	80,459	1,188	1,211	2,874	2,698
Illinois	10,164	7,722	32.0%	540	167	9,619	7,552	0	0	4	4
Indiana	31,944	24,094	33.0%	12,292	10,847	19,652	13,247	0	0	0	0
Michigan	36,801	37,014	-0.6%	7,610	9,313	26,775	25,245	1,188	1,211	1,228	1,245
Ohio	56,303	44,745	26.0%	10,415	9,848	44,683	33,940	0	0	1,205	957
Wisconsin	21,109	18,603	13.0%	19,949	17,636	723	476	0	0	437	492
West North Central	24,570	19,325	27.0%	20,941	16,921	2,341	1,504	308	295	980	605
Iowa	8,748	6,758	29.0%	7,793	6,156	0	0	0	0	955	602
Kansas	2,284	2,141	6.7%	2,284	2,141	0	0	0	0	0	0
Minnesota	7,134	4,055	76.0%	7,038	4,008	71	43	1	1	25	3
Missouri	5,940	6,115	-2.8%	3,363	4,360	2,270	1,460	308	294	0	0
Nebraska	206	217	-5.0%	206	217	0	0	0	0	0	0
North Dakota	258	39	566.0%	258	39	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	383,407	345,938	11.0%	324,243	291,151	52,960	48,618	0	0	6,204	6,169
Delaware	2,371	3,963	-40.0%	0	0	2,371	3,963	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	168,543	162,139	3.9%	164,590	156,529	3,347	5,143	0	0	606	467
Georgia	55,221	54,488	1.3%	43,662	43,255	10,156	9,638	0	0	1,403	1,596
Maryland	13,293	5,657	135.0%	5,658	0	7,178	5,207	0	0	456	450
North Carolina	50,169	45,327	11.0%	41,116	40,007	8,528	4,803	0	0	525	516
South Carolina	24,860	17,898	39.0%	21,044	15,292	3,572	2,405	0	0	244	201
Virginia	67,293	54,812	23.0%	47,898	35,816	17,512	17,370	0	0	1,883	1,626
West Virginia	1,657	1,653	0.2%	275	252	296	88	0	0	1,086	1,313
East South Central	134,436	151,066	-11.0%	89,498	106,136	40,228	41,870	0	0	4,710	3,060
Alabama	50,194	52,235	-3.9%	16,682	16,764	33,512	35,471	0	0	0	0
Kentucky	14,724	20,498	-28.0%	14,030	19,200	695	1,298	0	0	0	0
Mississippi	47,985	61,182	-22.0%	41,964	56,081	6,021	5,101	0	0	0	0
Tennessee	21,533	17,151	26.0%	16,822	14,091	0	0	0	0	4,710	3,060
West South Central	424,602	404,140	5.1%	119,715	106,823	193,984	192,789	0	0	110,904	104,528
Arkansas	19,394	20,069	-3.4%	16,497	17,275	2,368	2,278	0	0	529	516
Louisiana	77,566	74,553	4.0%	35,875	34,553	4,780	5,248	0	0	36,912	34,752
Oklahoma	45,033	33,466	35.0%	27,280	18,195	16,996	14,799	0	0	757	471
Texas	282,609	276,051	2.4%	40,063	36,799	169,841	170,464	0	0	72,706	68,789
Mountain	110,813	82,319	35.0%	92,756	71,856	18,034	10,331	0	0	22	131
Arizona	40,590	21,216	91.0%	30,257	18,267	10,333	2,949	0	0	0	0
Colorado	19,558	19,097	2.4%	17,035	16,114	2,523	2,983	0	0	0	0
Idaho	2,719	356	664.0%	2,719	356	0	0	0	0	0	0
Montana	531	438	21.0%	531	438	0	0	0	0	0	0
Nevada	24,050	24,320	-1.1%	24,050	24,320	0	0	0	0	0	0
New Mexico	12,580	10,022	26.0%	7,406	5,627	5,175	4,395	0	0	0	0
Utah	10,393	6,684	55.0%	10,370	6,553	0	0	0	0	22	131
Wyoming	391	187	109.0%	388	182	3	5	0	0	0	0
Pacific Contiguous	116,332	98,201	18.0%	40,800	41,336	70,781	52,357	0	0	4,751	4,508
California	85,882	78,527	9.4%	27,730	32,279	53,400	41,740	0	0	4,751	4,508
Oregon	21,813	14,182	54.0%	7,668	5,857	14,145	8,325	0	0	0	0
Washington	8,637	5,493	57.0%	5,402	3,200	3,235	2,293	0	0	0	0
Pacific Noncontiguous	132	305	-57.0%	132	305	0	0	0	0	0	0
Alaska	132	305	-57.0%	132	305	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,590,038	1,421,238	12.0%	752,731	694,831	703,504	601,416	1,496	1,506	132,307	123,485

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

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

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018
New England	W	W	W	--	--	W	W
Connecticut	--	--	--	--	--	--	--
Maine	W	W	W	--	--	W	W
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.03	2.22	-8.6%	--	--	2.03	2.22
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	--	W	W
Pennsylvania	1.92	2.15	-11.0%	--	--	1.92	2.15
East North Central	2.01	1.99	1.0%	2.12	2.08	1.87	1.84
Illinois	1.86	1.75	6.3%	1.99	1.80	1.81	1.74
Indiana	W	W	W	2.14	2.13	W	W
Michigan	2.11	2.15	-1.9%	2.11	2.15	--	--
Ohio	W	W	W	1.78	1.81	W	W
Wisconsin	2.24	2.18	2.8%	2.24	2.18	--	--
West North Central	1.65	1.72	-4.1%	1.65	1.72	--	--
Iowa	1.55	1.71	-9.4%	1.55	1.71	--	--
Kansas	1.63	1.70	-4.1%	1.63	1.70	--	--
Minnesota	2.08	2.12	-1.9%	2.08	2.12	--	--
Missouri	1.70	1.87	-9.1%	1.70	1.87	--	--
Nebraska	1.21	1.23	-1.6%	1.21	1.23	--	--
North Dakota	1.61	1.44	12.0%	1.61	1.44	--	--
South Dakota	2.04	1.78	15.0%	2.04	1.78	--	--
South Atlantic	2.71	2.72	-0.4%	2.75	2.75	2.44	2.47
Delaware	W	--	W	--	--	W	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.85	2.92	-2.4%	2.85	2.92	--	--
Georgia	2.75	2.85	-3.5%	2.75	2.85	--	--
Maryland	2.75	2.70	1.9%	--	--	2.75	2.70
North Carolina	W	W	W	3.46	3.03	W	W
South Carolina	3.34	3.46	-3.5%	3.34	3.46	--	--
Virginia	W	W	W	2.82	2.67	W	W
West Virginia	W	W	W	2.11	2.19	W	W
East South Central	W	W	W	2.09	2.14	W	W
Alabama	2.24	2.30	-2.6%	2.24	2.30	--	--
Kentucky	1.96	2.02	-3.0%	1.96	2.02	--	--
Mississippi	W	W	W	2.95	2.82	W	W
Tennessee	2.21	2.17	1.8%	2.21	2.17	--	--
West South Central	1.91	1.90	0.5%	2.10	2.00	1.65	1.78
Arkansas	W	W	W	2.03	1.92	W	W
Louisiana	W	W	W	3.01	2.28	W	W
Oklahoma	1.83	W	W	1.83	1.77	--	W
Texas	W	1.88	W	2.06	2.08	W	1.71
Mountain	W	W	W	2.16	2.00	W	W
Arizona	2.63	2.45	7.3%	2.63	2.45	--	--
Colorado	1.79	1.71	4.7%	1.79	1.71	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.98	1.91	W	W
Nevada	W	W	W	2.96	--	W	W
New Mexico	2.60	2.15	21.0%	2.60	2.15	--	--
Utah	2.00	2.04	-2.0%	2.00	2.04	--	--
Wyoming	W	W	W	1.88	1.78	W	W
Pacific Contiguous	W	W	W	2.21	--	W	W
California	--	--	--	--	--	--	--
Oregon	2.21	--	--	2.21	--	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	3.26	W	W	3.26	3.21	--	W
Alaska	3.26	3.21	1.6%	3.26	3.21	--	--
Hawaii	--	W	W	--	--	--	W
U.S. Total	2.06	2.06	0.0%	2.14	2.10	1.83	1.94

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

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

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	W	W	W	--	3.61	W	W
Connecticut	--	--	--	--	--	--	--
Maine	W	W	W	--	--	W	W
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	3.61	--	--	3.61	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.11	2.63	-20.0%	--	--	2.11	2.63
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	--	W	W
Pennsylvania	2.02	2.56	-21.0%	--	--	2.02	2.56
East North Central	2.01	1.98	1.5%	2.12	2.08	1.86	1.84
Illinois	1.86	1.76	5.7%	2.03	1.80	1.81	1.75
Indiana	W	W	W	2.16	2.10	W	W
Michigan	2.04	2.19	-6.8%	2.04	2.19	--	--
Ohio	W	W	W	1.80	1.81	W	W
Wisconsin	2.25	2.19	2.7%	2.25	2.19	--	--
West North Central	1.65	1.71	-3.5%	1.65	1.71	--	--
Iowa	1.57	1.68	-6.5%	1.57	1.68	--	--
Kansas	1.66	1.68	-1.2%	1.66	1.68	--	--
Minnesota	2.07	2.10	-1.4%	2.07	2.10	--	--
Missouri	1.71	1.87	-8.6%	1.71	1.87	--	--
Nebraska	1.23	1.24	-0.8%	1.23	1.24	--	--
North Dakota	1.56	1.44	8.3%	1.56	1.44	--	--
South Dakota	2.01	1.93	4.1%	2.01	1.93	--	--
South Atlantic	2.71	2.68	1.1%	2.75	2.75	2.38	2.31
Delaware	W	--	W	--	--	W	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.90	2.95	-1.7%	2.90	2.95	--	--
Georgia	2.72	2.86	-4.9%	2.72	2.86	--	--
Maryland	2.78	2.62	6.1%	--	--	2.78	2.62
North Carolina	W	W	W	3.45	3.04	W	W
South Carolina	3.21	3.42	-6.1%	3.21	3.42	--	--
Virginia	W	W	W	2.76	2.68	W	W
West Virginia	W	W	W	2.11	2.21	W	W
East South Central	W	W	W	2.10	2.13	W	W
Alabama	2.27	2.30	-1.3%	2.27	2.30	--	--
Kentucky	1.95	2.01	-3.0%	1.95	2.01	--	--
Mississippi	W	W	W	3.13	2.78	W	W
Tennessee	2.34	2.15	8.8%	2.34	2.15	--	--
West South Central	1.93	1.85	4.3%	2.10	1.96	1.70	1.71
Arkansas	W	W	W	2.04	1.93	W	W
Louisiana	W	W	W	2.81	2.09	W	W
Oklahoma	W	W	W	1.81	1.76	W	W
Texas	W	1.81	W	2.09	2.03	W	1.65
Mountain	W	W	W	2.16	2.01	W	W
Arizona	2.64	2.42	9.1%	2.64	2.42	--	--
Colorado	1.79	1.68	6.5%	1.79	1.68	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.99	1.88	W	W
Nevada	W	W	W	2.96	--	W	W
New Mexico	2.63	2.28	15.0%	2.63	2.28	--	--
Utah	1.98	2.05	-3.4%	1.98	2.05	--	--
Wyoming	W	W	W	1.90	1.81	W	W
Pacific Contiguous	W	W	W	2.17	--	W	W
California	--	--	--	--	--	--	--
Oregon	2.17	--	--	2.17	--	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.49	3.32	W	W
Alaska	3.49	3.32	5.1%	3.49	3.32	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.08	2.06	1.0%	2.15	2.09	1.87	1.97

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

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

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018
New England	W	W	W	18.01	15.21	W	W
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	15.00	W	W
New Hampshire	18.01	17.99	0.1%	18.01	17.99	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	W	W	W	11.18	10.65	W	W
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	11.18	10.65	W	W
Pennsylvania	13.13	15.33	-14.0%	--	--	13.13	15.33
East North Central	W	15.54	W	15.45	15.75	W	15.04
Illinois	18.41	W	W	--	--	18.41	W
Indiana	15.23	W	W	15.23	15.33	--	W
Michigan	15.79	15.04	5.0%	15.79	15.04	--	--
Ohio	15.36	W	W	15.56	16.83	14.99	W
Wisconsin	W	--	W	--	--	W	--
West North Central	14.84	14.85	-0.1%	14.84	14.85	--	--
Iowa	14.43	15.17	-4.9%	14.43	15.17	--	--
Kansas	14.79	14.98	-1.3%	14.79	14.98	--	--
Minnesota	17.82	15.24	17.0%	17.82	15.24	--	--
Missouri	14.73	15.02	-1.9%	14.73	15.02	--	--
Nebraska	15.15	--	--	15.15	--	--	--
North Dakota	14.39	13.39	7.5%	14.39	13.39	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	14.88	W	W	14.86	14.79	15.02	W
Delaware	--	W	W	--	--	--	W
District of Columbia	--	--	--	--	--	--	--
Florida	14.68	15.20	-3.4%	14.68	15.20	--	--
Georgia	14.76	15.06	-2.0%	14.76	15.06	--	--
Maryland	W	14.29	W	--	--	W	14.29
North Carolina	14.53	15.16	-4.2%	14.53	15.16	--	--
South Carolina	14.61	16.82	-13.0%	14.61	16.82	--	--
Virginia	W	W	W	15.80	13.12	W	W
West Virginia	16.41	W	W	16.41	15.83	--	W
East South Central	14.59	14.81	-1.5%	14.59	14.81	--	--
Alabama	14.70	14.68	0.1%	14.70	14.68	--	--
Kentucky	14.63	15.05	-2.8%	14.63	15.05	--	--
Mississippi	13.60	14.46	-5.9%	13.60	14.46	--	--
Tennessee	14.49	14.42	0.5%	14.49	14.42	--	--
West South Central	W	W	W	16.39	14.50	W	W
Arkansas	W	14.94	W	14.05	14.94	W	--
Louisiana	--	13.95	--	--	13.95	--	--
Oklahoma	15.78	15.16	4.1%	15.78	15.16	--	--
Texas	W	W	W	21.21	14.49	W	W
Mountain	W	W	W	14.97	16.17	W	W
Arizona	15.01	14.67	2.3%	15.01	14.67	--	--
Colorado	--	15.55	--	--	15.55	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	14.69	--	W	W
New Mexico	14.38	18.55	-22.0%	14.38	18.55	--	--
Utah	14.41	17.28	-17.0%	14.41	17.28	--	--
Wyoming	15.42	15.68	-1.7%	15.42	15.68	--	--
Pacific Contiguous	W	--	W	--	--	W	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	--	W	--	--	W	--
Pacific Noncontiguous	W	W	W	12.69	12.57	W	W
Alaska	15.54	--	--	15.54	--	--	--
Hawaii	W	W	W	12.68	12.57	W	W
U.S. Total	13.14	12.63	4.0%	12.99	12.43	13.63	13.30

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

Notes:
See Glossary for definitions. Values are preliminary.
See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Petroleum Liquids includes distillate and residual fuel oils.
See the Technical Notes for fuel conversion factors.

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

Table 4.11.B. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, (Year-to-Date) February 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	10.04	W	W	17.77	11.36	9.83	W
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	15.00	W	W
New Hampshire	17.77	W	W	17.77	10.95	--	W
Rhode Island	--	W	W	--	--	--	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	12.44	13.23	-6.0%	11.18	11.47	13.48	14.21
New Jersey	W	W	W	--	--	W	W
New York	12.25	12.87	-4.8%	11.18	11.47	15.00	13.86
Pennsylvania	W	W	W	--	--	W	W
East North Central	14.51	16.57	-12.0%	13.90	16.46	15.10	16.94
Illinois	W	W	W	--	--	W	W
Indiana	14.31	W	W	14.31	16.02	--	W
Michigan	12.59	15.44	-18.0%	12.59	15.44	--	--
Ohio	14.08	16.89	-17.0%	15.23	16.24	13.75	17.81
Wisconsin	W	19.05	W	11.30	19.05	W	--
West North Central	14.10	15.43	-8.6%	14.10	15.43	--	--
Iowa	13.99	15.46	-9.5%	13.99	15.46	--	--
Kansas	14.66	15.49	-5.4%	14.66	15.49	--	--
Minnesota	14.56	15.42	-5.6%	14.56	15.42	--	--
Missouri	13.79	15.62	-12.0%	13.79	15.62	--	--
Nebraska	14.52	15.36	-5.5%	14.52	15.36	--	--
North Dakota	13.95	14.73	-5.3%	13.95	14.73	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	13.93	14.51	-4.0%	14.00	14.81	13.42	13.75
Delaware	--	W	W	--	--	--	W
District of Columbia	--	--	--	--	--	--	--
Florida	14.50	15.71	-7.7%	14.50	15.71	--	--
Georgia	W	W	W	14.03	15.47	W	W
Maryland	W	14.13	W	--	--	W	14.13
North Carolina	14.35	17.24	-17.0%	14.35	17.24	--	--
South Carolina	14.22	16.89	-16.0%	14.22	16.89	--	--
Virginia	W	W	W	12.26	9.35	W	W
West Virginia	14.69	W	W	14.69	16.27	--	W
East South Central	W	W	W	13.92	15.36	W	W
Alabama	W	W	W	14.62	15.60	W	W
Kentucky	13.98	15.39	-9.2%	13.98	15.39	--	--
Mississippi	13.29	14.73	-9.8%	13.29	14.73	--	--
Tennessee	13.73	15.14	-9.3%	13.73	15.14	--	--
West South Central	W	W	W	15.70	14.67	W	W
Arkansas	W	14.94	W	14.05	14.94	W	--
Louisiana	--	13.95	--	--	13.95	--	--
Oklahoma	15.13	15.16	-0.2%	15.13	15.16	--	--
Texas	W	W	W	18.05	14.92	W	W
Mountain	W	16.38	W	16.21	16.41	W	15.76
Arizona	14.81	15.48	-4.3%	14.81	15.48	--	--
Colorado	--	15.64	--	--	15.64	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	14.56	--	W	W
New Mexico	19.69	18.95	3.9%	19.69	18.95	--	--
Utah	17.73	W	W	17.73	16.82	--	W
Wyoming	15.14	15.68	-3.4%	15.14	15.68	--	--
Pacific Contiguous	W	--	W	--	--	W	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	--	W	--	--	W	--
Pacific Noncontiguous	W	W	W	12.43	12.54	W	W
Alaska	15.54	--	--	15.54	--	--	--
Hawaii	W	W	W	12.42	12.54	W	W
U.S. Total	12.76	13.40	-4.8%	12.78	13.33	12.69	13.48

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

Notes:
See Glossary for definitions. Values are preliminary.
See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Petroleum Liquids includes distillate and residual fuel oils.
See the Technical Notes for fuel conversion factors.

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.85	1.59	16.0%	1.85	1.59	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	--	1.56	--	--	1.56	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.85	1.85	0.0%	1.85	1.85	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.62	2.82	-7.1%	2.62	2.82	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.62	2.82	-7.1%	2.62	2.82	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	--	--	--	--	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.17	2.44	-11.0%	2.17	2.44	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.17	2.44	-11.0%	2.17	2.44	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.27	2.43	-6.6%	2.27	2.43	--	--

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

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

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.62	1.59	1.9%	1.62	1.59	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.57	1.56	0.6%	1.57	1.56	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.90	1.77	7.3%	1.90	1.77	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.60	2.92	-11.0%	2.60	2.92	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.60	2.92	-11.0%	2.60	2.92	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	--	--	--	--	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.11	2.40	-12.0%	2.11	2.40	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.11	2.40	-12.0%	2.11	2.40	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.17	2.41	-10.0%	2.17	2.41	--	--

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

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

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	February 2019	February 2018	Percentage Change	February 2019	February 2018	February 2019	February 2018
New England	W	6.46	W	9.44	10.59	W	6.46
Connecticut	5.18	7.48	-31.0%	--	--	5.18	7.48
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	5.55	--	W	W
New Hampshire	W	W	W	10.44	10.59	W	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	3.47	3.77	-8.0%	5.19	7.34	3.31	3.40
New Jersey	3.85	2.98	29.0%	--	--	3.85	2.98
New York	4.31	5.33	-19.0%	5.19	7.34	3.91	4.33
Pennsylvania	2.91	3.25	-10.0%	--	--	2.91	3.25
East North Central	2.91	2.91	0.0%	3.17	2.99	2.78	2.85
Illinois	W	W	W	3.23	6.02	W	W
Indiana	W	W	W	3.02	2.87	W	W
Michigan	2.92	2.85	2.5%	3.07	3.03	2.89	2.80
Ohio	2.75	2.80	-1.8%	2.78	2.48	2.74	2.90
Wisconsin	3.51	3.30	6.4%	3.51	3.30	--	--
West North Central	W	W	W	3.60	3.02	W	W
Iowa	3.79	2.48	53.0%	3.79	2.48	--	--
Kansas	3.88	3.34	16.0%	3.88	3.34	--	--
Minnesota	W	W	W	3.46	3.67	W	W
Missouri	W	W	W	2.92	2.66	W	W
Nebraska	3.63	4.52	-20.0%	3.63	4.52	--	--
North Dakota	4.77	17.20	-72.0%	4.77	17.20	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	3.87	4.43	-13.0%	3.97	4.47	3.23	4.16
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	4.16	4.75	W	W
Georgia	W	W	W	3.26	3.33	W	W
Maryland	3.56	W	W	3.75	--	3.43	W
North Carolina	W	W	W	3.82	4.56	W	W
South Carolina	W	3.58	W	3.38	3.58	W	--
Virginia	W	W	W	4.36	4.88	W	W
West Virginia	3.03	W	W	2.88	2.69	3.14	W
East South Central	3.16	3.14	0.6%	3.23	3.16	2.99	3.06
Alabama	W	W	W	3.10	3.17	W	W
Kentucky	W	W	W	4.09	3.52	W	W
Mississippi	W	W	W	3.10	3.06	W	W
Tennessee	3.09	3.17	-2.5%	3.09	3.17	--	--
West South Central	2.79	2.84	-1.8%	2.79	2.98	2.78	2.74
Arkansas	W	W	W	2.78	2.74	W	W
Louisiana	W	W	W	2.94	3.06	W	W
Oklahoma	W	W	W	2.83	2.86	W	W
Texas	2.76	2.83	-2.5%	2.64	3.12	2.79	2.75
Mountain	4.08	W	W	3.96	3.24	5.16	W
Arizona	W	3.20	W	3.02	3.20	W	--
Colorado	W	W	W	3.42	3.36	W	W
Idaho	8.54	3.32	157.0%	8.54	3.32	--	--
Montana	2.65	1.75	51.0%	2.65	1.75	--	--
Nevada	4.93	3.27	51.0%	4.93	3.27	--	--
New Mexico	2.22	2.92	-24.0%	2.22	2.92	--	--
Utah	5.28	3.27	61.0%	5.28	3.27	--	--
Wyoming	2.96	W	W	2.96	3.27	--	W
Pacific Contiguous	6.59	3.43	92.0%	6.91	3.83	6.31	2.98
California	W	3.63	W	7.66	4.12	W	3.06
Oregon	W	W	W	4.09	2.34	W	W
Washington	W	W	W	7.76	3.44	W	W
Pacific Noncontiguous	7.72	8.44	-8.5%	7.72	8.44	--	--
Alaska	7.72	8.44	-8.5%	7.72	8.44	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.65	3.63	0.6%	3.80	3.81	3.47	3.36

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

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

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	February 2019 YTD	February 2018 YTD	Percentage Change	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	6.95	9.42	-26.0%	11.01	12.18	6.95	9.42
Connecticut	6.10	9.15	-33.0%	--	--	6.10	9.15
Maine	W	W	W	--	--	W	W
Massachusetts	W	9.84	W	10.99	--	W	9.84
New Hampshire	W	W	W	11.10	12.18	W	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	3.86	5.27	-27.0%	6.05	7.76	3.67	5.00
New Jersey	4.12	5.03	-18.0%	--	--	4.12	5.03
New York	4.97	6.72	-26.0%	6.05	7.76	4.50	6.21
Pennsylvania	3.23	4.50	-28.0%	--	--	3.23	4.50
East North Central	3.13	3.41	-8.2%	3.37	3.66	3.01	3.27
Illinois	3.36	W	W	4.47	9.45	3.30	W
Indiana	3.07	W	W	3.24	3.85	2.96	W
Michigan	3.15	3.39	-7.1%	3.37	3.92	3.09	3.20
Ohio	2.97	3.14	-5.4%	3.14	3.26	2.93	3.11
Wisconsin	3.55	3.58	-0.8%	3.55	3.58	--	--
West North Central	W	W	W	3.52	3.45	W	W
Iowa	3.42	3.25	5.2%	3.42	3.25	--	--
Kansas	3.90	3.73	4.6%	3.90	3.73	--	--
Minnesota	W	W	W	3.65	3.80	W	W
Missouri	W	W	W	3.19	3.07	W	W
Nebraska	3.69	5.46	-32.0%	3.69	5.46	--	--
North Dakota	5.45	15.60	-65.0%	5.45	15.60	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	4.28	5.66	-24.0%	4.39	5.65	3.49	5.76
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	4.55	4.81	W	W
Georgia	W	W	W	3.58	4.19	W	W
Maryland	W	W	W	4.87	--	W	W
North Carolina	W	W	W	4.37	7.50	W	W
South Carolina	W	W	W	3.75	5.11	W	W
Virginia	W	W	W	4.80	9.14	W	W
West Virginia	3.22	W	W	3.15	4.65	3.28	W
East South Central	3.41	3.63	-6.1%	3.48	3.67	3.22	3.50
Alabama	W	W	W	3.50	3.57	W	W
Kentucky	W	W	W	4.09	4.21	W	W
Mississippi	W	W	W	3.33	3.56	W	W
Tennessee	3.30	3.46	-4.6%	3.30	3.46	--	--
West South Central	3.00	3.45	-13.0%	3.04	3.54	2.97	3.39
Arkansas	W	W	W	3.03	3.35	W	W
Louisiana	W	W	W	3.20	3.66	W	W
Oklahoma	W	W	W	3.01	3.31	W	W
Texas	2.97	3.44	-14.0%	2.92	3.62	2.98	3.39
Mountain	W	W	W	3.82	3.36	W	W
Arizona	W	W	W	3.15	3.45	W	W
Colorado	W	W	W	3.52	3.51	W	W
Idaho	5.89	3.32	77.0%	5.89	3.32	--	--
Montana	2.29	1.87	22.0%	2.29	1.87	--	--
Nevada	4.64	3.26	42.0%	4.64	3.26	--	--
New Mexico	2.45	3.46	-29.0%	2.45	3.46	--	--
Utah	4.81	3.16	52.0%	4.81	3.16	--	--
Wyoming	W	W	W	3.27	3.69	W	W
Pacific Contiguous	5.37	3.48	54.0%	5.72	3.82	5.07	3.09
California	5.79	3.65	59.0%	6.55	4.11	5.21	3.15
Oregon	W	W	W	3.38	2.43	W	W
Washington	W	W	W	5.37	3.80	W	W
Pacific Noncontiguous	7.72	8.44	-8.5%	7.72	8.44	--	--
Alaska	7.72	8.44	-8.5%	7.72	8.44	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.85	4.46	-14.0%	4.00	4.52	3.66	4.36

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

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

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

Table 4.14. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Total (All Sectors) by State, February 2019

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	6	0.76	8.8	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	6	0.76	8.8	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,159	2.81	9.1	0	--	--	0	--	--
New Jersey	62	1.86	8.3	0	--	--	0	--	--
New York	26	2.64	8.3	0	--	--	0	--	--
Pennsylvania	1,071	2.87	9.1	0	--	--	0	--	--
East North Central	4,744	3.18	10.4	4,148	0.21	4.7	0	--	--
Illinois	852	3.54	18.6	2,140	0.21	4.6	0	--	--
Indiana	2,229	2.91	8.8	181	0.21	4.4	0	--	--
Michigan	59	2.55	7.6	893	0.21	4.8	0	--	--
Ohio	1,576	3.39	9.1	0	--	--	0	--	--
Wisconsin	28	2.69	7.5	934	0.23	4.7	0	--	--
West North Central	63	2.89	9.6	6,498	0.27	4.9	1,803	0.77	9.9
Iowa	34	2.72	8.5	1,067	0.25	4.7	0	--	--
Kansas	11	3.59	13.7	909	0.33	5.0	0	--	--
Minnesota	0	--	--	802	0.32	5.5	0	--	--
Missouri	19	2.78	9.1	2,696	0.23	4.7	0	--	--
Nebraska	0	--	--	921	0.25	4.9	0	--	--
North Dakota	0	--	--	0	--	--	1,803	0.77	9.9
South Dakota	0	--	--	103	0.41	5.4	0	--	--
South Atlantic	5,063	2.40	9.8	759	0.32	4.6	0	--	--
Delaware	35	2.69	7.7	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	699	2.47	8.4	0	--	--	0	--	--
Georgia	481	2.56	8.5	759	0.32	4.6	0	--	--
Maryland	288	2.31	10.7	0	--	--	0	--	--
North Carolina	932	1.87	9.4	0	--	--	0	--	--
South Carolina	561	1.77	9.4	0	--	--	0	--	--
Virginia	197	0.89	14.8	0	--	--	0	--	--
West Virginia	1,870	2.93	10.3	0	--	--	0	--	--
East South Central	2,400	2.49	8.9	1,459	0.28	5.2	56	0.43	12.7
Alabama	299	0.85	11.3	860	0.29	5.3	0	--	--
Kentucky	1,715	2.86	8.7	504	0.27	5.0	0	--	--
Mississippi	36	0.46	7.5	95	0.28	4.9	56	0.43	12.7
Tennessee	349	2.15	8.2	0	--	--	0	--	--
West South Central	74	2.63	9.2	6,507	0.27	5.0	1,892	1.04	17.4
Arkansas	7	0.41	8.8	1,598	0.22	4.9	0	--	--
Louisiana	67	2.88	9.3	376	0.28	5.0	73	0.52	15.0
Oklahoma	0	--	--	542	0.23	4.8	0	--	--
Texas	0	--	--	3,991	0.30	5.1	1,819	1.06	17.5
Mountain	1,678	0.52	12.7	5,170	0.51	9.1	24	0.63	8.7
Arizona	464	0.44	10.9	895	0.61	9.5	0	--	--
Colorado	92	0.46	11.1	1,105	0.32	5.6	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	829	0.72	9.7	24	0.63	8.7
Nevada	47	0.39	10.3	90	0.37	6.6	0	--	--
New Mexico	259	0.73	23.5	455	0.76	23.8	0	--	--
Utah	817	0.53	10.9	13	0.86	10.4	0	--	--
Wyoming	0	--	--	1,782	0.43	7.2	0	--	--
Pacific Contiguous	55	0.39	9.8	412	0.32	7.3	0	--	--
California	55	0.39	9.8	0	--	--	0	--	--
Oregon	0	--	--	95	0.25	4.6	0	--	--
Washington	0	--	--	318	0.34	8.1	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	14	0.16	9.3
Alaska	0	--	--	0	--	--	14	0.16	9.3
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	15,242	2.49	10.1	24,954	0.31	5.8	3,789	0.90	13.6

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

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

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

Table 4.15. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Electric Utilties by State, February 2019

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	0	--	--	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	0	--	--	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	0	--	--	0	--	--	0	--	--
East North Central	2,592	2.88	8.8	2,424	0.22	4.7	0	--	--
Illinois	230	2.99	9.1	416	0.20	4.5	0	--	--
Indiana	2,066	2.86	8.8	181	0.21	4.4	0	--	--
Michigan	59	2.55	7.6	893	0.21	4.8	0	--	--
Ohio	209	3.09	8.6	0	--	--	0	--	--
Wisconsin	28	2.69	7.5	934	0.23	4.7	0	--	--
West North Central	28	3.09	11.0	6,298	0.27	4.9	1,803	0.77	9.9
Iowa	0	--	--	930	0.25	4.7	0	--	--
Kansas	11	3.59	13.7	909	0.33	5.0	0	--	--
Minnesota	0	--	--	802	0.32	5.5	0	--	--
Missouri	17	2.77	9.2	2,696	0.23	4.7	0	--	--
Nebraska	0	--	--	859	0.25	4.9	0	--	--
North Dakota	0	--	--	0	--	--	1,803	0.77	9.9
South Dakota	0	--	--	103	0.41	5.4	0	--	--
South Atlantic	4,392	2.41	9.9	759	0.32	4.6	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	685	2.50	8.5	0	--	--	0	--	--
Georgia	466	2.61	8.4	759	0.32	4.6	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	912	1.90	9.5	0	--	--	0	--	--
South Carolina	561	1.77	9.4	0	--	--	0	--	--
Virginia	140	0.96	18.2	0	--	--	0	--	--
West Virginia	1,628	2.92	10.6	0	--	--	0	--	--
East South Central	2,340	2.53	9.0	1,459	0.28	5.2	0	--	--
Alabama	299	0.85	11.3	860	0.29	5.3	0	--	--
Kentucky	1,715	2.86	8.7	504	0.27	5.0	0	--	--
Mississippi	36	0.46	7.5	95	0.28	4.9	0	--	--
Tennessee	290	2.43	8.7	0	--	--	0	--	--
West South Central	67	2.88	9.3	4,013	0.24	4.9	610	1.55	21.5
Arkansas	0	--	--	1,402	0.22	4.9	0	--	--
Louisiana	67	2.88	9.3	245	0.24	5.0	73	0.52	15.0
Oklahoma	0	--	--	528	0.23	4.8	0	--	--
Texas	0	--	--	1,838	0.27	5.0	537	1.72	22.5
Mountain	1,678	0.52	12.7	4,256	0.47	9.0	24	0.63	8.7
Arizona	464	0.44	10.9	895	0.61	9.5	0	--	--
Colorado	92	0.46	11.1	1,105	0.32	5.6	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	24	0.63	8.7
Nevada	47	0.39	10.3	48	0.41	8.3	0	--	--
New Mexico	259	0.73	23.5	455	0.76	23.8	0	--	--
Utah	817	0.53	10.9	13	0.86	10.4	0	--	--
Wyoming	0	--	--	1,740	0.43	7.2	0	--	--
Pacific Contiguous	0	--	--	95	0.25	4.6	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	95	0.25	4.6	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	14	0.16	9.3
Alaska	0	--	--	0	--	--	14	0.16	9.3
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	11,098	2.29	9.8	19,304	0.31	5.8	2,451	0.94	12.5

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

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

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

Table 4.16. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Independent Power Producers by State, February 2019

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	6	0.76	8.8	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	6	0.76	8.8	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,159	2.81	9.1	0	--	--	0	--	--
New Jersey	62	1.86	8.3	0	--	--	0	--	--
New York	26	2.64	8.3	0	--	--	0	--	--
Pennsylvania	1,071	2.87	9.1	0	--	--	0	--	--
East North Central	2,057	3.53	12.5	1,662	0.21	4.6	0	--	--
Illinois	527	3.81	26.4	1,662	0.21	4.6	0	--	--
Indiana	163	3.60	9.1	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	1,367	3.44	9.1	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	0	--	--	0	--	--	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	0	--	--	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	582	2.55	9.0	0	--	--	0	--	--
Delaware	35	2.69	7.7	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	270	2.34	10.1	0	--	--	0	--	--
North Carolina	1	0.75	5.8	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	33	0.73	8.2	0	--	--	0	--	--
West Virginia	242	3.03	8.2	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	56	0.43	12.7
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	56	0.43	12.7
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	0	--	--	2,479	0.32	5.2	1,282	0.83	15.8
Arkansas	0	--	--	196	0.19	5.0	0	--	--
Louisiana	0	--	--	131	0.34	5.1	0	--	--
Oklahoma	0	--	--	0	--	--	0	--	--
Texas	0	--	--	2,153	0.33	5.2	1,282	0.83	15.8
Mountain	0	--	--	914	0.69	9.3	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	829	0.72	9.7	0	--	--
Nevada	0	--	--	42	0.32	4.5	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	43	0.53	5.9	0	--	--
Pacific Contiguous	0	--	--	318	0.34	8.1	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	318	0.34	8.1	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	3,804	3.13	10.8	5,373	0.35	5.9	1,338	0.82	15.7

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

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

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

Table 4.17. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Commercial Sector by State, February 2019

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	0	--	--	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	0	--	--	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	0	--	--	0	--	--	0	--	--
East North Central	0	--	--	0	--	--	0	--	--
Illinois	0	--	--	0	--	--	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	2	2.95	8.3	0	--	--	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	2	2.95	8.3	0	--	--	0	--	--
Nebraska	0	--	--	0	--	--	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	0	--	--	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	0	--	--	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	0	--	--	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	0	--	--	0	--	--	0	--	--
Arkansas	0	--	--	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	0	--	--	0	--	--
Texas	0	--	--	0	--	--	0	--	--
Mountain	0	--	--	0	--	--	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	0	--	--
Nevada	0	--	--	0	--	--	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	0	--	--	0	--	--
Pacific Contiguous	0	--	--	0	--	--	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	2	2.95	8.3	0	--	--	0	--	--

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

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

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

Table 4.18. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Industrial Sector by State, February 2019

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	0	--	--	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	0	--	--	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	0	--	--	0	--	--	0	--	--
East North Central	96	3.70	8.5	63	0.22	4.5	0	--	--
Illinois	96	3.70	8.5	63	0.22	4.5	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	0.87	9.8	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	34	2.72	8.5	200	0.21	4.4	0	--	--
Iowa	34	2.72	8.5	137	0.20	4.5	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	62	0.21	4.4	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	89	0.98	10.2	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	14	0.73	6.8	0	--	--	0	--	--
Georgia	15	1.01	11.5	0	--	--	0	--	--
Maryland	18	1.84	21.9	0	--	--	0	--	--
North Carolina	19	0.80	7.0	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	24	0.74	7.1	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	59	0.94	6.0	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	59	0.94	6.0	0	--	--	0	--	--
West South Central	7	0.41	8.8	15	0.19	4.5	0	--	--
Arkansas	7	0.41	8.8	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	15	0.19	4.5	0	--	--
Texas	0	--	--	0	--	--	0	--	--
Mountain	0	--	--	0	--	--	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	0	--	--
Nevada	0	--	--	0	--	--	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	0	--	--	0	--	--
Pacific Contiguous	55	0.39	9.8	0	--	--	0	--	--
California	55	0.39	9.8	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	339	1.73	8.7	277	0.21	4.5	0	--	--

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

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

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

Chapter 5

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

Table 5.1. Sales of Electricity to Ultimate Customers: Total by End-Use Sector, 2009 - February 2019 (Thousand Megawatthours)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2009	1,364,758	1,306,853	917,416	7,768	3,596,795
2010	1,445,708	1,330,199	971,221	7,712	3,754,841
2011	1,422,801	1,328,057	991,316	7,672	3,749,846
2012	1,374,515	1,327,101	985,714	7,320	3,694,650
2013	1,394,812	1,337,079	985,352	7,625	3,724,868
2014	1,407,208	1,352,158	997,576	7,758	3,764,700
2015	1,404,096	1,360,752	986,508	7,637	3,758,992
2016	1,411,058	1,367,191	976,715	7,497	3,762,462
2017	1,378,648	1,352,888	984,298	7,523	3,723,356
2018	1,464,373	1,376,741	953,076	7,738	3,801,928
Year 2017					
January	129,212	109,488	78,809	667	318,177
February	100,968	99,640	74,534	635	275,777
March	103,096	107,173	80,530	645	291,444
April	90,725	102,589	78,899	589	272,801
May	98,281	109,872	83,134	583	291,871
June	122,543	120,013	85,399	628	328,583
July	149,900	129,277	87,806	630	367,613
August	142,007	128,481	89,134	640	360,263
Sept	118,779	118,789	83,540	618	321,726
October	102,811	113,287	82,815	626	299,539
November	98,321	104,973	79,456	598	283,347
December	122,005	109,306	80,242	664	312,216
Year 2018					
January	148,978	114,618	76,061	751	340,408
February	113,383	102,001	71,948	643	287,975
March	106,939	107,886	76,811	625	292,262
April	95,128	102,922	75,241	608	273,898
May	103,395	112,597	81,461	591	298,044
June	129,478	121,578	81,527	628	333,212
July	153,031	130,916	85,041	640	369,629
August	152,951	134,479	89,632	686	377,748
Sept	128,459	121,581	81,192	648	331,881
October	106,638	115,861	81,023	636	304,157
November	103,372	104,622	76,927	622	285,543
December	122,620	107,678	76,213	660	307,171
Year 2019					
January	132,989	111,613	78,033	664	323,300
February	116,311	102,690	72,371	677	292,049
Year to Date					
2017	230,181	209,128	153,343	1,302	593,954
2018	262,362	216,620	148,009	1,394	628,383
2019	249,300	214,303	150,404	1,341	615,348
Rolling 12 Months Ending in February					
2018	1,410,829	1,360,379	978,964	7,614	3,757,785
2019	1,451,311	1,374,425	955,472	7,685	3,788,893

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

Table 5.2. Revenue from Sales of Electricity to Ultimate Customers: Total by End-Use Sector, 2009 - February 2019 (Million Dollars)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2009	157,044	132,747	62,670	828	353,289
2010	166,778	135,554	65,772	814	368,918
2011	166,714	135,927	67,606	803	371,049
2012	163,280	133,898	65,761	747	363,687
2013	169,131	137,188	67,934	805	375,058
2014	176,178	145,253	70,855	810	393,096
2015	177,624	144,781	68,166	771	391,341
2016	177,077	142,643	66,068	722	386,509
2017	177,661	144,242	67,691	728	390,322
2018	188,742	146,696	66,090	756	402,283
Year 2017					
January	15,781	11,183	5,190	63	32,216
February	12,911	10,442	4,941	60	28,354
March	13,289	11,208	5,407	61	29,965
April	11,536	10,669	5,209	56	27,470
May	12,843	11,638	5,639	56	30,176
June	16,171	13,209	6,141	64	35,585
July	19,606	14,184	6,416	64	40,269
August	18,679	14,141	6,435	64	39,320
Sept	15,772	13,104	5,992	62	34,930
October	13,164	12,208	5,725	60	31,157
November	12,721	11,016	5,345	57	29,139
December	15,189	11,239	5,249	62	31,739
Year 2018					
January	18,252	12,023	5,292	71	35,638
February	14,353	10,860	4,899	63	30,176
March	13,893	11,315	5,118	59	30,386
April	12,256	10,746	4,954	58	28,013
May	13,600	11,821	5,553	56	31,029
June	16,889	13,156	5,854	64	35,963
July	20,094	14,370	6,243	65	40,773
August	20,306	14,794	6,464	66	41,631
Sept	16,710	12,986	5,757	67	35,519
October	13,720	12,452	5,596	63	31,830
November	13,384	11,051	5,293	60	29,789
December	15,285	11,122	5,066	64	31,538
Year 2019					
January	16,580	11,484	5,138	65	33,266
February	14,768	10,801	4,838	68	30,474
Year to Date					
2017	28,692	21,625	10,131	123	60,570
2018	32,606	22,883	10,191	134	65,813
2019	31,347	22,285	9,975	133	63,741
Rolling 12 Months Ending in February					
2018	181,575	145,500	67,751	740	395,565
2019	187,483	146,098	65,874	755	400,210

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

Table 5.3. Average Price of Electricity to Ultimate Customers: Total by End-Use Sector, 2009 - February 2019 (Cents per Kilowatthour)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2009	11.51	10.16	6.83	10.66	9.82
2010	11.54	10.19	6.77	10.56	9.83
2011	11.72	10.24	6.82	10.46	9.90
2012	11.88	10.09	6.67	10.21	9.84
2013	12.13	10.26	6.89	10.55	10.07
2014	12.52	10.74	7.10	10.45	10.44
2015	12.65	10.64	6.91	10.09	10.41
2016	12.55	10.43	6.76	9.63	10.27
2017	12.89	10.66	6.88	9.68	10.48
2018	12.89	10.66	6.93	9.77	10.58
Year 2017					
January	12.21	10.21	6.59	9.39	10.13
February	12.79	10.48	6.63	9.50	10.28
March	12.89	10.46	6.71	9.49	10.28
April	12.72	10.40	6.60	9.46	10.07
May	13.07	10.59	6.78	9.61	10.34
June	13.20	11.01	7.19	10.18	10.83
July	13.08	10.97	7.31	10.12	10.95
August	13.15	11.01	7.22	10.06	10.91
Sept	13.28	11.03	7.17	9.99	10.86
October	12.80	10.78	6.91	9.57	10.40
November	12.94	10.49	6.73	9.50	10.28
December	12.45	10.28	6.54	9.35	10.17
Year 2018					
January	12.25	10.49	6.96	9.44	10.47
February	12.66	10.65	6.81	9.84	10.48
March	12.99	10.49	6.66	9.43	10.40
April	12.88	10.44	6.58	9.48	10.23
May	13.15	10.50	6.82	9.46	10.41
June	13.04	10.82	7.18	10.16	10.79
July	13.13	10.98	7.34	10.19	11.03
August	13.28	11.00	7.21	9.69	11.02
Sept	13.01	10.68	7.09	10.30	10.70
October	12.87	10.75	6.91	9.84	10.46
November	12.95	10.56	6.88	9.72	10.43
December	12.47	10.33	6.65	9.72	10.27
Year 2019					
January	12.47	10.29	6.58	9.80	10.29
February	12.70	10.52	6.68	10.01	10.43
Year to Date					
2017	12.46	10.34	6.61	9.44	10.20
2018	12.43	10.56	6.89	9.63	10.47
2019	12.57	10.40	6.63	9.91	10.36
Rolling 12 Months Ending in February					
2018	12.87	10.70	6.92	9.71	10.53
2019	12.92	10.63	6.89	9.82	10.56

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

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

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	3,960	3,793	4,008	4,055	1,114	1,232	41	46	9,123	9,126
Connecticut	1,052	965	927	946	231	254	9	14	2,218	2,179
Maine	465	413	327	311	140	204	0	0	932	928
Massachusetts	1,610	1,627	1,984	2,025	445	462	30	29	4,070	4,143
New Hampshire	398	371	337	343	150	154	0	0	885	868
Rhode Island	238	234	276	274	45	50	2	2	562	560
Vermont	196	183	157	157	103	109	0	0	457	449
Middle Atlantic	11,581	10,931	12,621	12,560	5,764	5,905	352	323	30,318	29,718
New Jersey	2,089	2,010	2,912	2,987	529	577	28	28	5,558	5,601
New York	4,193	4,097	6,225	6,104	1,368	1,392	260	238	12,045	11,832
Pennsylvania	5,299	4,824	3,485	3,469	3,868	3,935	63	57	12,715	12,285
East North Central	15,937	15,364	14,024	14,060	14,203	14,387	62	64	44,225	43,873
Illinois	3,664	3,639	3,966	3,872	3,318	3,329	55	57	11,003	10,898
Indiana	2,957	2,874	1,832	1,852	3,210	3,154	2	2	8,001	7,881
Michigan	2,786	2,623	2,869	2,911	2,230	2,430	1	1	7,886	7,964
Ohio	4,584	4,391	3,509	3,524	3,613	3,649	4	4	11,711	11,569
Wisconsin	1,946	1,838	1,848	1,901	1,831	1,823	0	0	5,625	5,562
West North Central	9,937	9,362	8,277	8,137	6,703	6,738	5	5	24,922	24,242
Iowa	1,385	1,261	1,014	998	1,782	1,798	0	0	4,180	4,058
Kansas	1,113	981	1,227	1,178	865	871	0	0	3,206	3,029
Minnesota	2,030	1,945	1,762	1,789	1,555	1,590	3	3	5,350	5,327
Missouri	3,264	3,154	2,445	2,405	849	868	2	2	6,561	6,429
Nebraska	1,003	958	802	776	728	748	0	0	2,534	2,482
North Dakota	605	567	599	580	710	650	0	0	1,914	1,797
South Dakota	537	496	427	410	213	213	0	0	1,178	1,119
South Atlantic	28,132	27,488	22,402	22,526	10,254	10,285	114	111	60,901	60,411
Delaware	463	422	320	320	137	152	0	0	921	894
District of Columbia	216	198	568	587	16	14	26	28	827	827
Florida	8,453	8,601	6,663	6,739	1,204	1,214	7	6	16,327	16,561
Georgia	4,292	4,268	3,320	3,409	2,347	2,413	14	15	9,973	10,105
Maryland	2,473	2,288	2,185	2,149	281	252	47	43	4,986	4,732
North Carolina	4,766	4,648	3,474	3,573	1,918	1,930	2	0	10,159	10,151
South Carolina	2,309	2,256	1,452	1,475	2,024	2,022	0	0	5,785	5,753
Virginia	4,063	3,808	3,846	3,696	1,222	1,225	18	19	9,148	8,748
West Virginia	1,097	999	573	578	1,104	1,063	0	0	2,774	2,640
East South Central	9,961	10,368	6,784	6,980	7,496	7,311	0	0	24,241	24,658
Alabama	2,336	2,370	1,587	1,619	2,540	2,582	0	0	6,463	6,571
Kentucky	2,260	2,285	1,448	1,452	2,178	2,037	0	0	5,885	5,775
Mississippi	1,473	1,614	982	1,036	1,290	1,297	0	0	3,746	3,947
Tennessee	3,892	4,098	2,767	2,873	1,488	1,394	0	0	8,147	8,365
West South Central	16,714	17,566	15,071	13,935	14,389	13,561	15	16	46,189	45,078
Arkansas	1,646	1,730	883	899	1,366	1,342	0	0	3,895	3,971
Louisiana	2,325	2,527	1,770	1,858	2,877	2,696	1	1	6,972	7,081
Oklahoma	1,889	1,859	1,446	1,499	1,461	1,386	0	0	4,795	4,743
Texas	10,854	11,450	10,972	9,679	8,686	8,138	14	15	30,526	29,282
Mountain	7,558	6,817	7,254	7,119	6,076	5,915	19	13	20,908	19,864
Arizona	2,219	1,897	2,035	1,973	1,036	976	1	1	5,291	4,847
Colorado	1,501	1,457	1,552	1,538	1,176	1,183	14	7	4,243	4,186
Idaho	850	772	527	512	470	460	0	0	1,847	1,744
Montana	561	511	442	440	394	356	0	0	1,397	1,307
Nevada	867	740	806	805	874	887	1	1	2,548	2,433
New Mexico	526	514	674	653	628	572	0	0	1,829	1,738
Utah	748	659	917	890	672	668	4	4	2,341	2,222
Wyoming	285	267	301	306	826	814	0	0	1,411	1,387
Pacific Contiguous	12,169	11,305	11,814	12,166	6,034	6,238	69	66	30,087	29,775
California	6,263	5,998	7,923	8,286	3,313	3,440	61	63	17,561	17,787
Oregon	2,007	1,796	1,398	1,384	884	920	2	2	4,291	4,102
Washington	3,899	3,511	2,493	2,496	1,837	1,878	5	1	8,234	7,886
Pacific Noncontiguous	362	390	435	463	339	377	0	0	1,135	1,230
Alaska	186	195	231	238	96	119	0	0	513	552
Hawaii	175	194	203	225	243	258	0	0	622	678
U.S. Total	116,311	113,383	102,690	102,001	72,371	71,948	677	643	292,049	287,975

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

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

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	8,482	8,819	8,516	8,627	2,412	2,513	86	100	19,496	20,059
Connecticut	2,312	2,381	1,983	1,991	479	474	17	31	4,792	4,877
Maine	933	884	679	665	370	430	0	0	1,982	1,979
Massachusetts	3,440	3,752	4,221	4,312	925	954	64	64	8,650	9,082
New Hampshire	862	872	714	722	306	308	0	0	1,882	1,901
Rhode Island	518	508	588	609	102	121	5	5	1,213	1,242
Vermont	418	423	331	327	230	226	0	0	978	977
Middle Atlantic	24,227	24,675	25,968	26,227	11,796	11,835	703	763	62,693	63,500
New Jersey	4,557	4,591	6,140	6,256	1,103	1,155	54	58	11,853	12,059
New York	8,686	8,936	12,485	12,572	2,810	2,808	516	580	24,497	24,896
Pennsylvania	10,984	11,149	7,343	7,399	7,882	7,871	133	126	26,343	26,545
East North Central	34,316	34,967	29,551	30,074	29,531	29,368	117	115	93,514	94,523
Illinois	8,009	8,161	8,244	8,368	6,919	6,817	102	101	23,276	23,447
Indiana	6,297	6,540	3,858	3,937	6,575	6,426	4	4	16,734	16,907
Michigan	5,992	6,006	6,127	6,192	4,656	4,765	1	1	16,777	16,963
Ohio	9,859	10,199	7,458	7,595	7,587	7,570	8	9	24,913	25,373
Wisconsin	4,158	4,061	3,863	3,982	3,794	3,790	1	0	11,816	11,833
West North Central	20,703	20,932	17,106	17,078	13,993	13,788	10	10	51,812	51,808
Iowa	2,886	2,868	2,108	2,105	3,718	3,630	0	0	8,712	8,604
Kansas	2,328	2,327	2,474	2,444	1,748	1,761	0	0	6,551	6,533
Minnesota	4,280	4,247	3,731	3,807	3,291	3,292	5	6	11,307	11,352
Missouri	6,869	7,182	5,058	5,075	1,766	1,782	5	5	13,697	14,044
Nebraska	2,064	2,078	1,618	1,592	1,546	1,551	0	0	5,228	5,221
North Dakota	1,221	1,190	1,250	1,196	1,489	1,336	0	0	3,960	3,723
South Dakota	1,056	1,040	866	858	434	435	0	0	2,357	2,332
South Atlantic	61,054	66,991	47,734	48,284	21,679	21,353	228	214	130,697	136,843
Delaware	943	971	687	685	303	309	0	0	1,933	1,965
District of Columbia	446	457	1,252	1,285	29	27	52	49	1,779	1,818
Florida	17,463	18,961	13,714	13,905	2,467	2,522	14	12	33,658	35,401
Georgia	9,601	10,759	7,100	7,423	4,977	4,951	29	30	21,708	23,164
Maryland	5,446	5,521	4,655	4,789	577	545	95	86	10,773	10,942
North Carolina	10,570	11,931	7,468	7,622	4,045	3,967	3	1	22,086	23,520
South Carolina	5,155	6,056	3,182	3,335	4,305	4,185	0	0	12,642	13,576
Virginia	9,012	9,793	8,396	7,952	2,630	2,605	35	37	20,073	20,387
West Virginia	2,419	2,542	1,280	1,288	2,345	2,241	0	0	6,044	6,071
East South Central	21,363	24,743	14,099	14,854	15,527	15,123	0	0	50,989	54,720
Alabama	5,355	6,165	3,380	3,603	5,322	5,377	0	0	14,058	15,144
Kentucky	5,009	5,560	3,052	3,135	4,489	4,217	0	0	12,551	12,913
Mississippi	3,163	3,740	2,022	2,152	2,658	2,674	0	0	7,843	8,566
Tennessee	7,836	9,278	5,644	5,965	3,057	2,855	0	0	16,537	18,097
West South Central	35,793	40,797	30,362	30,490	29,457	28,012	31	32	95,644	99,330
Arkansas	3,392	3,846	1,818	1,868	2,738	2,712	0	0	7,948	8,426
Louisiana	4,943	5,848	3,679	3,888	5,821	5,574	2	2	14,445	15,311
Oklahoma	4,109	4,430	3,077	3,089	3,053	2,825	0	0	10,239	10,345
Texas	23,349	26,672	21,788	21,645	17,846	16,902	29	30	63,013	65,248
Mountain	15,997	14,708	15,067	14,731	12,644	12,388	34	26	43,742	41,854
Arizona	4,694	4,076	4,229	4,107	2,140	2,105	1	1	11,064	10,290
Colorado	3,206	3,124	3,275	3,213	2,462	2,458	23	15	8,966	8,810
Idaho	1,780	1,652	1,093	1,064	998	991	0	0	3,871	3,707
Montana	1,128	1,112	882	879	780	701	0	0	2,790	2,692
Nevada	1,783	1,580	1,684	1,645	1,826	1,839	1	1	5,294	5,065
New Mexico	1,193	1,137	1,380	1,355	1,324	1,175	0	0	3,896	3,668
Utah	1,598	1,447	1,886	1,825	1,407	1,427	8	9	4,899	4,707
Wyoming	615	581	640	642	1,707	1,692	0	0	2,961	2,915
Pacific Contiguous	26,557	24,901	24,982	25,302	12,642	12,859	132	133	64,313	63,194
California	14,490	13,378	17,062	17,416	6,742	7,134	121	127	38,415	38,055
Oregon	4,089	3,875	2,783	2,723	1,895	1,833	5	4	8,772	8,435
Washington	7,978	7,647	5,137	5,163	4,005	3,892	6	1	17,126	16,704
Pacific Noncontiguous	807	829	920	953	722	771	0	0	2,449	2,552
Alaska	402	410	482	487	194	234	0	0	1,077	1,130
Hawaii	405	419	438	466	528	537	0	0	1,372	1,422
U.S. Total	249,300	262,362	214,303	216,620	150,404	148,009	1,341	1,394	615,348	628,383

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

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

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	839	794	670	688	152	169	5	5	1,668	1,656
Connecticut	239	208	165	162	33	36	2	2	440	408
Maine	54	67	37	41	12	20	0	0	103	128
Massachusetts	375	361	335	358	67	71	3	3	779	792
New Hampshire	80	74	56	56	21	22	0	0	158	152
Rhode Island	58	51	52	48	8	8	0	0	119	108
Vermont	33	33	25	24	11	12	0	0	69	68
Middle Atlantic	1,798	1,737	1,483	1,533	385	439	39	37	3,705	3,746
New Jersey	339	319	353	373	54	62	2	2	749	756
New York	740	746	816	830	77	93	32	30	1,664	1,698
Pennsylvania	719	673	313	330	254	284	5	5	1,292	1,292
East North Central	2,051	1,988	1,439	1,427	1,000	1,018	4	4	4,494	4,436
Illinois	456	445	360	329	223	217	4	3	1,042	994
Indiana	355	331	200	191	241	225	0	0	796	747
Michigan	420	410	327	335	163	181	0	0	909	925
Ohio	545	539	351	364	230	253	0	0	1,126	1,157
Wisconsin	275	263	202	208	143	142	0	0	621	613
West North Central	1,060	1,023	746	751	485	481	0	0	2,291	2,255
Iowa	161	147	98	93	117	109	0	0	376	349
Kansas	140	126	126	122	65	68	0	0	331	316
Minnesota	254	244	173	179	120	122	0	0	548	546
Missouri	297	308	191	204	52	56	0	0	540	569
Nebraska	96	92	68	65	53	53	0	0	216	210
North Dakota	55	52	52	50	61	56	0	0	168	158
South Dakota	56	53	39	38	16	17	0	0	112	108
South Atlantic	3,304	3,268	2,147	2,197	635	659	9	9	6,095	6,133
Delaware	56	53	32	32	10	13	0	0	98	98
District of Columbia	28	27	74	72	1	1	3	3	106	103
Florida	1,002	1,045	648	677	93	97	1	1	1,743	1,819
Georgia	463	462	313	320	124	123	1	1	900	906
Maryland	331	307	232	238	22	22	4	3	589	570
North Carolina	555	532	318	326	118	124	0	0	990	983
South Carolina	293	292	156	161	117	123	0	0	566	576
Virginia	466	437	321	313	83	84	1	2	872	836
West Virginia	109	114	54	58	67	72	0	0	231	243
East South Central	1,111	1,133	734	737	429	419	0	0	2,274	2,289
Alabama	297	291	182	183	140	144	0	0	620	618
Kentucky	233	237	146	143	120	114	0	0	500	494
Mississippi	164	182	105	113	79	79	0	0	348	374
Tennessee	416	423	301	299	90	81	0	0	807	803
West South Central	1,813	1,846	1,250	1,185	746	728	1	1	3,810	3,761
Arkansas	153	170	76	78	78	78	0	0	308	326
Louisiana	213	226	158	166	143	137	0	0	514	529
Oklahoma	179	183	108	115	73	70	0	0	361	369
Texas	1,267	1,268	907	826	451	443	1	1	2,626	2,538
Mountain	868	788	679	667	383	365	2	1	1,931	1,822
Arizona	271	231	203	203	65	60	0	0	539	495
Colorado	181	171	156	148	86	83	1	1	424	403
Idaho	81	78	40	41	27	28	0	0	148	146
Montana	60	55	44	44	25	17	0	0	130	116
Nevada	102	93	68	66	45	48	0	0	216	206
New Mexico	66	63	67	63	36	32	0	0	169	158
Utah	76	69	72	73	41	42	0	0	190	184
Wyoming	30	29	29	29	58	56	0	0	116	114
Pacific Contiguous	1,825	1,675	1,546	1,565	542	536	7	6	3,920	3,782
California	1,241	1,147	1,204	1,223	389	394	6	6	2,840	2,769
Oregon	217	193	126	121	57	55	0	0	400	369
Washington	367	335	217	221	96	88	1	0	680	643
Pacific Noncontiguous	100	102	107	109	81	85	0	0	287	296
Alaska	41	41	45	44	17	20	0	0	103	106
Hawaii	59	61	62	65	64	65	0	0	185	191
U.S. Total	14,768	14,353	10,801	10,860	4,838	4,899	68	63	30,474	30,176

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

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

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	1,794	1,808	1,427	1,446	326	344	11	12	3,558	3,610
Connecticut	511	491	349	339	69	69	5	5	934	904
Maine	132	142	81	85	34	42	0	0	247	270
Massachusetts	788	819	716	750	138	146	6	6	1,647	1,720
New Hampshire	173	170	119	115	43	43	0	0	334	328
Rhode Island	121	112	110	107	18	20	1	1	250	239
Vermont	70	75	52	49	25	24	0	0	147	148
Middle Atlantic	3,676	3,862	3,004	3,225	799	895	77	80	7,556	8,063
New Jersey	727	720	735	770	112	125	5	5	1,579	1,620
New York	1,517	1,605	1,629	1,764	159	183	62	65	3,367	3,616
Pennsylvania	1,432	1,538	640	692	527	588	10	10	2,610	2,827
East North Central	4,401	4,474	2,986	3,035	2,071	2,119	8	8	9,466	9,635
Illinois	987	1,010	733	759	464	483	7	7	2,191	2,259
Indiana	751	738	412	401	485	461	0	0	1,648	1,600
Michigan	901	926	688	688	341	352	0	0	1,930	1,966
Ohio	1,177	1,226	735	753	491	529	1	1	2,403	2,510
Wisconsin	585	574	417	433	291	294	0	0	1,293	1,300
West North Central	2,190	2,235	1,517	1,556	985	970	1	1	4,693	4,762
Iowa	333	322	199	192	233	215	0	0	764	730
Kansas	265	289	229	249	129	134	0	0	623	672
Minnesota	541	530	369	376	249	250	1	1	1,159	1,157
Missouri	632	679	399	421	107	115	0	0	1,138	1,215
Nebraska	197	196	137	135	110	109	0	0	444	439
North Dakota	111	108	107	103	125	113	0	0	343	323
South Dakota	111	112	78	80	33	34	0	0	222	225
South Atlantic	7,098	7,772	4,512	4,700	1,339	1,434	18	17	12,968	13,922
Delaware	115	118	69	68	24	26	0	0	207	212
District of Columbia	58	58	158	156	2	2	5	5	223	221
Florida	2,082	2,291	1,330	1,389	192	204	1	1	3,604	3,886
Georgia	1,031	1,156	672	736	265	303	1	2	1,969	2,197
Maryland	720	726	492	524	46	50	7	6	1,266	1,306
North Carolina	1,193	1,279	657	671	245	251	0	0	2,095	2,201
South Carolina	632	767	324	369	248	272	0	0	1,203	1,408
Virginia	1,031	1,091	699	666	177	177	3	3	1,909	1,938
West Virginia	238	284	113	122	139	148	0	0	490	554
East South Central	2,360	2,633	1,509	1,546	889	876	0	0	4,758	5,054
Alabama	655	731	384	407	295	313	0	0	1,334	1,451
Kentucky	514	557	301	297	244	236	0	0	1,060	1,090
Mississippi	349	402	216	229	165	159	0	0	731	791
Tennessee	842	942	608	613	185	167	0	0	1,634	1,723
West South Central	3,840	4,208	2,462	2,547	1,528	1,525	2	3	7,832	8,283
Arkansas	316	368	156	160	159	161	0	0	631	688
Louisiana	444	515	323	348	286	284	0	0	1,053	1,147
Oklahoma	375	409	224	240	151	145	0	0	750	794
Texas	2,705	2,916	1,759	1,800	932	936	2	2	5,399	5,654
Mountain	1,835	1,696	1,383	1,361	769	756	3	2	3,990	3,815
Arizona	573	498	418	416	130	128	0	0	1,122	1,041
Colorado	383	364	319	303	176	174	2	1	881	842
Idaho	172	169	82	84	56	58	0	0	311	311
Montana	121	119	88	87	46	34	0	0	256	241
Nevada	211	197	133	133	92	98	0	0	436	428
New Mexico	148	137	134	130	72	66	0	0	353	334
Utah	161	150	148	147	81	83	1	1	391	381
Wyoming	65	63	60	60	114	114	0	0	239	237
Pacific Contiguous	3,933	3,697	3,258	3,243	1,096	1,098	12	12	8,299	8,050
California	2,749	2,557	2,565	2,551	781	810	11	11	6,106	5,929
Oregon	437	412	247	240	118	109	0	0	803	761
Washington	746	728	446	452	197	180	1	0	1,390	1,359
Pacific Noncontiguous	220	219	227	225	174	174	0	0	621	619
Alaska	87	88	94	91	33	40	0	0	214	219
Hawaii	133	131	134	134	140	134	0	0	407	400
U.S. Total	31,347	32,606	22,285	22,883	9,975	10,191	133	134	63,741	65,813

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

Table 5.6.A. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, February 2019 and 2018 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	21.20	20.92	16.72	16.97	13.69	13.70	13.22	11.00	18.28	18.14
Connecticut	22.77	21.58	17.78	17.12	14.30	14.02	27.00	14.43	19.82	18.72
Maine	11.69	16.21	11.18	13.14	8.79	9.98	--	--	11.08	13.81
Massachusetts	23.28	22.19	16.88	17.66	15.05	15.33	8.85	8.86	19.15	19.12
New Hampshire	20.20	19.82	16.72	16.39	13.85	14.34	--	--	17.80	17.49
Rhode Island	24.17	21.66	18.97	17.59	18.14	16.65	19.11	16.69	21.11	19.20
Vermont	16.67	18.03	16.07	15.05	10.97	10.73	--	--	15.18	15.22
Middle Atlantic	15.53	15.89	11.75	12.20	6.68	7.43	11.13	11.39	12.22	12.60
New Jersey	16.24	15.86	12.13	12.49	10.19	10.73	8.64	9.02	13.48	13.50
New York	17.64	18.20	13.11	13.60	5.63	6.65	12.24	12.49	13.82	14.35
Pennsylvania	13.57	13.95	9.00	9.50	6.58	7.23	7.68	7.93	10.16	10.51
East North Central	12.87	12.94	10.26	10.15	7.04	7.08	6.77	6.15	10.16	10.11
Illinois	12.45	12.23	9.07	8.50	6.71	6.51	6.55	5.89	9.47	9.12
Indiana	12.00	11.52	10.90	10.32	7.50	7.13	11.78	10.98	9.94	9.48
Michigan	15.08	15.62	11.38	11.50	7.29	7.44	10.03	11.18	11.53	11.62
Ohio	11.88	12.29	10.00	10.32	6.37	6.94	6.86	6.92	9.62	10.00
Wisconsin	14.15	14.29	10.95	10.95	7.83	7.80	12.85	12.94	11.04	11.02
West North Central	10.66	10.93	9.01	9.23	7.23	7.13	7.65	8.35	9.19	9.30
Iowa	11.63	11.65	9.62	9.33	6.59	6.04	--	--	8.99	8.59
Kansas	12.61	12.85	10.24	10.37	7.52	7.77	--	--	10.33	10.42
Minnesota	12.53	12.56	9.82	10.01	7.72	7.70	8.99	9.50	10.24	10.25
Missouri	9.10	9.78	7.82	8.48	6.11	6.50	6.12	7.02	8.24	8.85
Nebraska	9.54	9.60	8.44	8.39	7.26	7.06	--	--	8.54	8.46
North Dakota	9.03	9.15	8.65	8.59	8.61	8.64	--	--	8.76	8.79
South Dakota	10.47	10.76	9.13	9.32	7.70	7.79	--	--	9.48	9.66
South Atlantic	11.74	11.89	9.59	9.75	6.19	6.41	7.84	7.79	10.01	10.15
Delaware	12.08	12.60	10.00	10.09	7.52	8.36	--	--	10.68	10.98
District of Columbia	13.02	13.38	12.95	12.34	8.58	8.38	10.38	9.65	12.80	12.43
Florida	11.85	12.14	9.73	10.05	7.71	7.95	8.40	8.40	10.68	10.98
Georgia	10.79	10.83	9.43	9.38	5.27	5.09	4.22	5.10	9.03	8.96
Maryland	13.40	13.42	10.60	11.06	7.93	8.88	7.41	7.18	11.81	12.05
North Carolina	11.65	11.44	9.14	9.14	6.13	6.45	8.29	8.86	9.75	9.68
South Carolina	12.69	12.96	10.77	10.89	5.76	6.08	--	--	9.78	10.01
Virginia	11.47	11.47	8.35	8.47	6.80	6.89	7.90	8.43	9.53	9.55
West Virginia	9.98	11.38	9.36	9.96	6.10	6.74	--	--	8.31	9.20
East South Central	11.15	10.93	10.82	10.56	5.73	5.73	--	--	9.38	9.28
Alabama	12.72	12.29	11.48	11.27	5.53	5.57	--	--	9.59	9.40
Kentucky	10.32	10.36	10.10	9.86	5.53	5.59	--	--	8.49	8.55
Mississippi	11.15	11.26	10.66	10.90	6.10	6.12	--	--	9.28	9.48
Tennessee	10.69	10.33	10.88	10.39	6.03	5.85	--	--	9.90	9.60
West South Central	10.85	10.51	8.29	8.51	5.18	5.37	6.77	8.44	8.25	8.34
Arkansas	9.32	9.80	8.66	8.63	5.73	5.84	11.52	11.66	7.91	8.20
Louisiana	9.15	8.94	8.95	8.95	4.97	5.08	9.06	9.73	7.38	7.47
Oklahoma	9.50	9.85	7.49	7.69	5.03	5.07	--	--	7.53	7.77
Texas	11.68	11.07	8.26	8.53	5.20	5.44	6.60	8.34	8.60	8.67
Mountain	11.48	11.56	9.36	9.37	6.30	6.18	9.81	9.69	9.24	9.17
Arizona	12.21	12.20	9.98	10.29	6.24	6.18	9.01	8.92	10.19	10.21
Colorado	12.04	11.73	10.05	9.65	7.33	6.99	9.71	9.28	10.00	9.62
Idaho	9.52	10.10	7.55	7.93	5.76	6.03	--	--	8.00	8.39
Montana	10.72	10.70	10.03	9.97	6.40	4.79	--	--	9.28	8.84
Nevada	11.82	12.50	8.47	8.15	5.15	5.39	7.58	8.11	8.47	8.47
New Mexico	12.60	12.21	9.86	9.69	5.68	5.64	--	--	9.22	9.10
Utah	10.14	10.41	7.85	8.24	6.15	6.23	10.57	10.72	8.10	8.29
Wyoming	10.61	10.86	9.53	9.50	6.97	6.86	--	--	8.25	8.21
Pacific Contiguous	14.99	14.81	13.09	12.86	8.99	8.60	9.78	8.95	13.03	12.70
California	19.82	19.12	15.19	14.75	11.73	11.44	9.83	8.94	16.17	15.57
Oregon	10.79	10.73	9.02	8.76	6.49	6.00	8.98	9.30	9.33	9.00
Washington	9.40	9.54	8.69	8.84	5.23	4.67	9.60	9.48	8.26	8.16
Pacific Noncontiguous	27.53	26.30	24.65	23.52	23.83	22.52	--	--	25.32	24.09
Alaska	21.83	21.10	19.61	18.60	17.52	16.93	--	--	20.03	19.12
Hawaii	33.57	31.52	30.38	28.70	26.32	25.10	--	--	29.70	28.14
U.S. Total	12.70	12.66	10.52	10.65	6.68	6.81	10.01	9.84	10.43	10.48

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

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

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD	February 2019 YTD	February 2018 YTD
New England	21.15	20.50	16.75	16.76	13.52	13.69	12.99	12.03	18.25	18.00
Connecticut	22.11	20.63	17.60	17.02	14.41	14.53	26.16	16.77	19.49	18.54
Maine	14.10	16.10	12.00	12.79	9.09	9.83	--	--	12.44	13.62
Massachusetts	22.90	21.82	16.95	17.40	14.89	15.27	8.96	9.36	19.04	18.94
New Hampshire	20.04	19.48	16.63	15.95	13.99	14.10	--	--	17.76	17.27
Rhode Island	23.36	21.98	18.66	17.53	17.57	16.38	19.06	16.75	20.58	19.23
Vermont	16.70	17.65	15.80	15.10	10.84	10.66	--	--	15.02	15.17
Middle Atlantic	15.17	15.65	11.57	12.30	6.77	7.57	10.99	10.49	12.05	12.70
New Jersey	15.96	15.68	11.97	12.31	10.18	10.80	8.67	8.70	13.32	13.43
New York	17.46	17.96	13.05	14.03	5.65	6.52	12.11	11.23	13.75	14.53
Pennsylvania	13.04	13.79	8.72	9.35	6.69	7.47	7.64	7.90	9.91	10.65
East North Central	12.82	12.79	10.10	10.09	7.01	7.21	7.02	6.96	10.12	10.19
Illinois	12.33	12.37	8.89	9.08	6.70	7.08	6.81	6.77	9.41	9.63
Indiana	11.93	11.28	10.68	10.19	7.37	7.18	10.79	10.71	9.85	9.47
Michigan	15.04	15.42	11.22	11.11	7.33	7.39	10.23	10.79	11.51	11.59
Ohio	11.93	12.03	9.86	9.92	6.47	6.99	6.87	6.92	9.65	9.89
Wisconsin	14.07	14.14	10.81	10.87	7.66	7.75	13.35	12.82	10.94	10.99
West North Central	10.58	10.68	8.87	9.11	7.04	7.03	8.05	8.09	9.06	9.19
Iowa	11.53	11.24	9.42	9.14	6.25	5.93	--	--	8.77	8.49
Kansas	11.40	12.40	9.24	10.21	7.37	7.62	--	--	9.51	10.29
Minnesota	12.65	12.48	9.89	9.88	7.56	7.59	9.56	9.27	10.25	10.19
Missouri	9.19	9.45	7.90	8.29	6.05	6.46	6.35	6.74	8.31	8.65
Nebraska	9.57	9.43	8.46	8.45	7.11	7.00	--	--	8.50	8.41
North Dakota	9.10	9.07	8.54	8.58	8.39	8.43	--	--	8.65	8.68
South Dakota	10.52	10.73	8.97	9.31	7.58	7.78	--	--	9.41	9.66
South Atlantic	11.63	11.60	9.45	9.73	6.18	6.71	7.88	7.70	9.92	10.17
Delaware	12.16	12.19	9.98	9.88	7.81	8.45	--	--	10.70	10.80
District of Columbia	13.02	12.77	12.58	12.11	8.52	8.31	10.33	9.38	12.56	12.15
Florida	11.92	12.08	9.70	9.99	7.77	8.09	8.32	8.51	10.71	10.98
Georgia	10.74	10.75	9.47	9.91	5.32	6.12	4.50	6.07	9.07	9.48
Maryland	13.22	13.15	10.57	10.94	8.03	9.16	7.44	6.98	11.75	11.93
North Carolina	11.29	10.72	8.79	8.80	6.07	6.34	8.21	8.58	9.49	9.36
South Carolina	12.25	12.67	10.17	11.06	5.76	6.50	--	--	9.52	10.37
Virginia	11.44	11.14	8.32	8.37	6.74	6.81	8.05	8.21	9.51	9.50
West Virginia	9.84	11.18	8.82	9.50	5.94	6.60	--	--	8.11	9.13
East South Central	11.05	10.64	10.71	10.41	5.73	5.79	--	--	9.33	9.24
Alabama	12.23	11.86	11.35	11.29	5.54	5.83	--	--	9.49	9.58
Kentucky	10.26	10.02	9.86	9.46	5.45	5.60	--	--	8.44	8.44
Mississippi	11.05	10.75	10.68	10.64	6.21	5.96	--	--	9.31	9.23
Tennessee	10.74	10.16	10.78	10.28	6.04	5.85	--	--	9.88	9.52
West South Central	10.73	10.32	8.11	8.35	5.19	5.44	6.68	8.43	8.19	8.34
Arkansas	9.31	9.56	8.58	8.55	5.81	5.93	11.44	11.62	7.94	8.17
Louisiana	8.99	8.81	8.77	8.94	4.91	5.10	8.96	10.01	7.29	7.49
Oklahoma	9.12	9.24	7.28	7.77	4.93	5.12	--	--	7.32	7.67
Texas	11.59	10.93	8.07	8.31	5.23	5.54	6.50	8.31	8.57	8.67
Mountain	11.47	11.53	9.18	9.24	6.08	6.10	9.59	9.47	9.12	9.12
Arizona	12.21	12.22	9.89	10.12	6.09	6.06	8.97	9.08	10.14	10.12
Colorado	11.96	11.64	9.75	9.42	7.17	7.09	9.39	8.94	9.83	9.56
Idaho	9.68	10.22	7.52	7.87	5.63	5.88	--	--	8.03	8.39
Montana	10.77	10.70	10.01	9.93	5.87	4.90	--	--	9.16	8.94
Nevada	11.81	12.45	7.92	8.09	5.04	5.34	7.37	8.01	8.24	8.45
New Mexico	12.38	12.05	9.70	9.61	5.44	5.65	--	--	9.07	9.10
Utah	10.07	10.38	7.86	8.06	5.79	5.83	10.57	10.69	7.99	8.10
Wyoming	10.59	10.84	9.31	9.41	6.70	6.73	--	--	8.07	8.14
Pacific Contiguous	14.81	14.85	13.04	12.82	8.67	8.54	9.15	8.69	12.90	12.74
California	18.97	19.12	15.03	14.65	11.58	11.35	9.13	8.66	15.89	15.58
Oregon	10.70	10.62	8.88	8.82	6.23	5.94	9.03	9.20	9.16	9.02
Washington	9.36	9.52	8.68	8.75	4.92	4.62	9.64	9.56	8.12	8.14
Pacific Noncontiguous	27.28	26.41	24.72	23.63	24.04	22.64	--	--	25.36	24.24
Alaska	21.78	21.39	19.44	18.72	17.21	17.21	--	--	19.91	19.37
Hawaii	32.73	31.33	30.52	28.77	26.54	25.00	--	--	29.64	28.10
U.S. Total	12.57	12.43	10.40	10.56	6.63	6.89	9.91	9.63	10.36	10.47

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

Table 5.7. Number of Ultimate Customers Served by Sector: 2009 - February 2019

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2009	125,208,829	17,562,235	757,537	704	143,529,305
2010	125,717,935	17,674,338	747,747	239	144,140,259
2011	126,143,072	17,638,062	727,920	92	144,509,146
2012	126,832,343	17,729,029	732,385	83	145,293,840
2013	127,777,153	17,679,562	831,790	75	146,288,580
2014	128,680,416	17,853,995	839,212	79	147,373,702
2015	129,811,718	17,985,690	835,536	78	148,633,022
2016	131,068,760	18,148,353	838,059	86	150,055,258
2017	132,579,747	18,359,427	840,329	86	151,779,589
2018	133,960,222	18,548,645	799,996	85	153,308,948
Year 2017					
January	131,977,307	18,289,356	828,464	84	151,095,211
February	131,437,253	18,199,541	817,642	84	150,454,520
March	132,851,616	18,384,031	836,953	84	152,072,684
April	131,902,166	18,225,046	821,828	86	150,949,126
May	132,559,481	18,375,746	847,817	86	151,783,130
June	132,866,506	18,402,963	856,760	85	152,126,314
July	132,345,053	18,354,033	851,042	85	151,550,213
August	133,013,535	18,437,269	867,301	85	152,318,190
Sept	132,461,398	18,354,295	845,776	85	151,661,554
October	133,126,174	18,435,264	846,549	85	152,408,072
November	133,093,866	18,430,836	830,580	85	152,355,367
December	133,321,574	18,423,574	833,004	85	152,578,237
Year 2018					
January	133,344,237	18,511,591	796,731	83	152,652,642
February	132,950,019	18,387,369	773,724	83	152,111,195
March	133,912,760	18,524,464	784,718	83	153,222,025
April	133,452,513	18,481,484	784,792	83	152,718,872
May	134,227,643	18,565,843	808,290	83	153,601,859
June	134,050,605	18,566,686	816,627	83	153,434,001
July	133,981,066	18,548,375	819,030	86	153,348,557
August	134,537,841	18,621,883	825,213	88	153,985,025
Sept	133,925,550	18,535,656	802,444	88	153,263,738
October	134,471,360	18,650,412	806,702	88	153,928,562
November	134,278,555	18,571,446	788,374	86	153,638,461
December	134,390,512	18,618,535	793,306	86	153,802,439
Year 2019					
January	134,962,234	18,643,058	897,380	83	154,502,755
February	133,460,501	18,505,879	879,321	82	152,845,783
Rolling 12 Months Ending in February					
2018	132,819,635	18,393,501	834,005	85	152,047,227
2019	134,137,595	18,569,477	817,183	85	153,524,340

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

Table 5.8. Number of Ultimate Customers Served by Sector by State: February 2019 and 2018

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	6,352,400	6,372,043	892,694	881,280	19,832	20,239	6	6	7,264,932	7,273,568
Connecticut	1,509,619	1,501,996	154,404	154,067	4,226	4,323	3	3	1,668,252	1,660,389
Maine	701,426	681,663	98,625	95,612	3,023	2,912	0	0	803,074	780,187
Massachusetts	2,752,884	2,807,412	413,825	407,044	7,531	7,918	2	2	3,174,242	3,222,376
New Hampshire	625,507	621,179	108,046	107,538	3,150	3,169	0	0	736,703	731,886
Rhode Island	447,509	446,187	60,654	60,454	1,765	1,781	1	1	509,929	508,423
Vermont	315,455	313,606	57,140	56,565	137	136	0	0	372,732	370,307
Middle Atlantic	16,224,595	16,124,182	2,360,490	2,333,722	29,557	29,972	20	20	18,614,662	18,487,896
New Jersey	3,580,962	3,559,472	530,664	518,885	11,792	11,787	6	6	4,123,424	4,090,150
New York	7,224,324	7,174,848	1,113,996	1,102,932	6,582	6,694	8	8	8,344,910	8,284,482
Pennsylvania	5,419,309	5,389,862	715,830	711,905	11,183	11,491	6	6	6,146,328	6,113,264
East North Central	20,357,964	20,227,655	2,517,222	2,497,854	46,318	46,480	10	9	22,921,514	22,771,998
Illinois	5,332,760	5,300,708	619,073	613,912	3,990	4,003	3	3	5,955,826	5,918,626
Indiana	2,881,588	2,852,316	353,364	351,928	15,016	15,200	1	1	3,249,969	3,219,445
Michigan	4,401,347	4,381,583	550,931	549,343	NM	NM	2	2	4,957,778	4,936,412
Ohio	5,008,305	4,982,697	635,435	626,748	16,912	17,056	2	2	5,660,654	5,626,503
Wisconsin	2,733,964	2,710,351	358,419	355,923	NM	NM	2	1	3,097,287	3,071,012
West North Central	9,596,954	9,506,619	1,469,445	1,454,796	109,844	108,739	3	3	11,176,246	11,070,157
Iowa	1,403,240	1,392,837	245,412	244,013	NM	NM	0	0	1,655,283	1,643,559
Kansas	1,280,513	1,268,015	236,977	234,261	24,798	24,853	0	0	1,542,288	1,527,129
Minnesota	2,424,923	2,401,567	292,524	289,950	NM	NM	1	1	2,725,464	2,699,417
Missouri	2,835,057	2,806,069	384,429	380,117	6,644	6,788	2	2	3,226,132	3,192,976
Nebraska	865,508	857,036	161,304	159,795	52,000	51,517	0	0	1,078,812	1,068,348
North Dakota	381,736	379,526	74,390	73,461	8,756	7,990	0	0	464,882	460,977
South Dakota	405,977	401,569	74,409	73,199	NM	NM	0	0	483,385	477,751
South Atlantic	28,141,788	27,819,110	3,824,944	3,785,521	77,752	77,917	13	13	32,044,497	31,682,561
Delaware	433,234	427,020	54,769	54,180	572	601	0	0	488,575	481,801
District of Columbia	279,982	272,136	26,475	26,208	1	1	3	3	306,461	298,348
Florida	9,396,571	9,323,950	1,238,708	1,231,238	20,174	20,189	2	2	10,655,455	10,575,379
Georgia	4,426,449	4,359,412	589,020	581,701	19,189	19,188	1	1	5,034,659	4,960,302
Maryland	2,348,385	2,329,835	254,937	253,069	8,768	8,730	5	5	2,612,095	2,591,639
North Carolina	4,615,720	4,539,067	712,819	699,427	9,727	9,769	1	1	5,338,267	5,248,264
South Carolina	2,319,452	2,279,374	370,691	365,555	4,190	4,232	0	0	2,694,333	2,649,161
Virginia	3,461,684	3,427,305	432,644	429,415	3,730	3,731	1	1	3,898,059	3,860,452
West Virginia	860,311	861,011	144,881	144,728	11,401	11,476	0	0	1,016,593	1,017,215
East South Central	8,515,380	8,432,867	1,409,266	1,394,680	21,940	22,699	0	0	9,946,586	9,850,246
Alabama	2,269,516	2,249,035	372,249	369,480	8,158	8,180	0	0	2,649,923	2,626,695
Kentucky	2,012,863	1,994,303	305,491	301,910	5,423	6,185	0	0	2,323,777	2,302,398
Mississippi	1,321,674	1,311,078	240,688	238,582	7,527	7,481	0	0	1,569,889	1,557,141
Tennessee	2,911,327	2,878,451	490,838	484,708	832	853	0	0	3,402,997	3,364,012
West South Central	16,331,434	16,026,777	2,232,345	2,273,697	294,252	190,288	6	6	18,858,037	18,490,768
Arkansas	1,402,015	1,389,105	193,770	191,568	34,324	34,159	2	2	1,630,111	1,614,834
Louisiana	2,106,153	2,088,338	293,836	291,076	18,117	18,218	1	1	2,418,107	2,397,633
Oklahoma	1,797,555	1,779,434	288,013	284,303	17,853	17,844	0	0	2,103,421	2,081,581
Texas	11,025,711	10,769,900	1,456,726	1,506,750	223,958	120,067	3	3	12,706,398	12,396,720
Mountain	9,931,289	9,767,151	1,403,863	1,387,978	85,929	85,389	5	5	11,421,086	11,240,523
Arizona	2,837,618	2,794,549	323,603	320,725	6,399	6,433	2	2	3,167,622	3,121,709
Colorado	2,353,181	2,313,405	365,705	361,802	14,063	13,900	1	1	2,732,950	2,689,108
Idaho	753,433	736,257	111,379	109,750	28,387	28,170	0	0	893,199	874,177
Montana	516,438	509,968	111,490	110,030	NM	NM	0	0	634,072	626,041
Nevada	1,196,253	1,172,250	166,354	163,923	NM	NM	1	1	1,365,762	1,339,358
New Mexico	909,172	900,027	140,460	139,028	8,473	8,443	0	0	1,058,105	1,047,498
Utah	1,089,492	1,067,258	126,181	124,220	9,527	9,500	1	1	1,225,201	1,200,979
Wyoming	275,702	273,437	58,691	58,500	9,782	9,716	0	0	344,175	341,653
Pacific Contiguous	17,282,367	17,950,407	2,281,569	2,264,522	191,703	189,844	19	21	19,755,658	20,404,794
California	12,443,594	13,160,940	1,647,201	1,632,651	138,103	138,818	12	13	14,228,910	14,932,422
Oregon	1,768,849	1,750,925	240,667	240,138	26,097	23,321	2	2	2,035,615	2,014,386
Washington	3,069,924	3,038,542	393,701	391,733	27,503	27,705	5	6	3,491,133	3,457,986
Pacific Noncontiguous	726,330	723,208	114,041	113,319	NM	NM	0	0	842,565	838,684
Alaska	289,224	287,591	54,305	53,450	NM	NM	0	0	344,911	342,412
Hawaii	437,106	435,617	59,736	59,869	812	786	0	0	497,654	496,272
U.S. Total	133,460,501	132,950,019	18,505,879	18,387,369	879,321	773,724	82	83	152,845,783	152,111,195

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

Chapter 6

Capacity

Table 6.1. Electric Generating Summer Capacity Changes (MW), January 2019 to February 2019

		As of End of January 2019	Activity During February 2019 as Reported to EIA		As of End of February 2019	Net Change in Capacity - Current Month and Prior Periods			Changes in and Total Net Summer Capacity -- Outlook Based on Reports to EIA							
									Planned Capacity Additions		Planned Capacity Reductions		Planned Net Change		Planned Total Net Summer	
Technology	Capacity Source	Total In-Service Capacity	Actual Capacity Additions	Actual Capacity Reductions	Total In-Service Capacity	Current Month	Year to Date	Past 12 Months	Next Month	Next 12 Months	Next Month	Next 12 Months	Next Month	Next 12 Months	At End of Next Month	At End of Next 12 Months
..... *Onshore Wind (Summer Capacity)*	*Utility Scale Facilities*	*95,225.9*	*480.1*	*620.9*	*95,110.6*	*-115.3*	*844.6*	*6,410.8*	*1,244.8*	*11,701.1*	*0.0*	*0.0*	*1,244.8*	*11,701.1*	*96,355.4*	*106,811.7*
..... *Offshore Wind (Summer Capacity)*	*Utility Scale Facilities*	*29.3*	*0.0*	*0.0*	*29.3*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*29.3*	*29.3*
..... Wind (Summer Capacity)	Utility Scale Facilities	95,255.2	480.1	620.9	95,139.9	-115.3	844.6	6,410.8	1,244.8	11,701.1	0.0	0.0	1,244.8	11,701.1	96,384.7	106,841.0
..... *Solar Photovoltaic*	*Utility Scale Facilities*	*30,622.2*	*203.4*	*555.2*	*30,360.3*	*-261.9*	*189.8*	*4,287.1*	*382.3*	*5,620.5*	*0.0*	*0.0*	*382.3*	*5,620.5*	*30,742.6*	*35,980.8*
..... *Solar Thermal without Energy Storage*	*Utility Scale Facilities*	*1,352.5*	*0.0*	*0.0*	*1,352.5*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*1,352.5*	*1,352.5*
..... *Solar Thermal with Energy Storage*	*Utility Scale Facilities*	*405.4*	*0.0*	*0.0*	*405.4*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*405.4*	*405.4*
..... Solar Subtotal	Utility Scale Facilities	32,380.1	203.4	555.2	32,118.2	-261.9	189.8	4,287.1	382.3	5,620.5	0.0	0.0	382.3	5,620.5	32,500.5	37,738.7
..... Conventional Hydroelectric	Utility Scale Facilities	79,917.3	74.1	124.3	79,883.1	-34.2	-10.0	73.4	1.5	109.9	0.0	136.8	1.5	-26.9	79,884.6	79,856.2
..... *Wood/Wood Waste Biomass*	*Utility Scale Facilities*	*8,753.1*	*49.5*	*14.4*	*8,763.5*	*10.4*	*8.8*	*-62.6*	*0.0*	*202.4*	*0.0*	*114.1*	*0.0*	*88.3*	*8,763.5*	*8,851.8*
..... *Landfill Gas*	*Utility Scale Facilities*	*2,059.9*	*0.0*	*1.4*	*2,052.8*	*-7.1*	*-14.6*	*-21.4*	*1.6*	*6.2*	*0.0*	*15.8*	*1.6*	*-9.6*	*2,054.4*	*2,043.2*
..... *Municipal Solid Waste*	*Utility Scale Facilities*	*2,233.3*	*0.0*	*0.0*	*2,234.1*	*0.8*	*-0.9*	*-10.9*	*0.0*	*0.0*	*34.8*	*44.8*	*-34.8*	*-44.8*	*2,199.3*	*2,189.3*
..... *Other Waste Biomass*	*Utility Scale Facilities*	*766.6*	*0.0*	*21.0*	*745.6*	*-21.0*	*-27.5*	*-43.5*	*0.0*	*48.0*	*0.0*	*4.5*	*0.0*	*43.5*	*745.6*	*789.1*
..... Biomass Sources Subtotal	Utility Scale Facilities	13,812.9	49.5	36.8	13,796.0	-16.9	-34.2	-138.4	1.6	256.6	34.8	179.2	-33.2	77.4	13,762.8	13,873.4
..... Geothermal	Utility Scale Facilities	2,514.5	0.0	82.8	2,431.7	-82.8	-109.1	-67.6	7.9	7.9	0.0	0.0	7.9	7.9	2,439.6	2,439.6
... Renewable Sources Subtotal	***Utility Scale Facilities***	***223,880.0***	***807.1***	***1,420.0***	***223,368.9***	***-511.1***	***881.1***	***10,565.3***	***1,638.1***	***17,696.0***	***34.8***	***316.0***	***1,603.3***	***17,380.0***	***224,972.2***	***240,748.9***
..... *Natural Gas Fired Combined Cycle*	*Utility Scale Facilities*	*264,217.9*	*9,133.1*	*8,377.0*	*265,045.1*	*827.2*	*1,284.5*	*18,317.0*	*827.7*	*8,357.4*	*50.0*	*740.0*	*777.7*	*7,617.4*	*265,822.8*	*272,662.5*
..... *Natural Gas Fired Combustion Turbine*	*Utility Scale Facilities*	*127,978.1*	*85.0*	*225.8*	*127,874.7*	*-103.4*	*54.4*	*1,600.2*	*490.5*	*1,967.1*	*20.0*	*499.9*	*470.5*	*1,467.2*	*128,345.2*	*129,341.9*
..... *Natural Gas Steam Turbine*	*Utility Scale Facilities*	*73,327.1*	*1,145.4*	*43.4*	*74,165.0*	*837.9*	*-574.2*	*-4,058.0*	*0.0*	*0.0*	*0.0*	*2,041.9*	*0.0*	*-2,041.9*	*74,165.0*	*72,123.1*
..... *Natural Gas Internal Combustion Engine*	*Utility Scale Facilities*	*4,701.3*	*3.3*	*6.7*	*4,697.9*	*-3.4*	*63.7*	*384.1*	*0.0*	*254.2*	*0.0*	*12.7*	*0.0*	*241.5*	*4,697.9*	*4,939.4*
..... *Natural Gas with Compressed Air Storage*	*Utility Scale Facilities*	*110.0*	*0.0*	*0.0*	*110.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*110.0*	*110.0*
..... *Other Natural Gas*	*Utility Scale Facilities*	*122.0*	*15.4*	*0.0*	*142.4*	*20.4*	*20.4*	*20.6*	*0.0*	*40.7*	*0.0*	*0.0*	*0.0*	*40.7*	*142.4*	*183.1*
..... Natural Gas Subtotal	Utility Scale Facilities	470,456.4	10,382.2	8,652.9	472,035.1	1,578.7	848.8	16,263.9	1,318.2	10,619.4	70.0	3,294.5	1,248.2	7,324.9	473,283.3	479,360.0
..... *Conventional Steam Coal*	*Utility Scale Facilities*	*242,883.0*	*88.8*	*3,282.6*	*240,156.1*	*-2,726.9*	*-2,561.7*	*-9,934.9*	*0.0*	*82.0*	*323.0*	*4,433.6*	*-323.0*	*-4,351.6*	*239,833.1*	*235,804.5*
..... *Coal Integrated Gasification Combined Cycle*	*Utility Scale Facilities*	*756.0*	*0.0*	*0.0*	*756.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*756.0*	*756.0*
..... Coal Subtotal	Utility Scale Facilities	243,639.0	88.8	3,282.6	240,912.1	-2,726.9	-2,561.7	-9,934.9	0.0	82.0	323.0	4,433.6	-323.0	-4,351.6	240,589.1	236,560.5
..... Petroleum Coke	Utility Scale Facilities	1,527.9	0.0	0.0	1,524.7	-3.2	-3.2	-3.2	0.0	0.0	0.0	67.0	0.0	-67.0	1,524.7	1,457.7
..... Petroleum Liquids	Utility Scale Facilities	31,509.1	13.0	32.5	31,477.6	-31.5	-48.7	-260.7	3.5	36.2	24.6	205.9	-21.1	-169.7	31,456.5	31,307.9
..... Other Gases	Utility Scale Facilities	2,375.8	2.2	6.3	2,367.8	-8.0	-8.0	-8.0	0.0	10.0	0.0	0.0	0.0	10.0	2,367.8	2,377.8
... Fossil Fuels Subtotal	***Utility Scale Facilities***	***749,508.2***	***10,486.2***	***11,974.3***	***748,317.3***	***-1,190.9***	***-1,772.8***	***6,057.1***	***1,321.7***	***10,747.6***	***417.6***	***8,001.0***	***904.1***	***2,746.6***	***749,221.4***	***751,063.9***
..... Hydroelectric Pumped Storage	Utility Scale Facilities	22,857.2	0.0	0.0	22,857.2	0.0	1.8	46.8	0.0	93.6	0.0	0.0	0.0	93.6	22,857.2	22,950.8
..... Flywheels	Utility Scale Facilities	47.0	0.0	0.0	47.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0	47.0
..... Batteries	Utility Scale Facilities	835.0	20.9	6.0	866.7	31.7	24.7	177.9	34.4	117.6	0.0	0.0	34.4	117.6	901.1	984.3
... Energy Storage Subtotal	***Utility Scale Facilities***	***23,739.2***	***20.9***	***6.0***	***23,770.9***	***31.7***	***26.5***	***224.7***	***34.4***	***211.2***	***0.0***	***0.0***	***34.4***	***211.2***	***23,805.3***	***23,982.1***
... Nuclear	***Utility Scale Facilities***	***99,359.8***	***86.0***	***0.0***	***99,445.8***	***86.0***	***90.9***	***-206.8***	***0.0***	***155.0***	***0.0***	***1,480.0***	***0.0***	***-1,325.0***	***99,445.8***	***98,120.8***
... All Other	***Utility Scale Facilities***	***1,527.5***	***0.0***	***1.0***	***1,526.5***	***-1.0***	***-654.8***	***-647.9***	***0.0***	***47.9***	***0.0***	***0.0***	***0.0***	***47.9***	***1,526.5***	***1,574.4***
TOTAL	**UTILITY SCALE FACILITIES**	**1,098,014.7**	**11,400.2**	**13,401.3**	**1,096,429.4**	**-1,585.3**	**-1,429.1**	**15,992.4**	**2,994.2**	**28,857.7**	**452.4**	**9,797.0**	**2,541.8**	**19,060.7**	**1,098,971.2**	**1,115,490.1**
..... *Estimated Small Scale Solar Photovoltaic*	*Small Scale Facilities*	*19,959.0*			*20,125.8*	*166.8*	*604.3*	*3,368.1*								
..... Estimated Total Solar Photovoltaic	All Facilities	50,581.2			50,486.1	-95.1	794.1	7,655.2								
... Estimated Total Solar	***All Facilities***	***52,339.1***			***52,244.0***	***-95.1***	***794.1***	***7,655.2***								

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

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

Table 6.1.A. Estimated Net Summer Solar Photovoltaic Capacity From Utility and Small Scale Facilities (Megawatts)
2008 - February 2019

Period	Utility Solar Photovoltaic	Estimated Small Scale Solar Photovoltaic	Estimated Total Solar Photovoltaic
Annual Totals			
2009	145.5	N/A	N/A
2010	393.4	N/A	N/A
2011	1,052.0	N/A	N/A
2012	2,694.1	N/A	N/A
2013	5,336.1	N/A	N/A
2014	8,656.6	7,326.6	15,983.2
2015	11,905.4	9,778.5	21,683.9
2016	20,192.9	12,765.1	32,958.0
2017	25,209.0	16,147.8	41,356.8
2018	30,170.5	19,521.5	49,692.0
Year 2017			
January	20,603.7	12,970.1	33,573.8
February	20,792.6	13,272.0	34,064.6
March	21,177.9	13,558.9	34,736.8
April	21,700.6	13,815.1	35,515.7
May	22,006.1	14,115.3	36,121.4
June	22,242.6	14,401.8	36,644.4
July	22,356.4	14,670.8	37,027.2
August	22,547.7	15,018.7	37,566.4
Sept	22,762.8	15,216.3	37,979.1
October	23,095.3	15,456.6	38,551.9
November	23,660.0	15,719.9	39,379.9
December	25,209.0	16,147.8	41,356.8
Year 2018			
January	25,983.4	16,496.2	42,479.6
February	26,073.2	16,757.7	42,830.9
March	26,576.0	17,048.0	43,624.0
April	26,854.0	17,306.3	44,160.3
May	27,275.1	17,600.7	44,875.8
June	27,432.9	17,887.4	45,320.3
July	27,556.8	18,145.8	45,702.6
August	27,635.9	18,426.4	46,062.3
Sept	27,951.5	18,712.4	46,663.9
October	28,103.5	19,000.5	47,104.0
November	28,630.8	19,278.1	47,908.9
December	30,170.5	19,521.5	49,692.0
Year 2019			
January	30,622.2	19,959.0	50,581.2
February	30,360.3	20,125.8	50,486.1

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

Table 6.1.B. Estimated Net Summer Solar Photovoltaic Capacity From Small Scale Facilities by Sector (Megawatts):
2014 - February 2019

Period	Residential	Commercial	Industrial	Total
Annual Totals				
2014	3,346.3	3,279.7	700.6	7,326.6
2015	5,191.5	3,706.7	880.3	9,778.5
2016	7,527.0	4,022.8	1,215.3	12,765.1
2017	9,626.8	5,155.8	1,365.1	16,147.8
2018	11,664.4	6,285.8	1,571.3	19,521.5
Year 2017				
January	7,754.9	4,071.5	1,143.7	12,970.1
February	7,946.3	4,110.9	1,214.8	13,272.0
March	8,115.3	4,203.6	1,240.0	13,558.9
April	8,269.3	4,293.6	1,252.2	13,815.1
May	8,453.2	4,381.8	1,280.4	14,115.3
June	8,618.2	4,481.8	1,301.9	14,401.8
July	8,778.3	4,565.3	1,327.2	14,670.8
August	8,961.3	4,711.5	1,346.0	15,018.7
Sept	9,113.0	4,738.4	1,364.9	15,216.3
October	9,265.2	4,826.7	1,364.7	15,456.6
November	9,429.8	4,924.9	1,365.1	15,719.9
December	9,626.8	5,155.8	1,365.1	16,147.8
Year 2018				
January	9,818.4	5,312.1	1,365.7	16,496.2
February	9,985.1	5,398.4	1,374.2	16,757.7
March	10,155.4	5,501.2	1,391.4	17,048.0
April	10,313.9	5,580.1	1,412.2	17,306.3
May	10,492.1	5,676.2	1,432.4	17,600.7
June	10,660.0	5,778.0	1,449.5	17,887.4
July	10,828.8	5,858.8	1,458.2	18,145.8
August	11,011.0	5,945.3	1,470.2	18,426.4
Sept	11,178.8	6,026.4	1,507.2	18,712.4
October	11,373.1	6,105.2	1,522.1	19,000.5
November	11,552.4	6,176.0	1,549.7	19,278.1
December	11,664.4	6,285.8	1,571.3	19,521.5
Year 2019				
January	11,998.4	6,379.6	1,581.0	19,959.0
February	12,165.8	6,369.7	1,590.3	20,125.8

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

Table 6.2.A. Net Summer Capacity of Utility Scale Units by Technology and by State, February 2019 and 2018 (Megawatts)

Census Division and State	Renewable Sources		Fossil Fuels		Hydroelectric Pumped Storage		Other Energy Storage		Nuclear		All Other Sources		All Sources	
	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	5,877.5	5,679.4	23,177.9	21,217.6	1,797.4	1,797.4	31.8	24.7	4,016.4	4,018.2	48.0	320.9	34,949.0	33,058.2
Connecticut	409.4	362.2	7,308.0	6,113.8	29.4	29.4	1.6	1.6	2,087.8	2,087.8	26.0	298.9	9,862.2	8,893.7
Maine	2,347.1	2,345.6	2,574.8	2,536.5	0.0	0.0	16.2	16.2	0.0	0.0	22.0	22.0	4,960.1	4,920.3
Massachusetts	1,385.7	1,299.5	9,076.2	8,375.4	1,768.0	1,768.0	11.0	4.9	677.2	679.0	0.0	0.0	12,918.1	12,126.8
New Hampshire	928.9	928.9	2,289.9	2,262.9	0.0	0.0	0.0	0.0	1,251.4	1,251.4	0.0	0.0	4,470.2	4,443.2
Rhode Island	150.2	113.3	1,831.1	1,831.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,981.3	1,944.4
Vermont	656.2	629.9	97.9	97.9	0.0	0.0	3.0	2.0	0.0	0.0	0.0	0.0	757.1	729.8
Middle Atlantic	11,162.6	10,869.7	71,953.5	67,987.7	3,411.6	3,409.8	113.5	72.9	18,700.2	19,310.2	11.2	420.9	105,352.6	102,071.2
New Jersey	972.6	919.0	12,430.3	12,378.6	420.0	420.0	42.1	1.5	3,500.2	4,107.9	11.2	11.2	17,376.4	17,838.2
New York	7,332.3	7,073.9	26,939.4	25,992.3	1,408.6	1,406.8	21.0	21.0	5,403.0	5,405.3	0.0	221.7	41,104.3	40,121.0
Pennsylvania	2,857.7	2,876.8	32,583.8	29,616.8	1,583.0	1,583.0	50.4	50.4	9,797.0	9,797.0	0.0	188.0	46,871.9	44,112.0
East North Central	12,548.0	11,682.1	112,568.8	114,449.6	2,179.0	2,134.0	169.7	167.7	19,034.4	19,029.4	187.1	188.1	146,687.0	147,650.9
Illinois	4,943.9	4,432.9	29,060.6	29,000.9	0.0	0.0	112.7	112.7	11,582.4	11,577.4	78.0	78.0	45,777.6	45,201.9
Indiana	2,658.1	2,442.8	23,901.5	23,107.4	0.0	0.0	23.0	22.0	0.0	0.0	88.0	89.0	26,670.6	25,661.2
Michigan	2,659.0	2,636.1	20,644.4	20,788.5	2,179.0	2,134.0	1.0	0.0	4,122.2	4,122.2	0.0	0.0	29,605.6	29,680.8
Ohio	1,051.3	930.4	25,926.0	27,023.4	0.0	0.0	33.0	33.0	2,134.0	2,134.0	0.0	0.0	29,144.3	30,120.8
Wisconsin	1,235.7	1,239.9	13,036.3	14,529.4	0.0	0.0	0.0	0.0	1,195.8	1,195.8	21.1	21.1	15,488.9	16,986.2
West North Central	29,553.4	26,736.1	59,153.4	60,575.5	657.0	657.0	5.1	3.2	5,443.4	5,443.4	24.5	24.5	94,836.8	93,439.7
Iowa	8,502.9	7,320.8	9,801.3	9,927.3	0.0	0.0	1.1	0.0	601.4	601.4	0.0	0.0	18,906.7	17,849.5
Kansas	5,679.0	5,136.2	9,024.4	9,775.8	0.0	0.0	0.0	0.0	1,225.0	1,225.0	0.8	0.8	15,929.2	16,137.8
Minnesota	5,247.0	4,957.0	10,155.2	10,005.3	0.0	0.0	1.0	1.0	1,657.0	1,657.0	18.4	18.4	17,078.6	16,638.7
Missouri	1,579.0	1,567.9	17,651.0	18,391.8	657.0	657.0	2.2	2.2	1,190.0	1,190.0	0.0	0.0	21,079.2	21,808.9
Nebraska	2,327.9	1,724.6	6,196.6	6,148.4	0.0	0.0	0.0	0.0	770.0	770.0	0.0	0.0	9,294.5	8,643.0
North Dakota	3,740.8	3,592.8	4,633.6	4,635.6	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	8,379.7	8,233.7
South Dakota	2,476.8	2,436.8	1,691.3	1,691.3	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	4,168.9	4,128.1
South Atlantic	19,950.3	18,716.1	164,080.5	158,092.7	7,905.2	7,905.2	92.5	80.5	24,706.6	24,602.6	481.7	446.7	217,216.8	209,843.8
Delaware	47.5	46.1	3,330.4	3,331.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,377.9	3,377.5
District of Columbia	28.9	23.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.9	32.0
Florida	2,589.8	2,163.2	53,141.1	51,921.9	0.0	0.0	14.0	0.0	3,626.0	3,572.0	377.7	348.7	59,748.6	58,005.8
Georgia	3,966.5	3,964.5	27,050.6	26,964.0	1,862.2	1,862.2	1.0	1.0	4,061.0	4,061.0	44.0	44.0	36,985.3	36,896.7
Maryland	1,187.3	1,091.1	11,847.1	10,278.7	0.0	0.0	7.0	13.0	1,725.8	1,707.8	6.0	0.0	14,773.2	13,090.6
North Carolina	6,754.8	6,148.1	22,127.1	21,644.3	86.0	86.0	1.0	1.0	5,149.6	5,117.6	54.0	54.0	34,172.5	33,051.0
South Carolina	2,215.5	2,147.9	12,131.3	11,435.2	2,716.0	2,716.0	4.0	0.0	6,576.2	6,576.2	0.0	0.0	23,643.0	22,875.3
Virginia	2,132.9	2,105.1	20,669.8	18,744.9	3,241.0	3,241.0	0.0	0.0	3,568.0	3,568.0	0.0	0.0	29,611.7	27,659.0
West Virginia	1,027.1	1,027.1	13,774.1	13,763.3	0.0	0.0	65.5	65.5	0.0	0.0	0.0	0.0	14,866.7	14,855.9
East South Central	8,882.5	8,769.6	63,929.2	65,225.8	1,616.3	1,616.3	1.0	1.0	11,294.1	10,984.1	1.4	1.4	85,724.5	86,598.2
Alabama	4,174.4	4,156.0	20,565.3	20,482.4	0.0	0.0	1.0	1.0	5,370.4	5,060.4	0.0	0.0	30,111.1	29,699.8
Kentucky	1,245.4	1,245.4	18,290.3	18,874.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19,535.7	20,119.7
Mississippi	463.0	435.3	12,883.3	13,989.9	0.0	0.0	0.0	0.0	1,401.0	1,401.0	1.4	1.4	14,748.7	15,827.6
Tennessee	2,999.7	2,932.9	12,190.3	11,879.2	1,616.3	1,616.3	0.0	0.0	4,522.7	4,522.7	0.0	0.0	21,329.0	20,951.1
West South Central	39,036.6	35,952.6	139,433.7	139,489.0	286.0	286.0	99.8	98.3	8,910.7	8,910.7	512.5	512.7	188,279.3	185,249.3
Arkansas	1,697.1	1,694.3	11,219.7	11,183.0	28.0	28.0	0.0	0.0	1,817.8	1,817.8	0.0	0.0	14,762.6	14,723.1
Louisiana	683.2	683.2	20,012.9	20,596.7	0.0	0.0	0.5	0.5	2,132.9	2,132.9	288.5	288.7	23,118.0	23,702.0
Oklahoma	9,041.0	8,463.1	18,567.7	18,577.0	258.0	258.0	0.0	0.0	0.0	0.0	0.0	0.0	27,866.7	27,298.1
Texas	27,615.3	25,112.0	89,633.4	89,132.3	0.0	0.0	99.3	97.8	4,960.0	4,960.0	224.0	224.0	122,532.0	119,526.1
Mountain	26,815.1	26,213.4	62,292.2	62,292.8	778.8	778.8	50.6	23.6	3,937.0	3,937.0	127.2	126.3	94,000.9	93,371.9
Arizona	5,090.8	5,014.4	19,395.3	19,407.3	216.3	216.3	42.0	20.0	3,937.0	3,937.0	0.0	0.0	28,681.4	28,595.0
Colorado	4,519.9	4,362.6	11,109.2	11,119.2	562.5	562.5	5.0	1.0	0.0	0.0	9.3	9.3	16,205.9	16,054.6
Idaho	4,069.9	4,011.9	1,127.6	1,127.6	0.0	0.0	0.0	0.0	0.0	0.0	14.8	14.8	5,212.3	5,154.3
Montana	3,562.2	3,471.3	2,741.9	2,741.9	0.0	0.0	0.0	0.0	0.0	0.0	44.0	44.0	6,348.1	6,257.2
Nevada	3,612.7	3,572.5	7,821.6	7,791.6	0.0	0.0	0.0	0.0	0.0	0.0	6.5	6.5	11,440.8	11,370.6
New Mexico	2,472.7	2,385.8	5,962.1	5,966.8	0.0	0.0	3.6	2.6	0.0	0.0	0.0	0.0	8,438.4	8,355.2
Utah	1,600.5	1,600.5	7,360.2	7,360.2	0.0	0.0	0.0	0.0	0.0	0.0	40.2	40.2	9,000.9	9,000.9
Wyoming	1,886.4	1,794.4	6,774.3	6,778.2	0.0	0.0	0.0	0.0	0.0	0.0	12.4	11.5	8,673.1	8,584.1
Pacific Contiguous	68,332.7	67,056.3	47,507.8	48,707.9	4,225.9	4,225.9	242.5	175.2	3,403.0	3,417.0	106.3	106.3	123,818.2	123,688.6
California	31,309.6	30,135.8	38,439.9	39,630.0	3,911.9	3,911.9	231.3	162.8	2,240.0	2,240.0	106.3	106.3	76,239.0	76,186.8
Oregon	12,264.8	12,209.7	4,326.1	4,318.1	0.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	16,595.9	16,532.8
Washington	24,758.3	24,710.8	4,741.8	4,759.8	314.0	314.0	6.2	7.4	1,163.0	1,177.0	0.0	0.0	30,983.3	30,969.0
Pacific Noncontiguous	1,210.2	1,128.3	4,220.3	4,221.6	0.0	0.0	107.2	88.7	0.0	0.0	26.6	26.6	5,564.3	5,465.2
Alaska	538.2	538.2	2,162.0	2,163.3	0.0	0.0	46.2	46.2	0.0	0.0	0.0	0.0	2,746.4	2,747.7
Hawaii	672.0	590.1	2,058.3	2,058.3	0.0	0.0	61.0	42.5	0.0	0.0	26.6	26.6	2,817.9	2,717.5
U.S. Total	223,368.9	212,803.6	748,317.3	742,260.2	22,857.2	22,810.4	913.7	735.8	99,445.8	99,652.6	1,526.5	2,174.4	1,096,429.4	1,080,437.0

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

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

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

Table 6.2.B. Net Summer Capacity Using Primarily Renewable Energy Sources and by State, February 2019 and 2018 (Megawatts)

Census Division and State	Summer Capacity at Utility Scale Facilities														Small Scale Capacity		Capacity From Utility and Small Scale Facilities			
	Wind		Solar Photovoltaic		Solar Thermal		Conventional Hydroelectric		Biomass Sources		Geothermal		Total Renewable Sources		Estimated Solar Photovoltaic		Estimated Total Solar Photovoltaic		Estimated Total Solar	
	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	1,424.8	1,400.6	961.6	787.9	0.0	0.0	1,960.9	1,960.7	1,530.2	1,530.2	0.0	0.0	5,877.5	5,679.4	2,184.5	1,861.7	3,146.1	2,649.6	3,146.1	2,649.6
Connecticut	1.0	1.0	83.6	35.5	0.0	0.0	122.2	122.2	202.6	203.5	0.0	0.0	409.4	362.2	423.5	340.8	507.1	376.3	507.1	376.3
Maine	921.6	921.6	5.6	5.6	0.0	0.0	733.0	732.4	686.9	686.0	0.0	0.0	2,347.1	2,345.6	45.8	34.6	51.4	40.2	51.4	40.2
Massachusetts	96.1	92.9	737.3	653.9	0.0	0.0	267.0	267.4	285.3	285.3	0.0	0.0	1,385.7	1,299.5	1,427.0	1,269.7	2,164.3	1,923.6	2,164.3	1,923.6
New Hampshire	183.1	183.1	0.0	0.0	0.0	0.0	504.8	504.8	241.0	241.0	0.0	0.0	928.9	928.9	85.0	72.3	85.0	72.3	85.0	72.3
Rhode Island	72.8	51.8	34.6	18.7	0.0	0.0	2.7	2.7	40.1	40.1	0.0	0.0	150.2	113.3	98.2	53.8	132.8	72.5	132.8	72.5
Vermont	150.2	150.2	100.5	74.2	0.0	0.0	331.2	331.2	74.3	74.3	0.0	0.0	656.2	629.9	105.0	90.6	205.5	164.8	205.5	164.8
Middle Atlantic	3,363.9	3,205.6	1,047.1	889.9	0.0	0.0	5,473.2	5,469.2	1,278.4	1,305.0	0.0	0.0	11,162.6	10,869.7	3,106.0	2,605.1	4,153.1	3,495.0	4,153.1	3,495.0
New Jersey	7.6	7.6	725.4	671.8	0.0	0.0	12.3	12.3	227.3	227.3	0.0	0.0	972.6	919.0	1,514.2	1,303.8	2,239.6	1,975.6	2,239.6	1,975.6
New York	1,984.5	1,826.2	262.4	166.3	0.0	0.0	4,561.3	4,557.3	524.1	524.1	0.0	0.0	7,332.3	7,073.9	1,266.1	1,021.8	1,528.5	1,188.1	1,528.5	1,188.1
Pennsylvania	1,371.8	1,371.8	59.3	51.8	0.0	0.0	899.6	899.6	527.0	553.6	0.0	0.0	2,857.7	2,876.8	325.7	279.5	385.0	331.3	385.0	331.3
East North Central	9,980.4	9,152.2	455.0	402.0	0.0	0.0	856.9	857.3	1,255.7	1,270.6	0.0	0.0	12,548.0	11,682.1	418.0	311.4	873.0	713.4	873.0	713.4
Illinois	4,777.9	4,261.9	35.9	34.9	0.0	0.0	34.1	34.1	96.0	102.0	0.0	0.0	4,943.9	4,432.9	90.6	54.9	126.5	89.8	126.5	89.8
Indiana	2,309.8	2,109.4	216.2	196.7	0.0	0.0	60.4	60.4	71.7	76.3	0.0	0.0	2,658.1	2,442.8	81.4	55.2	297.6	251.9	297.6	251.9
Michigan	1,735.8	1,735.8	97.2	74.3	0.0	0.0	266.9	266.9	559.1	559.1	0.0	0.0	2,659.0	2,636.1	58.6	51.0	155.8	125.3	155.8	125.3
Ohio	718.4	605.9	83.6	75.2	0.0	0.0	101.9	101.9	147.4	147.4	0.0	0.0	1,051.3	930.4	124.7	103.0	208.3	178.2	208.3	178.2
Wisconsin	438.5	439.2	22.1	20.9	0.0	0.0	393.6	394.0	381.5	385.8	0.0	0.0	1,235.7	1,239.9	62.7	47.3	84.8	68.2	84.8	68.2
West North Central	24,910.9	22,250.2	851.6	636.8	0.0	0.0	3,291.7	3,291.7	499.2	557.4	0.0	0.0	29,553.4	26,736.1	349.5	282.3	1,201.1	919.1	1,201.1	919.1
Iowa	8,326.2	7,143.8	8.9	9.2	0.0	0.0	146.4	146.4	21.4	21.4	0.0	0.0	8,502.9	7,320.8	96.5	75.4	105.4	84.6	105.4	84.6
Kansas	5,658.8	5,116.0	4.2	4.2	0.0	0.0	7.0	7.0	9.0	9.0	0.0	0.0	5,679.0	5,136.2	19.3	12.6	23.5	16.8	23.5	16.8
Minnesota	3,854.5	3,707.9	757.4	558.2	0.0	0.0	205.9	205.9	429.2	485.0	0.0	0.0	5,247.0	4,957.0	70.7	50.9	828.1	609.1	828.1	609.1
Missouri	954.3	954.3	62.1	48.6	0.0	0.0	548.5	548.5	14.1	16.5	0.0	0.0	1,579.0	1,567.9	154.4	137.2	216.5	185.8	216.5	185.8
Nebraska	2,018.3	1,417.4	18.0	15.6	0.0	0.0	275.9	275.9	15.7	15.7	0.0	0.0	2,327.9	1,724.6	7.7	5.4	25.7	21.0	25.7	21.0
North Dakota	3,221.0	3,073.0	0.0	0.0	0.0	0.0	510.0	510.0	9.8	9.8	0.0	0.0	3,740.8	3,592.8	0.3	0.2	0.3	0.2	0.3	0.2
South Dakota	877.8	837.8	1.0	1.0	0.0	0.0	1,598.0	1,598.0	0.0	0.0	0.0	0.0	2,476.8	2,436.8	0.6	0.6	1.6	1.6	1.6	1.6
South Atlantic	1,086.3	1,086.3	7,352.4	5,995.0	0.0	0.0	7,224.4	7,268.2	4,287.2	4,366.6	0.0	0.0	19,950.3	18,716.1	1,773.7	1,412.1	9,126.1	7,407.1	9,126.1	7,407.1
Delaware	2.0	2.0	33.3	31.9	0.0	0.0	0.0	0.0	12.2	12.2	0.0	0.0	47.5	46.1	79.6	71.2	112.9	103.1	112.9	103.1
District of Columbia	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0	23.0	23.0	0.0	0.0	28.9	23.0	47.9	39.4	53.8	39.4	53.8	39.4
Florida	0.0	0.0	1,307.4	811.9	0.0	0.0	54.5	54.5	1,227.9	1,296.8	0.0	0.0	2,589.8	2,163.2	315.6	209.6	1,623.0	1,021.5	1,623.0	1,021.5
Georgia	0.0	0.0	1,013.9	1,011.9	0.0	0.0	2,047.2	2,047.2	905.4	905.4	0.0	0.0	3,966.5	3,964.5	NM	153.6	NM	1,165.5	NM	1,165.5
Maryland	190.0	190.0	266.4	169.1	0.0	0.0	590.0	590.0	140.9	142.0	0.0	0.0	1,187.3	1,091.1	729.3	629.2	995.7	798.3	995.7	798.3
North Carolina	208.0	208.0	3,985.9	3,369.8	0.0	0.0	2,002.0	2,002.0	558.9	568.3	0.0	0.0	6,754.8	6,148.1	149.5	116.0	4,135.4	3,485.8	4,135.4	3,485.8
South Carolina	0.0	0.0	365.1	253.7	0.0	0.0	1,323.9	1,367.7	526.5	526.5	0.0	0.0	2,215.5	2,147.9	202.6	138.6	567.7	392.3	567.7	392.3
Virginia	0.0	0.0	374.5	346.7	0.0	0.0	866.0	866.0	892.4	892.4	0.0	0.0	2,132.9	2,105.1	68.6	48.6	443.1	395.3	443.1	395.3
West Virginia	686.3	686.3	0.0	0.0	0.0	0.0	340.8	340.8	0.0	0.0	0.0	0.0	1,027.1	1,027.1	7.4	5.9	7.4	5.9	7.4	5.9
East South Central	29.1	29.1	543.7	455.2	0.0	0.0	7,049.3	7,056.3	1,260.4	1,229.0	0.0	0.0	8,882.5	8,769.6	96.4	85.7	640.1	540.9	640.1	540.9
Alabama	0.0	0.0	194.0	179.3	0.0	0.0	3,290.8	3,290.8	689.6	685.9	0.0	0.0	4,174.4	4,156.0	NM	NM	NM	NM	NM	NM
Kentucky	0.0	0.0	26.3	26.3	0.0	0.0	1,146.9	1,146.9	72.2	72.2	0.0	0.0	1,245.4	1,245.4	23.9	17.5	50.2	43.8	50.2	43.8
Mississippi	0.0	0.0	160.6	160.6	0.0	0.0	0.0	0.0	302.4	274.7	0.0	0.0	463.0	435.3	7.9	6.6	168.5	167.2	168.5	167.2
Tennessee	29.1	29.1	162.8	89.0	0.0	0.0	2,611.6	2,618.6	196.2	196.2	0.0	0.0	2,999.7	2,932.9	56.9	55.7	219.7	144.7	219.7	144.7
West South Central	32,654.2	30,281.9	2,080.4	1,371.8	0.0	0.0	2,991.4	2,987.5	1,310.6	1,311.4	0.0	0.0	39,036.6	35,952.6	666.8	519.8	2,747.2	1,891.6	2,747.2	1,891.6
Arkansas	0.0	0.0	100.0	100.0	0.0	0.0	1,265.8	1,263.9	331.3	330.4	0.0	0.0	1,697.1	1,694.3	17.1	11.3	117.1	111.3	117.1	111.3
Louisiana	0.0	0.0	1.1	1.1	0.0	0.0	192.0	192.0	490.1	490.1	0.0	0.0	683.2	683.2	142.4	130.6	143.5	131.7	143.5	131.7
Oklahoma	8,070.7	7,494.8	30.5	30.5	0.0	0.0	863.6	861.6	76.2	76.2	0.0	0.0	9,041.0	8,463.1	7.7	5.4	38.2	35.9	38.2	35.9
Texas	24,583.5	22,787.1	1,948.8	1,240.2	0.0	0.0	670.0	670.0	413.0	414.7	0.0	0.0	27,615.3	25,112.0	499.6	372.5	2,448.4	1,612.7	2,448.4	1,612.7
Mountain	9,130.6	8,917.0	5,787.0	5,491.0	473.9	473.9	10,642.4	10,574.4	174.3	174.3	606.9	582.8	26,815.1	26,213.4	2,563.9	2,068.6	8,350.9	7,559.6	8,824.8	8,033.5
Arizona	267.3	267.3	1,776.5	1,700.1	295.4	295.4	2,720.9	2,720.9	30.7	30.7	0.0	0.0	5,090.8	5,014.4	1,454.4	1,141.7	3,230.9	2,841.8	3,526.3	3,137.2
Colorado	3,268.5	3,185.7	536.3	460.8	0.0	0.0	686.4	687.4	28.7	28.7	0.0	0.0	4,519.9	4,362.6	357.6	336.2	893.9	797.0	893.9	797.0
Idaho	970.4	970.5	240.0	240.0	0.0	0.0	2,765.6	2,707.5	83.9	83.9	10.0	10.0	4,069.9	4,011.9	28.7	15.2	268.7	255.2	268.7	255.2
Montana	783.5	703.5	17.0	17.0	0.0	0.0	2,758.7	2,747.8	3.0	3.0	0.0	0.0	3,562.2	3,471.3	14.4	11.7	31.4	28.7	31.4	28.7
Nevada	150.0	150.0	1,707.7	1,684.6	178.5	178.5	1,051.4	1,051.4	9.8	9.8	515.3	498.2	3,612.7	3,572.5	319.3	234.0	2,027.0	1,918.6	2,205.5	2,097.1
New Mexico	1,815.4	1,764.5	560.4	531.4	0.0	0.0	82.9	82.9	5.4	5.4	8.6	1.6	2,472.7	2,385.8	141.7	122.4	702.1	653.8	702.1	653.8
Utah	388.2	388.2	857.1	857.1	0.0	0.0	269.4	269.4	12.8	12.8	73.0	73.0	1,600.5	1,600.5	243.1	203.9	1,100.2	1,061.0	1,100.2	1,061.0
Wyoming	1,487.3	1,487.3	92.0	0.0	0.0	0.0	307.1	307.1	0.0	0.0	0.0	0.0	1,886.4	1,794.4	4.8	3.3	96.8	3.3	96.8	3.3
Pacific Contiguous	12,293.5	12,140.0	11,157.4	9,945.3	1,284.0	1,284.0	39,889.9	39,847.9	1,926.1	1,965.6	1,781.8	1,873.5	68,332.7	67,056.3	8,351.2	7,027.9	19,508.6	16,973.2	20,792.6	18,257.2
California	6,010.2	5,856.7	10,819.6	9,702.7	1,284.0	1,284.0	10,206.5	10,198.2	1,227.0	1,240.2	1,762.3	1,854.0	31,309.6	30,135.8	8,056.4	6,787.9	18,876.0	16,490.6	20,160.0	17,774.6
Oregon	3,210.2	3,210.2	318.1	242.1	0.0	0.0	8,402.3	8,423.2	314.7	314.7	19.5	19.5	12,264.8	12,209.7	157.4	138.2	475.5	380.3	475.5	380.3
Washington	3,073.1	3,073.1	19.7	0.5	0.0	0.0	21,281.1	21,226.5	384.4	410.7	0.0	0.0	24,758.3	24,710.8	137.3	101.8	157.0	102.3	157.0	102.3
Pacific Noncontiguous	266.2	266.2	124.1	98.3	0.0	0.0	503.0	496.5	273.9	224.3	43.0	43.0	1,210.2	1,128.3	615.8	583.2	739.9	681.5	739.9	681.5
Alaska	60.6	60.6	0.0	0.0	0.0	0.0	470.6	470.6	7.0	7.0	0.0	0.0	538.2	538.2	3.3	2.2	3.3	2.2	3.3	2.2
Hawaii	205.6	205.6	124.1	98.3	0.0	0.0	32.4	25.9	266.9	217.3	43.0	43.0	672.0	590.1	612.5	580.9	736.6	679.2	736.6	679.2
U.S. Total	95,139.9	88,729.1	30,360.3	26,073.2	1,757.9	1,757.9	79,883.1	79,809.7	13,796.0	13,934.4	2,431.7	2,499.3	223,368.9	212,803.6	20,125.8	16,757.7	50,486.1	42,830.9	52,244.0	44,588.8

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

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

Table 6.2.C. Net Summer Capacity of Utility Scale Units Using Primarily Fossil Fuels and by State, February 2019 and 2018 (Megawatts)

Census Division and State	Natural Gas Fired Combined Cycle		Natural Gas Fired Combustion Turbine		Other Natural Gas		Coal		Petroleum Coke		Petroleum Liquids		Other Gases		Total Fossil Fuels	
	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018	February 2019	February 2018
New England	13,727.9	11,869.1	1,210.9	1,116.9	1,612.5	1,605.8	917.3	917.3	0.0	0.0	5,709.3	5,708.5	0.0	0.0	23,177.9	21,217.6
Connecticut	3,442.7	2,345.2	567.6	477.6	879.2	872.5	383.4	383.4	0.0	0.0	2,035.1	2,035.1	0.0	0.0	7,308.0	6,113.8
Maine	1,284.3	1,250.0	301.1	297.1	108.5	108.5	0.0	0.0	0.0	0.0	880.9	880.9	0.0	0.0	2,574.8	2,536.5
Massachusetts	5,955.7	5,255.7	331.6	331.6	199.7	199.7	0.0	0.0	0.0	0.0	2,589.2	2,588.4	0.0	0.0	9,076.2	8,375.4
New Hampshire	1,258.0	1,231.0	3.8	3.8	400.2	400.2	533.9	533.9	0.0	0.0	94.0	94.0	0.0	0.0	2,289.9	2,262.9
Rhode Island	1,787.2	1,787.2	6.8	6.8	24.9	24.9	0.0	0.0	0.0	0.0	12.2	12.2	0.0	0.0	1,831.1	1,831.1
Vermont	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.9	97.9	0.0	0.0	97.9	97.9
Middle Atlantic	31,984.9	26,074.8	7,896.3	7,690.6	14,371.8	15,126.1	12,109.7	13,529.8	78.6	78.6	5,387.1	5,358.6	125.1	129.2	71,953.5	67,987.7
New Jersey	8,531.1	8,157.9	2,976.3	2,845.0	44.9	497.7	609.0	609.0	11.6	11.6	234.0	234.0	23.4	23.4	12,430.3	12,378.6
New York	8,922.6	7,986.3	3,171.2	3,164.4	9,662.3	9,685.5	1,631.5	1,640.2	0.0	0.0	3,551.8	3,515.9	0.0	0.0	26,939.4	25,992.3
Pennsylvania	14,531.2	9,930.6	1,748.8	1,681.2	4,664.6	4,942.9	9,869.2	11,280.6	67.0	67.0	1,601.3	1,608.7	101.7	105.8	32,583.8	29,616.8
East North Central	21,636.5	18,862.0	26,763.3	26,702.6	4,234.9	4,216.9	56,165.4	60,684.3	247.6	247.6	2,428.2	2,643.3	1,092.9	1,092.9	112,568.8	114,449.6
Illinois	3,580.2	3,580.2	10,504.8	10,446.1	286.1	289.9	13,976.0	13,974.0	0.0	0.0	677.0	674.2	36.5	36.5	29,060.6	29,000.9
Indiana	3,810.0	2,406.0	3,353.4	3,355.8	729.1	729.1	15,291.4	15,759.4	0.0	0.0	98.3	237.8	619.3	619.3	23,901.5	23,107.4
Michigan	4,418.0	4,421.0	3,972.3	3,969.2	2,383.5	2,394.0	9,086.9	9,216.7	47.2	47.2	486.5	490.4	250.0	250.0	20,644.4	20,788.5
Ohio	7,020.4	5,704.0	5,559.2	5,559.2	189.2	189.2	12,256.0	14,605.4	142.0	142.0	572.1	636.5	187.1	187.1	25,926.0	27,023.4
Wisconsin	2,807.9	2,750.8	3,373.6	3,372.3	647.0	614.7	5,555.1	7,128.8	58.4	58.4	594.3	604.4	0.0	0.0	13,036.3	14,529.4
West North Central	6,644.7	6,633.1	11,737.1	11,528.9	3,755.2	4,378.5	33,111.8	34,116.0	32.0	32.0	3,864.2	3,878.6	8.4	8.4	59,153.4	60,575.5
Iowa	1,783.6	1,772.6	1,256.8	1,271.2	540.7	532.8	5,365.9	5,497.9	32.0	32.0	822.3	820.8	0.0	0.0	9,801.3	9,927.3
Kansas	266.0	266.0	2,156.8	2,148.3	1,369.2	2,096.7	4,670.2	4,714.2	0.0	0.0	562.2	550.6	0.0	0.0	9,024.4	9,775.8
Minnesota	2,172.0	2,172.0	2,670.9	2,456.4	364.8	275.8	4,174.7	4,309.4	0.0	0.0	772.8	791.7	0.0	0.0	10,155.2	10,005.3
Missouri	1,794.9	1,789.9	3,400.6	3,399.6	834.4	836.4	10,521.6	11,260.8	0.0	0.0	1,099.5	1,105.1	0.0	0.0	17,651.0	18,391.8
Nebraska	338.2	342.6	1,149.4	1,150.8	525.8	516.5	3,863.0	3,817.3	0.0	0.0	320.2	321.2	0.0	0.0	6,196.6	6,148.4
North Dakota	0.0	0.0	408.0	408.0	111.6	111.6	4,042.4	4,042.4	0.0	0.0	63.2	65.2	8.4	8.4	4,633.6	4,635.6
South Dakota	290.0	290.0	694.6	694.6	8.7	8.7	474.0	474.0	0.0	0.0	224.0	224.0	0.0	0.0	1,691.3	1,691.3
South Atlantic	60,047.2	53,178.6	31,990.8	31,786.1	7,387.1	7,307.0	54,004.3	55,137.3	142.8	142.8	10,373.3	10,405.9	135.0	135.0	164,080.5	158,092.7
Delaware	1,511.0	1,512.0	317.2	317.2	843.1	843.1	410.0	410.0	0.0	0.0	114.1	114.1	135.0	135.0	3,330.4	3,331.4
District of Columbia	0.0	0.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	9.0
Florida	30,079.7	27,953.7	7,759.2	7,889.6	2,486.2	2,479.6	7,804.0	8,570.0	59.0	59.0	4,953.0	4,970.0	0.0	0.0	53,141.1	51,921.9
Georgia	7,989.0	7,954.2	7,791.0	7,787.2	832.9	832.9	9,408.5	9,360.5	83.8	83.8	945.4	945.4	0.0	0.0	27,050.6	26,964.0
Maryland	2,849.1	976.0	1,970.9	1,957.6	1,494.2	1,414.2	4,327.0	4,712.0	0.0	0.0	1,205.9	1,218.9	0.0	0.0	11,847.1	10,278.7
North Carolina	5,233.0	4,724.8	6,050.7	6,045.1	1.0	0.0	10,504.8	10,536.8	0.0	0.0	337.6	337.6	0.0	0.0	22,127.1	21,644.3
South Carolina	3,152.0	2,399.0	2,757.9	2,814.8	546.0	546.0	5,212.0	5,212.0	0.0	0.0	463.4	463.4	0.0	0.0	12,131.3	11,435.2
Virginia	9,233.4	7,658.9	4,245.3	3,894.3	1,068.2	1,068.2	3,780.0	3,778.0	0.0	0.0	2,342.9	2,345.5	0.0	0.0	20,669.8	18,744.9
West Virginia	0.0	0.0	1,089.6	1,071.3	115.5	123.0	12,558.0	12,558.0	0.0	0.0	11.0	11.0	0.0	0.0	13,774.1	13,763.3
East South Central	21,760.6	20,632.1	12,626.1	12,646.9	4,502.5	6,028.8	24,903.2	25,756.2	0.0	0.0	117.0	142.0	19.8	19.8	63,929.2	65,225.8
Alabama	9,697.8	9,618.4	2,532.2	2,532.2	1,937.8	2,766.3	6,335.1	5,503.1	0.0	0.0	42.6	42.6	19.8	19.8	20,565.3	20,482.4
Kentucky	1,763.0	1,763.0	4,976.6	4,976.6	260.0	260.0	11,278.8	11,862.8	0.0	0.0	11.9	11.9	0.0	0.0	18,290.3	18,874.3
Mississippi	7,844.7	7,847.7	1,336.8	1,357.6	2,238.5	2,936.3	1,444.0	1,804.0	0.0	0.0	19.3	44.3	0.0	0.0	12,883.3	13,989.9
Tennessee	2,455.1	1,403.0	3,780.5	3,780.5	66.2	66.2	5,845.3	6,586.3	0.0	0.0	43.2	43.2	0.0	0.0	12,190.3	11,879.2
West South Central	60,353.8	60,487.3	14,394.9	13,977.4	32,317.3	31,660.5	30,583.1	31,575.8	954.7	957.9	174.6	174.8	655.3	655.3	139,433.7	139,489.0
Arkansas	4,603.4	4,566.0	702.8	702.8	796.0	802.0	5,105.3	5,100.0	0.0	0.0	12.2	12.2	0.0	0.0	11,219.7	11,183.0
Louisiana	7,430.6	7,533.0	2,349.6	2,357.9	6,057.6	6,528.4	2,833.7	2,832.6	890.9	894.1	43.1	43.3	407.4	407.4	20,012.9	20,596.7
Oklahoma	7,263.6	7,247.6	1,686.9	1,684.9	6,220.3	5,235.5	3,322.5	4,334.6	0.0	0.0	74.4	74.4	0.0	0.0	18,567.7	18,577.0
Texas	41,056.2	41,140.7	9,655.6	9,231.8	19,243.4	19,094.6	19,321.6	19,308.6	63.8	63.8	44.9	44.9	247.9	247.9	89,633.4	89,132.3
Mountain	22,510.8	22,483.8	8,635.6	8,638.9	3,835.9	3,838.9	26,802.5	26,815.5	52.0	52.0	351.9	356.3	103.5	107.4	62,292.2	62,292.8
Arizona	9,879.6	9,891.6	2,367.6	2,367.6	1,478.6	1,478.6	5,579.0	5,579.0	0.0	0.0	90.5	90.5	0.0	0.0	19,395.3	19,407.3
Colorado	3,249.5	3,240.5	2,572.3	2,572.3	639.0	639.0	4,480.0	4,499.0	0.0	0.0	168.4	168.4	0.0	0.0	11,109.2	11,119.2
Idaho	547.7	547.7	552.0	552.0	14.0	14.0	8.5	8.5	0.0	0.0	5.4	5.4	0.0	0.0	1,127.6	1,127.6
Montana	0.0	0.0	321.6	321.6	72.2	72.2	2,294.6	2,294.6	52.0	52.0	0.0	0.0	1.5	1.5	2,741.9	2,741.9
Nevada	5,445.0	5,415.0	1,185.6	1,185.6	444.6	444.6	740.4	740.4	0.0	0.0	6.0	6.0	0.0	0.0	7,821.6	7,791.6
New Mexico	1,465.0	1,465.0	962.7	966.0	846.4	849.4	2,640.0	2,634.0	0.0	0.0	48.0	52.4	0.0	0.0	5,962.1	5,966.8
Utah	1,830.0	1,830.0	520.2	520.2	328.2	328.2	4,654.0	4,654.0	0.0	0.0	27.8	27.8	0.0	0.0	7,360.2	7,360.2
Wyoming	94.0	94.0	153.6	153.6	12.9	12.9	6,406.0	6,406.0	0.0	0.0	5.8	5.8	102.0	105.9	6,774.3	6,778.2
Pacific Contiguous	25,899.5	26,028.1	11,993.4	11,559.9	6,923.1	8,431.1	1,982.0	1,982.0	17.0	17.0	471.4	468.4	221.4	221.4	47,507.8	48,707.9
California	19,881.0	19,999.6	11,140.2	10,706.7	6,667.1	8,175.1	57.0	57.0	17.0	17.0	456.2	453.2	221.4	221.4	38,439.9	39,630.0
Oregon	3,382.9	3,374.9	133.8	133.8	224.4	224.4	585.0	585.0	0.0	0.0	0.0	0.0	0.0	0.0	4,326.1	4,318.1
Washington	2,635.6	2,653.6	719.4	719.4	31.6	31.6	1,340.0	1,340.0	0.0	0.0	15.2	15.2	0.0	0.0	4,741.8	4,759.8
Pacific Noncontiguous	479.2	479.2	626.3	626.3	175.0	175.0	332.8	332.8	0.0	0.0	2,600.6	2,601.9	6.4	6.4	4,220.3	4,221.6
Alaska	479.2	479.2	626.3	626.3	175.0	175.0	152.8	152.8	0.0	0.0	728.7	730.0	0.0	0.0	2,162.0	2,163.3
Hawaii	0.0	0.0	0.0	0.0	0.0	0.0	180.0	180.0	0.0	0.0	1,871.9	1,871.9	6.4	6.4	2,058.3	2,058.3
U.S. Total	265,045.1	246,728.1	127,874.7	126,274.5	79,115.3	82,768.6	240,912.1	250,847.0	1,524.7	1,527.9	31,477.6	31,738.3	2,367.8	2,375.8	748,317.3	742,260.2

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

NOTES:
Capacity from facilities with a total generator nameplate capacity less than 1 MW are excluded from this report. This exclusion may represent a significant portion of existing or planned capacity for some technologies such as solar photovoltaic generation.

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

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2019

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2019	1	61776		IPP	Oak Leaf Solar XXII LLC	CO	62252	53965	1.5	Solar Photovoltaic	SUN	PV
2019	1	61777		IPP	Oak Leaf Solar XXIII LLC	CO	62256	53966	1.5	Solar Photovoltaic	SUN	PV
2019	1	61780		IPP	Oak Leaf Solar XXIV LLC	CO	62253	53967	1.5	Solar Photovoltaic	SUN	PV
2019	1	61779		IPP	Oak Leaf Solar XXVI LLC	CO	62254	53970	1.5	Solar Photovoltaic	SUN	PV
2019	1	60571	AEP Onsite Partners	IPP	Trout Creek Solar	CO	62260	44901	2.0	Solar Photovoltaic	SUN	PV
2019	1	61482	AES ES GILBERT, LLC	IPP	AES ES GILBERT	AZ	61861	SRP	10.0	Batteries	MWH	BA
2019	1	60281	Altus Power America Management, LLC	IPP	Corcoran CSG	MN	61971	201	1.0	Solar Photovoltaic	SUN	PV
2019	1	60281	Altus Power America Management, LLC	IPP	Corcoran CSG	MN	61971	202	1.0	Solar Photovoltaic	SUN	PV
2019	1	60281	Altus Power America Management, LLC	IPP	Corcoran CSG	MN	61971	203	1.0	Solar Photovoltaic	SUN	PV
2019	1	60281	Altus Power America Management, LLC	IPP	Corcoran CSG	MN	61971	204	1.0	Solar Photovoltaic	SUN	PV
2019	1	60281	Altus Power America Management, LLC	IPP	Corcoran CSG	MN	61971	205	1.0	Solar Photovoltaic	SUN	PV
2019	1	61563	Blue Summit II Wind, LLC	IPP	Blue Summit II Wind, LLC	TX	61970	BSII	99.4	Onshore Wind Turbine	WND	WT
2019	1	61260	Capricornus Community Solar Garden, LLC	IPP	Capricornus Community Solar Garden	MN	61651	CAPR	1.0	Solar Photovoltaic	SUN	PV
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC1	18.5	Natural Gas Internal Combustion Engine	NG	IC
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC2	18.5	Natural Gas Internal Combustion Engine	NG	IC
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC3	18.5	Natural Gas Internal Combustion Engine	NG	IC
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC4	18.5	Natural Gas Internal Combustion Engine	NG	IC
2019	1	18947	City of Tipton - (IA)	Electric Utility	Tipton	IA	8106	7	2.0	Petroleum Liquids	DFO	IC
2019	1	56769	Consolidated Edison Development Inc.	IPP	Blackwell Solar Park	CA	59524	FRBSP	20.0	Solar Photovoltaic	SUN	PV
2019	1	61338	Crux Community Solar Gardens, LLC	IPP	Crux Community Solar	MN	61712	CRUX	1.0	Solar Photovoltaic	SUN	PV
2019	1	61413	Enel Green Power Diamond Vista Wind Project, LLC	IPP	Diamond Vista Wind Project, LLC	KS	61789	DV	299.3	Onshore Wind Turbine	WND	WT
2019	1	6452	Florida Power & Light Co	Electric Utility	Interstate Solar Energy Center	FL	61768	1	74.5	Solar Photovoltaic	SUN	PV
2019	1	6452	Florida Power & Light Co	Electric Utility	Miami Dade Solar Energy Center	FL	61766	1	74.5	Solar Photovoltaic	SUN	PV
2019	1	6452	Florida Power & Light Co	Electric Utility	Pioneer Trail Solar Energy Center	FL	61767	1	74.5	Solar Photovoltaic	SUN	PV
2019	1	6452	Florida Power & Light Co	Electric Utility	Sunshine Gateway Solar Energy Center	FL	61763	1	74.5	Solar Photovoltaic	SUN	PV
2019	1	7019	Gay & Robinson Inc	Industrial	Gay Robinson	HI	50333	HYD3	6.5	Conventional Hydroelectric	WAT	HY
2019	1	61365	Hilltopper Wind Project, LLC	IPP	Hilltopper Wind Project	IL	61735	WT1	185.0	Onshore Wind Turbine	WND	WT
2019	1	61907	JBAB Solar I, LLC.	IPP	JBAB - Washington DC	DC	62374	PV1	5.9	Solar Photovoltaic	SUN	PV
2019	1	61289	Kaus Community Solar Garden, LLC	IPP	Kaus Community Solar	MN	61716	KAUS	1.0	Solar Photovoltaic	SUN	PV
2019	1	54913	NSTAR Electric Company	Electric Utility	Greenfield Solar PV	MA	62063	LG400	2.0	Solar Photovoltaic	SUN	PV
2019	1	54913	NSTAR Electric Company	Electric Utility	Hinsdale Solar PV	MA	62064	LG400	2.0	Solar Photovoltaic	SUN	PV
2019	1	54913	NSTAR Electric Company	Electric Utility	Southwick Solar PV	MA	62082	REC34	5.0	Solar Photovoltaic	SUN	PV
2019	1	54913	NSTAR Electric Company	Electric Utility	Springfield Solar PV	MA	62072	LG395	4.0	Solar Photovoltaic	SUN	PV
2019	1	61552	Pelzer Solar I, LLC	IPP	Pelzer Solar I	SC	61945	19	1.0	Solar Photovoltaic	SUN	PV
2019	1	61494	Radian Generation	IPP	NorWest Energy 4, LLC	OR	62268	NWE4	5.6	Solar Photovoltaic	SUN	PV
2019	1	61414	Rattlesnake Creek Wind Project, LLC	IPP	Rattlesnake Creek Wind Project	NE	59292	RCWP	318.1	Onshore Wind Turbine	WND	WT
2019	1	61587	Sagittarius Community Solar Gardens LLC	IPP	Sagittarius Community Solar Gardens LLC	MN	61994	CRUX	0.7	Solar Photovoltaic	SUN	PV
2019	1	17633	Southern Indiana Gas & Elec Co	Electric Utility	Volkman Road Solar Array	IN	61334	VRSA2	1.0	Batteries	MWH	BA
2019	1	60531	Standard Solar	IPP	Fort Indiantown Gap	PA	62408	X0028	3.0	Solar Photovoltaic	SUN	PV
2019	1	18454	Tampa Electric Co	Electric Utility	Bonnie Mine Solar	FL	61655	PV1	35.0	Solar Photovoltaic	SUN	PV
2019	1	61625	USS Brockway Solar LLC	IPP	USS Brockway Solar CSG	MN	62049	USSBR	1.0	Solar Photovoltaic	SUN	PV
2019	1	61627	USS JJ Solar LLC	IPP	USS JJ Solar CSG	MN	62047	USSJJ	1.0	Solar Photovoltaic	SUN	PV
2019	1	61629	USS Norelius Solar LLC	IPP	USS Norelius Solar CSG	MN	62045	USSNO	1.0	Solar Photovoltaic	SUN	PV
2019	1	61631	USS Solar Rapids LLC	IPP	USS Solar Rapids CSG	MN	62042	USSSR	1.0	Solar Photovoltaic	SUN	PV
2019	1	61666	WED GW Solar, LLC CSG	IPP	WED GW Solar, LLC	RI	62118	GWSOL	3.0	Solar Photovoltaic	SUN	PV
2019	1	61648	WED Green Hill, LLC	IPP	WED Green Hill, LLC	RI	62106	GHILL	3.0	Onshore Wind Turbine	WND	WT
2019	1	61649	WED Plainfield II, LLC	IPP	WED Plainfield II, LLC	RI	62107	PLAI2	3.0	Onshore Wind Turbine	WND	WT
2019	1	61650	WED Plainfield III, LLC	IPP	WED Plainfield III, LLC	RI	62108	PLAI3	3.0	Onshore Wind Turbine	WND	WT
2019	1	61651	WED Plainfield, LLC	IPP	WED Plainfield, LLC	RI	62109	PLAI1	3.0	Onshore Wind Turbine	WND	WT
2019	1	61652	WED Shun I, LLC	IPP	WED Shun I, LLC	RI	62110	SHUN1	3.0	Onshore Wind Turbine	WND	WT
2019	1	61653	WED Shun II, LLC	IPP	WED Shun II, LLC	RI	62111	SHUN2	3.0	Onshore Wind Turbine	WND	WT
2019	1	61654	WED Shun III, LLC	IPP	WED Shun III, LLC	RI	62112	SHUN3	3.0	Onshore Wind Turbine	WND	WT
2019	1	61559	Whitt Solar, LLC	IPP	Whitt Solar	SC	61952	20	2.0	Solar Photovoltaic	SUN	PV
2019	1	61672	Willow Spring Solar LLC	IPP	Willow Spring Solar, LLC	CA	60324	GEN01	100.0	Solar Photovoltaic	SUN	PV
2019	2	61259	Altair Community Solar Garden, LLC	IPP	Altair Community Solar Garden	MN	61645	ALTA	1.0	Solar Photovoltaic	SUN	PV
2019	2	59474	BQ Energy LLC	IPP	Kings Park Solar I	NY	59880	KIPS1	2.0	Solar Photovoltaic	SUN	PV
2019	2	59474	BQ Energy LLC	IPP	Kings Park Solar II	NY	59881	KIPS2	2.0	Solar Photovoltaic	SUN	PV
2019	2	61546	Bloom Solar, LLC	IPP	Bloom Solar	SC	61940	6	2.0	Solar Photovoltaic	SUN	PV
2019	2	61230	CD Arevon USA, Inc.	IPP	CA Flats Solar 150, LLC	CA	60034	GEN01	150.0	Solar Photovoltaic	SUN	PV
2019	2	3037	City of Carlyle - (IL)	Electric Utility	Carlyle	IL	936	11	2.8	Petroleum Liquids	DFO	IC
2019	2	61060	Cypress Creek Renewables	IPP	SCE&G Curie CSG	SC	61432	SCCU1	2.0	Solar Photovoltaic	SUN	PV
2019	2	61610	Delaware River Solar, LLC	IPP	Turner Rd Community Solar Project	NY	62160	300	2.0	Solar Photovoltaic	SUN	PV
2019	2	57170	EDF Renewable Asset Holdings, Inc.	IPP	Stoneray Power Partners, LLC	MN	62269	STNRY	100.0	Onshore Wind Turbine	WND	WT
2019	2	61688	ENGIE Generation North America LLC	IPP	Goose Lake MN DPC-GM	MN	62148	PV1	1.5	Solar Photovoltaic	SUN	PV
2019	2	11479	Madison Gas & Electric Co	IPP	Saratoga Wind Farm	IA	61070	SWE	66.0	Onshore Wind Turbine	WND	WT
2019	2	61292	NC State University, Energy Systems	Commercial	NCSU CCUP Cogeneration Plant	NC	61675	CTG1	5.6	Natural Gas Fired Combustion Turbine	NG	GT
2019	2	61292	NC State University, Energy Systems	Commercial	NCSU CCUP Cogeneration Plant	NC	61675	STG	1.0	Natural Gas Steam Turbine	NG	ST

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2019

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2019	2	61740	NJ Solar 1, LLC	IPP	Hunterdon Health System Solar Project	NJ	62225	PV1	1.5	Solar Photovoltaic	SUN	PV
2019	2	54913	NSTAR Electric Company	Electric Utility	Savoy Solar PV	MA	62065	LG400	2.0	Solar Photovoltaic	SUN	PV
2019	2	54913	NSTAR Electric Company	Electric Utility	Southampton Solar PV	MA	62066	LG400	2.0	Solar Photovoltaic	SUN	PV
2019	2	62070	Plainfield Solar LLC	IPP	Plainfield Community Solar LLC	MA	62579	2999	2.0	Solar Photovoltaic	SUN	PV
2019	2	61507	Plumsted 537 LLC	IPP	Plumsted 537 LLC	NJ	61892	PLMST	19.8	Batteries	MWH	BA
2019	2	60163	Soltage LLC	Industrial	Redwing Solar	SC	61946	11	2.0	Solar Photovoltaic	SUN	PV
2019	2	60403	TRS Fuel Cell, LLC	Electric CHP	TRS Fuel Cell	CT	60683	MMH1	3.7	Other Natural Gas	NG	FC
2019	2	61562	Torrecillas Wind Energy, LLC	IPP	Torrecillas Wind Energy, LLC	TX	61969	TWE	300.0	Onshore Wind Turbine	WND	WT

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

Table 6.4. Retired Utility Scale Generating Units by Operating Company, Plant, and Month, 2019

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2019	1	1692	Big Rivers Electric Corp	Electric Utility	HMP&L Station Two Henderson	KY	1382	1	153.0	Conventional Steam Coal	BIT	ST
2019	1	1692	Big Rivers Electric Corp	Electric Utility	HMP&L Station Two Henderson	KY	1382	2	159.0	Conventional Steam Coal	BIT	ST
2019	1	19145	DTE Tuscola, LLC	Industrial	Tuscola Station	IL	55245	TG1	3.8	Natural Gas Steam Turbine	NG	ST
2019	1	58945	EthosEnergy Power Plant Services	IPP	Quantum Pasco Power LP	FL	54424	GT1	48.5	Natural Gas Fired Combined Cycle	NG	CT
2019	1	58945	EthosEnergy Power Plant Services	IPP	Quantum Pasco Power LP	FL	54424	GT2	48.5	Natural Gas Fired Combined Cycle	NG	CT
2019	1	58945	EthosEnergy Power Plant Services	IPP	Quantum Pasco Power LP	FL	54424	ST1	24.0	Natural Gas Fired Combined Cycle	NG	CA
2019	2	6526	FirstEnergy Generation Corp	IPP	FirstEnergy Bruce Mansfield	PA	6094	1	830.0	Conventional Steam Coal	RC	ST
2019	2	6526	FirstEnergy Generation Corp	IPP	FirstEnergy Bruce Mansfield	PA	6094	2	830.0	Conventional Steam Coal	RC	ST
2019	2	10171	Kentucky Utilities Co	Electric Utility	E W Brown	KY	1355	1	106.0	Conventional Steam Coal	BIT	ST
2019	2	10171	Kentucky Utilities Co	Electric Utility	E W Brown	KY	1355	2	166.0	Conventional Steam Coal	BIT	ST
2019	2	15534	TalenEnergy Montour LLC	IPP	TalenEnergy Montour	PA	3149	11	11.0	Conventional Steam Coal	RC	ST
2019	2	58105	University of Redlands	Commercial	Energy Center	CA	58168	EC01	1.5	Natural Gas Internal Combustion Engine	NG	IC

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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	3	61608	Agilon Energy Holdings II, LLC	IPP	Victoria City Power LLC	TX	61241	VC-1	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	50.0
2019	3	61608	Agilon Energy Holdings II, LLC	IPP	Victoria City Power LLC	TX	61241	VC-2	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	50.0
2019	3	61608	Agilon Energy Holdings II, LLC	IPP	Victoria Port Power LLC	TX	61242	VP-1	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	50.0
2019	3	61608	Agilon Energy Holdings II, LLC	IPP	Victoria Port Power LLC	TX	61242	VP-2	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	50.0
2019	3	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	BAKUP	2.5	Petroleum Liquids	DFO	IC	(U) Under construction, less than or equal to 50 percent complete	2.5
2019	3	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	BLKST	1.0	Petroleum Liquids	DFO	IC	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	3	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	CHPP	3.5	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	3	61325	Aquarius Community Solar Gardens, LLC	IPP	Aquarius Community Solar	MN	61710	AQUA	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	3	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT7	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	161.9
2019	3	61705	Boring Solar LLC	IPP	Boring Solar LLC	OR	62169	BSPV2	2.2	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.2
2019	3	62003	CMR Solar, LLC	IPP	CMR Solar LLC	NY	62486	CMRSL	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	3	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	CTG5	216.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	234.9
2019	3	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	CTG6	216.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	234.9
2019	3	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	STG2	395.1	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	419.6
2019	3	61337	Cassiopeia Community Solar Garden, LLC	IPP	Cassiopeia Community Solar	MN	61711	CASS	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	3	61568	Chisago Holdco LLC	IPP	Chisago Holdco LLC, CSG	MN	61968	CHIS	3.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.0
2019	3	61419	Constellation Solar MC, LLC	IPP	Gateway Solar	MD	61794	GTWYN	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	3	61419	Constellation Solar MC, LLC	IPP	Gateway Solar	MD	61794	GTWYS	2.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.6
2019	3	61060	Cypress Creek Renewables	IPP	Cascade Solar (TX)	TX	61875	GEN1	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2019	3	61187	DG Minnesota CSG, LLC	IPP	Held Solar Project	MN	62267	HELD	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2019	3	5109	DTE Electric Company	Electric Utility	Pine River Wind Park	MI	61106	1	161.3	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	161.3
2019	3	61610	Delaware River Solar, LLC	IPP	Sacket Lake Rd #2 Community Solar Farm	NY	62159	20	1.7	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.7
2019	3	61420	ENGIE Storage Services NA LLC	Commercial	Pacific Union College BESS	CA	61795	12649	1.0	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	1.0
2019	3	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT1	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	3	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT2	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	3	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT3	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	3	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT4	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	3	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT5	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	3	58970	Ecoplexus, Inc	IPP	Folsom SP and CSP Sacramento	CA	61698	FOLSM	1.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.3
2019	3	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND1	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	3	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND2	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	3	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND3	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	3	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND4	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	3	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND5	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	3	59735	Enerparc CA2, LLC	IPP	Cloverdale Solar Center	CA	60813	ECA02	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	3	56201	Engie North America	IPP	Live Oak Wind Project	TX	61782	WTGS	199.5	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	199.5
2019	3	6035	Exelon Power	IPP	Exelon West Medway II LLC	MA	59882	4	97.4	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	100.0
2019	3	6035	Exelon Power	IPP	Exelon West Medway II LLC	MA	59882	5	97.4	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	100.0
2019	3	62004	Flowers Solar LLC	IPP	Flowers Solar LLC	NC	62487	FLOW	4.3	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.3
2019	3	61518	Frontenac Holdco LLC	IPP	Frontenac Holdco LLC, CSG	MN	61919	FRONT	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	3	61872	Gavilan District College Solar Project	IPP	Gavilan District College Solar Project	CA	61993	GDCBA	0.5	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	0.5
2019	3	61549	Goldenrod Solar, LLC	IPP	Goldenrod Solar	SC	61943	9	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	3	60025	Greenbacker Renewable Energy Corporation	IPP	Oak Leaf Solar XXVIII LLC	CO	62255	53973	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2019	3	60025	Greenbacker Renewable Energy Corporation	IPP	Oak Leaf Solar XXXII	CO	62251	53975	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2019	3	9417	Interstate Power and Light Co	Electric Utility	English Farms	IA	61565	1	169.9	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	169.9
2019	3	9417	Interstate Power and Light Co	Electric Utility	Upland Prairie	IA	61564	1	299.3	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	299.3
2019	3	61550	Jessamine Solar, LLC	IPP	Jessamine Solar	SC	61944	10	1.9	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.9
2019	3	61687	KCE NY 1, LLC	IPP	KCE NY 1	NY	62147	KNY1	20.0	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	20.0
2019	3	59898	Kawailoa Solar, LLC	IPP	Kawailoa Solar	HI	60125	KAWS	49.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	49.0
2019	3	60987	Lanikuhana Solar LLC	IPP	Lanikuhana Solar LLC	HI	58281	1	14.7	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	14.7
2019	3	61679	MSC-GreyCloud01 LLC	IPP	MSC-GreyCloud01 Community Solar	MN	62143	52785	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	3	11806	Massachusetts Mun Wholes Electric Co	Electric Utility	Ashburnham Energy Storage Project	MA	62219	AMLPB	3.0	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	3.0
2019	3	61396	Midway Wind, LLC	IPP	Midway Wind, LLC	TX	61776	MIDWY	162.9	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	162.9
2019	3	61227	Nautilus Solar Solutions	IPP	Nautilus Lindstrom Solar CSG	MN	62030	LI	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	3	61227	Nautilus Solar Solutions	IPP	Nautilus Saint Cloud Solar CSG	MN	62031	SC	4.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.0
2019	3	61227	Nautilus Solar Solutions	IPP	Nautilus Winsted Solar CSG	MN	62032	WS	3.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.0
2019	3	61227	Nautilus Solar Solutions	IPP	Synergen Panorama, LLC	MD	62327	SP	6.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	6.6
2019	3	59300	PNM Resources	Electric Utility	Vista Solar Energy Center	NM	62467	VISTA	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2019	3	61612	Panda Solar NC 1, LLC	IPP	Panda Solar NC 1, LLC	NC	62089	20002	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	61655	Panda Solar NC 2, LLC	IPP	Panda Solar NC 2, LLC	NC	62120	20003	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	3	61743	Patriot Wind Farm, LLC	IPP	Patriot Wind Farm	TX	58614	PAT1	226.1	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	226.1
2019	3	61585	Pisces Community Solar Garden LLC	IPP	Pisces Community Solar Garden	MN	61992	CRUX	0.7	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.7
2019	3	61614	Rollingstone Holdco LLC	IPP	Rollingstone Holdco CSG	MN	62037	ROLLI	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	3	61613	Sartell Holdco LLC	IPP	Sartell Holdco CSG	MN	62036	SARTE	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	3	61616	Solar Provider Group MN I LLC	IPP	Syncarpha Dodge 1	MN	62053	SPGD1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	60117	SunShare	IPP	Becker Solar 2 CSG	MN	62084	BCKR2	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	60117	SunShare	IPP	Becker Solar 3 CSG	MN	62085	BCKR3	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	60117	SunShare	IPP	Becker Solar 4 CSG	MN	62086	BCKR4	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	60117	SunShare	IPP	Becker Solar 5 CSG	MN	62087	BCKR5	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	60117	SunShare	IPP	Becker Solar CSG	MN	62040	BCKR1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	18454	Tampa Electric Co	Electric Utility	Peace Creek Solar	FL	61666	GEN	55.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	55.4
2019	3	61532	Techren Solar I LLC	IPP	Techren	NV	61611	TECH1	100.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	100.0
2019	3	61123	Upton County Solar 2 LLC	IPP	Castle Gap Solar	TX	60123	BAT1	9.9	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	9.9
2019	3	61557	Vincent Solar, LLC	IPP	Vincent Solar	SC	61950	14	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	3	59764	Waipio PV, LLC	IPP	Waipio Solar	HI	60024	WPO	45.9	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	45.9
2019	3	61558	Watauga Solar, LLC	IPP	Watauga Solar	SC	61951	15	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	3	60154	White Street Renewables LLC	IPP	White Street Renewables	NC	60364	WSLFG	1.6	Landfill Gas	LFG	IC	(TS) Construction complete, but not yet in commercial operation	1.6
2019	3	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK2	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK3	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK4	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK5	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	4	61012	AES Distributed Energy	IPP	Williamsburg	MA	62202	WIL01	4.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.0
2019	4	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA01	1.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.0
2019	4	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA02	1.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.0
2019	4	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA1C	11.8	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	11.8
2019	4	61326	Aquila Community Solar Gardens, LLC	IPP	Aquila Community Solar	MN	61704	AQUI	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	4	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT4	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	161.9
2019	4	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT5	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	161.9
2019	4	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT6	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	161.9

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	4	61329	Canopus Community Solar Garden, LLC	IPP	Canopus Community Solar	MN	61707	CANO	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	4	58492	Chattanooga Metropolitan Airport	Commercial	Chattanooga Metropolitan Airport Solar	TN	58515	GEN3	0.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.6
2019	4	60609	Clean Focus Renewables, Inc.	IPP	Rugged Solar LLC	CA	57960	1	80.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	80.0
2019	4	61567	DP-C2 Episode 1 LLC	IPP	Blackville Solar II	SC	61973	C2BV	20.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	20.0
2019	4	61567	DP-C2 Episode 1 LLC	IPP	Diamond Solar II	SC	61974	C2BV	8.2	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	8.2
2019	4	61567	DP-C2 Episode 1 LLC	IPP	Edison Solar II	SC	61975	C2BV	4.8	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.8
2019	4	61610	Delaware River Solar, LLC	IPP	Breesport Road Community Solar Farm	NY	62157	235	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	61610	Delaware River Solar, LLC	IPP	Hospital Rd Community Solar Farm	NY	62155	9	1.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.4
2019	4	61610	Delaware River Solar, LLC	IPP	Kelly Bridge Road Community Solar Farm	NY	62154	12	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	61610	Delaware River Solar, LLC	IPP	Pool Brook Rd Community Solar Farm	NY	62156	15	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	61610	Delaware River Solar, LLC	IPP	Sacket Lake Rd #1 Community Solar Farm	NY	62158	11	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	61339	Deneb Community Solar Garden, LLC	IPP	Deneb Community Solar	MN	61715	DENE	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	4	57202	E&E Enterprises LLC	IPP	Allendorf	IA	56215	ET	1.8	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	2.0
2019	4	61404	Edenton Solar	IPP	Edenton Solar	NC	61781	EDE	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	4	61070	Foundation CA Fund IX Manager, LLC	IPP	Foundation Mann Packing	CA	61443	WTG1	1.8	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	1.8
2019	4	58959	Freeport LNG Development L.P	Industrial	Freeport LP Pretreatment Facility	TX	59145	65GTG	77.5	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	97.0
2019	4	60399	GASNA 6P, LLC	IPP	San Joaquin Solar	CA	60678	SJ1B	1.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.5
2019	4	60428	Green City Recovery, LLC	IPP	Green City Recovery, LLC	KY	60703	2	1.0	Landfill Gas	LFG	IC	(TS) Construction complete, but not yet in commercial operation	1.0
2019	4	60025	Greenbacker Renewable Energy Corporation	IPP	Camden Dam Solar, LLC	NC	62330	CMDND	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	4	60025	Greenbacker Renewable Energy Corporation	IPP	Jamesville Road Solar, LLC	NC	62329	JMVLR	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	4	60025	Greenbacker Renewable Energy Corporation	IPP	Mill Pond Solar, LLC	NC	62328	MLLPD	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	4	60195	Groton Station Fuel Cell, LLC	IPP	Naval Sub Base New London Fuel Cell	CT	61743	MMH2	3.7	Other Natural Gas	NG	FC	(U) Under construction, less than or equal to 50 percent complete	3.7
2019	4	61952	Hanford Renewable Energy LLC	IPP	Verwey-Hanford Dairy Digester #2	CA	62418	4	1.0	Other Waste Biomass	OBG	IC	(TS) Construction complete, but not yet in commercial operation	1.0
2019	4	61952	Hanford Renewable Energy LLC	IPP	Verwey-Hanford Dairy Digester #3	CA	62419	4	1.0	Other Waste Biomass	OBG	IC	(TS) Construction complete, but not yet in commercial operation	1.0
2019	4	19547	Hawaiian Electric Co Inc	Electric Utility	West Loch Solar One	HI	61987	WLS1	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2019	4	61928	Jamison Solar Farm	Electric Utility	Jamison Solar Farm	SC	62396	1	1.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.1
2019	4	61964	Kimberly Clark - Mobile Alabama	Industrial	Kimberly Clark Mobile - CHP Plant	AL	62449	GT100	21.8	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	25.0
2019	4	61964	Kimberly Clark - Mobile Alabama	Industrial	Kimberly Clark Mobile - CHP Plant	AL	62449	GT200	21.8	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	25.0
2019	4	62037	MSC-Chisago02 LLC	IPP	MSC-Chisago02 LLC	MN	62538	52740	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	4	61680	MSC-Scandia01 LLC	IPP	MSC-Scandia01	MN	62144	52741	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	4	62035	MSC-Scott01 LLC	IPP	MSC-Scott01 LLC	MN	62535	52737	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	4	13201	Naknek Electric Assn, Inc	Electric Utility	Naknek	AK	6301	NA6	3.0	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	3.3
2019	4	13201	Naknek Electric Assn, Inc	Electric Utility	Naknek	AK	6301	NA7	3.0	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	3.3
2019	4	61943	North Rosamond Solar, LLC	IPP	North Rosamond Solar LLC	CA	59879	GEN01	160.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	160.0
2019	4	61663	Panda Solar NC 10, LLC	IPP	Panda Solar NC 10, LLC	NC	62128	20031	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	61664	Panda Solar NC 11, LLC	IPP	Panda Solar NC 11, LLC	NC	62129	20032	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	61656	Panda Solar NC 3, LLC	IPP	Panda Solar NC 3, LLC	NC	62121	20011	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	61657	Panda Solar NC 4, LLC	IPP	Panda Solar NC 4, LLC	NC	62122	20009	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	61660	Panda Solar NC 6, LLC	IPP	Panda Solar NC 6, LLC	NC	62124	20028	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	4	61659	Panda Solar NC 7 , LLC	IPP	Panda Solar NC 7, LLC	NC	62125	20038	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2019	4	61661	Panda Solar NC 8, LLC	IPP	Panda Solar NC 8, LLC	NC	62126	20052	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	61662	Panda Solar NC 9, LLC	IPP	Panda Solar NC 9, LLC	NC	62127	20022	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	62010	Prairie Queen Wind Farm LLC	IPP	Prairie Queen Wind Farm	KS	62488	WT	199.3	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	199.3
2019	4	16191	Robbins Lumber Inc	Industrial	Robbins Lumber	ME	50230	WEG	8.5	Wood/Wood Waste Biomass	WDS	ST	(TS) Construction complete, but not yet in commercial operation	10.0
2019	4	60947	Tesla Inc.	IPP	Bd of Educ of Queen Anne's Cnty, Cnty HS	MD	62074	PV1	1.7	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.7
2019	4	60947	Tesla Inc.	IPP	Blue Shld Of Cal- El Dorado Hlls Mtr B	CA	62077	PV1	2.1	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.1
2019	4	60947	Tesla Inc.	IPP	Estrella Mountain PV	AZ	60230	PV1	1.8	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.8
2019	4	60947	Tesla Inc.	IPP	Pima Community College	AZ	62075	PV1	1.1	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.1
2019	4	61839	USS Kost Trail Solar LLC	IPP	USS Kost Trail Solar CSG	MN	62339	USSKT	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	4	19511	University of Alaska	Commercial	University of Alaska Fairbanks	AK	50711	GEN5	17.0	Conventional Steam Coal	SUB	ST	(TS) Construction complete, but not yet in commercial operation	17.0
2019	4	58105	University of Redlands	Commercial	Energy Center	CA	58168	TURB1	0.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	0.3
2019	4	58105	University of Redlands	Commercial	Energy Center	CA	58168	TURB2	0.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	0.3
2019	4	58105	University of Redlands	Commercial	Energy Center	CA	58168	TURB3	0.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	0.3
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	A.J. Mihm Generating Station	MI	61391	M1	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	A.J. Mihm Generating Station	MI	61391	M2	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	A.J. Mihm Generating Station	MI	61391	M3	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	F.D. Kuester Generating Station	MI	61392	K1	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	F.D. Kuester Generating Station	MI	61392	K2	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	F.D. Kuester Generating Station	MI	61392	K3	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	F.D. Kuester Generating Station	MI	61392	K4	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	F.D. Kuester Generating Station	MI	61392	K5	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	F.D. Kuester Generating Station	MI	61392	K6	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	F.D. Kuester Generating Station	MI	61392	K7	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	4	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	4	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	4	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	4	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	5	60571	AEP Onsite Partners	IPP	Lady Slipper Solar Array	MN	62414	PV1	4.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.5
2019	5	61012	AES Distributed Energy	IPP	Palmer	MA	62135	PAL01	3.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.5
2019	5	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	1	0.6	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	0.6
2019	5	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	2B	0.6	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	0.6
2019	5	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	3	1.1	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	1.1
2019	5	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	4C	0.5	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	0.5
2019	5	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT3	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	161.9
2019	5	60672	Birdsboro Power LLC	IPP	Birdsboro Power	PA	61035	GEN1	476.0	Natural Gas Fired Combined Cycle	NG	CS	(V) Under construction, more than 50 percent complete	525.0
2019	5	58871	Citizens Enterprises Corporation	IPP	Two Mile Desert Project	NC	60510	PV1	16.2	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	16.2
2019	5	3913	City of Colby - (KS)	Electric Utility	Colby City of	KS	1272	9	3.0	Petroleum Liquids	DFO	IC	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	5	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	7	4.4	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	5	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	8	3.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	3.3
2019	5	61567	DP-C2 Episode 1 LLC	IPP	Richardson Solar II	SC	61972	C2BV	3.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.6
2019	5	61610	Delaware River Solar, LLC	IPP	Boas Rd #1 Community Solar Farm	NY	62530	496	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	5	61610	Delaware River Solar, LLC	IPP	Boas Rd #2 Community Solar Farm	NY	62531	1010	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	5	61610	Delaware River Solar, LLC	IPP	Boas Rd #3 Community Solar Farm	NY	62532	1011	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	5	61610	Delaware River Solar, LLC	IPP	Boas Rd #4 Community Solar Farm	NY	62533	1023	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	5	56201	Engie North America	IPP	Seymour Hills Wind Project, LLC	TX	62227	WTGS	30.2	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	30.2
2019	5	12685	Entergy Mississippi LLC	Electric Utility	Hinds Energy Facility	MS	55218	H04BS	36.4	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	49.1
2019	5	60251	GRP Franklin Renewable Energy Facility, LLC	IPP	GRP Franklin Renewable Energy Facility	GA	60550	GEN	93.5	Wood/Wood Waste Biomass	WDS	ST	(V) Under construction, more than 50 percent complete	93.5
2019	5	60846	GRP Madison Renewable Energy Facility, LLC	IPP	GRP Madison Renewable Energy Facility	GA	61213	GEN	65.0	Wood/Wood Waste Biomass	WDS	ST	(V) Under construction, more than 50 percent complete	65.0
2019	5	7136	Georgia-Pacific Consr Prods LP-Naheola	Industrial	Georgia-Pacific Consr Prods LP-Naheola	AL	10699	TG4	29.4	Wood/Wood Waste Biomass	WDS	ST	(TS) Construction complete, but not yet in commercial operation	40.3

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	5	60195	Groton Station Fuel Cell, LLC	IPP	Naval Sub Base New London Fuel Cell	CT	61743	MMH3	3.7	Other Natural Gas	NG	FC	(U) Under construction, less than or equal to 50 percent complete	3.7
2019	5	61456	Hope Farm Solar, LLC	IPP	Hope Farm Solar, LLC	RI	61840	HOPE	10.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	10.0
2019	5	9130	Hutchinson Utilities Comm	Electric Utility	Hutchinson Plant #1	MN	1980	11	9.8	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.8
2019	5	9130	Hutchinson Utilities Comm	Electric Utility	Hutchinson Plant #1	MN	1980	12	9.8	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.8
2019	5	9234	Indiana Municipal Power Agency	Electric Utility	Tipton Solar Park	IN	62305	STIP	5.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.3
2019	5	62038	MSC-Chisago01 LLC	IPP	MSC-Chisago01 LLC	MN	62536	52739	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	5	62039	MSC-Rice01 LLC	IPP	MSC-Rice01 LLC	MN	62537	52738	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	5	56990	NJR Clean Energy Ventures Corporation	IPP	IFF Union Beach Project	NJ	62306	IFFUB	5.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.5
2019	5	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	18	13.5	Petroleum Liquids	DFO	GT	(V) Under construction, more than 50 percent complete	15.4
2019	5	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	19	1.0	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	1.0
2019	5	13484	New York Methodist Hospital	IPP	New York Methodist Hospital	NY	52091	CCHEG	1.5	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	1.5
2019	5	13902	NorthWestern Energy	Electric Utility	Hauser	MT	2185	HAU7	3.4	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	3.5
2019	5	56545	Pattern Operators LP	IPP	Grady Wind Energy Center, LLC	NM	60317	1	220.5	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	220.5
2019	5	61605	Riverhead Solar Farm LLC	IPP	Riverhead Solar Farm	NY	62017	RIV1	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2019	5	61699	SR Meridian II	IPP	Meridian II	MS	62164	MRDII	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	5	61677	Sol Systems	IPP	Warren Solar Farm LLC	NC	62223	10423	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	5	59598	Tooele Army Depot	IPP	Tooele Army Depot	UT	59817	PV1	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2019	5	61883	USS DVL Solar CSG	IPP	USS DVL Solar CSG	MN	62360	USDVL	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	5	61882	USS Eggo Solar CSG	IPP	USS Eggo Solar CSG	MN	62359	USEGG	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	5	61841	USS Lake Patterson Solar	IPP	USS Lake Patterson Solar CSG	MN	62337	USLP	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	5	61842	USS Webster Solar	IPP	USS Webster Solar CSG	MN	62336	USWEB	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	5	19564	University of Notre Dame	Commercial	University of Notre Dame	IN	50366	GT1	5.6	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	5.4
2019	5	19564	University of Notre Dame	Commercial	University of Notre Dame	IN	50366	GT2	5.6	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	5.4
2019	6	60278	64KT 8me LLC	IPP	Springbok 3 Solar Farm	CA	60491	SB3SF	90.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	90.0
2019	6	61012	AES Distributed Energy	IPP	Founders Homestead Farms Solar	RI	62302	RFH01	4.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.5
2019	6	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA03	1.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA04	1.5	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.5
2019	6	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA05	1.3	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.3
2019	6	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA06	1.2	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.2
2019	6	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA07	1.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA08	1.9	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.9
2019	6	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA09	4.5	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	4.5
2019	6	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA10	1.3	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.3
2019	6	59474	BQ Energy LLC	IPP	Yeoman Creek	IL	61910	YEOM	8.8	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	8.8
2019	6	60366	BRE NC Solar 2, LLC	IPP	BRE NC Solar 2	NC	60626	BEAM2	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	60367	BRE NC Solar 3, LLC	IPP	BRE NC Solar 3	NC	60627	BEAM3	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	60368	BRE NC Solar 4, LLC	IPP	BRE NC Solar 4	NC	60628	BEAM4	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	57449	Borrego Solar Systems Inc	Industrial	Clif Bar Bakery of Twin Falls	ID	62151	PV1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	6	61467	Central CA Fuel Cell 2, LLC	Electric CHP	Tulare WWTP BioMat Fuel Cell	CA	61846	MM27	2.8	Other Natural Gas	NG	FC	(V) Under construction, more than 50 percent complete	2.8
2019	6	61926	Dryden-Tompkins Solar I, LLC	IPP	Ellis Solar	NY	62413	ELLIS	18.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	18.0
2019	6	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT1	8.7	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	8.9
2019	6	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT2	8.7	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	8.9
2019	6	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT3	8.7	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	8.9
2019	6	58970	Ecoplexus, Inc	IPP	Grandy PV 1	NC	59518	GRAND	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2019	6	11241	Entergy Louisiana LLC	Electric Utility	St. Charles Power Station (LA)	LA	60926	1A	250.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	250.0
2019	6	11241	Entergy Louisiana LLC	Electric Utility	St. Charles Power Station (LA)	LA	60926	1B	250.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	250.0
2019	6	11241	Entergy Louisiana LLC	Electric Utility	St. Charles Power Station (LA)	LA	60926	1C	500.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	500.0
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1A	376.6	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	376.6
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1B	376.6	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	376.6
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1C	376.6	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	376.6
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1ST	593.3	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	593.3
2019	6	61037	Foard City Wind, LLC	IPP	Foard City Wind	TX	61402	FOARD	352.8	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	352.8
2019	6	62062	GD Richmond Buttonwoods I, LLC	IPP	GD Richmond Buttonwoods I, LLC	RI	62567	GDBUT	1.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.3
2019	6	60747	Gamble Solar, LLC	IPP	Gamble Solar	NC	61127	12348	3.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.0
2019	6	7140	Georgia Power Co	Electric Utility	Guyton Community Solar	GA	62392	1	3.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.6
2019	6	7140	Georgia Power Co	Electric Utility	Waynesboro Community Solar	GA	62409	1	2.4	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.4
2019	6	60025	Greenbacker Renewable Energy Corporation	IPP	Blue Star	MD	62332	BLUES	7.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	7.5
2019	6	60025	Greenbacker Renewable Energy Corporation	IPP	Sol Phoenix	MD	62331	SOLPH	2.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.5
2019	6	60040	Hale Wind Energy	IPP	Hale Community Wind Farm	TX	59247	HALE1	478.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	478.0
2019	6	57389	IKEA Property Inc	Commercial	IKEA Live Oak Rooftop PV System	TX	62152	570	1.7	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.7
2019	6	57389	IKEA Property Inc	Commercial	IKEA Norfolk Rooftop PV System	VA	62355	569PV	1.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.3
2019	6	54769	INEOS USA LLC	Industrial	Power Island	TX	10154	GEN2	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	50.0
2019	6	54769	INEOS USA LLC	Industrial	Power Island	TX	10154	GEN3	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	50.0
2019	6	49893	Invenergy Services LLC	IPP	Santa Rita East	TX	62038	STRAE	302.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	302.4
2019	6	59678	KDC Solar PR1, LLC	IPP	KDC Solar PR1, LLC	NJ	59910	SF	22.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	22.0
2019	6	59458	Landfill Energy Systems Florida	IPP	Sarasota County LFGTE Facility	FL	59686	LESF4	1.6	Landfill Gas	LFG	IC	(L) Regulatory approvals pending. Not under construction	1.6
2019	6	11806	Massachusetts Mun Wholes Electric Co	Electric Utility	Berkshire Wind Power Project	MA	57721	HN-8	2.3	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	2.3
2019	6	11806	Massachusetts Mun Wholes Electric Co	Electric Utility	Berkshire Wind Power Project	MA	57721	HN-9	2.3	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	2.3
2019	6	61925	Middlesex-Yates Solar, LLC	IPP	Daum Solar	NY	62412	DAUM	4.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	4.0
2019	6	61708	NRG Canal 3 Development LLC	IPP	Canal	MA	1599	3	330.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	330.0
2019	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	501	375.7	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	375.7
2019	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	502	200.6	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	200.6
2019	6	61658	Panda Solar NC 5, LLC	IPP	Panda Solar NC 5, LLC	NC	62123	20007	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	6	60389	Rabbit Hill Energy Storage Project	IPP	Rabbit Hill Energy Storage Project	TX	60649	1	9.9	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	9.9
2019	6	61485	Rio Bravo Windpower, LLC	IPP	Rio Bravo Windpower, LLC	TX	61865	1	237.6	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	237.6
2019	6	17650	Southern Power Co	IPP	Mankato Energy Center	MN	56104	CTG1	200.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	210.0
2019	6	61916	Spencer-Tioga Solar, LLC	IPP	Pasto Solar	NY	62389	PASTO	16.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	16.0
2019	6	61492	StraightUp Solar	IPP	John A Logan College Solar	IL	61878	JALC	1.6	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.9
2019	6	58658	Sunlight Partners	IPP	Higgins Solar	NC	60166	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	58658	Sunlight Partners	IPP	Iga Solar	NC	60170	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	58658	Sunlight Partners	IPP	Izia Solar	NC	60141	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	61533	Techren Solar II LLC	IPP	Techren Solar II LLC	NV	61930	TECH2	200.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	200.0
2019	6	61885	USS East Hauer Watt Solar CSG	IPP	USS East Hauer Watt CSG	MN	62362	USEHW	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	6	61881	USS King 2 CSG	IPP	USS King 2 CSG	MN	62358	USK12	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	7	61466	Bakersfield Fuel Cell 1, LLC	Electric CHP	Bolthouse Farms Fuel Cell	CA	61845	MM28	2.5	Other Natural Gas	NG	FC	(U) Under construction, less than or equal to 50 percent complete	2.5
2019	7	61466	Bakersfield Fuel Cell 1, LLC	Electric CHP	Bolthouse Farms Fuel Cell	CA	61845	MM29	2.5	Other Natural Gas	NG	FC	(U) Under construction, less than or equal to 50 percent complete	2.5
2019	7	61745	Burgaw Solar, LLC	IPP	Burgaw Solar, LLC	NC	62240	1072	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	7	58871	Citizens Enterprises Corporation	IPP	Citizens Imperial Solar	CA	62052	CIS1	30.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	30.0
2019	7	3265	Cleco Power LLC	Electric Utility	St. Mary Clean Energy Center	LA	60610	1	47.9	All Other	WH	OT	(V) Under construction, more than 50 percent complete	58.2
2019	7	57280	Eagle Creek RE LLC	IPP	Swinging Bridge 2	NY	2634	SWI3	1.2	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	1.2

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	7	60147	Enerparc Solar Development, LLC	IPP	Hilly Branch	NC	60358	28941	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	7	56201	Engie North America	IPP	Solomon Forks Wind Project, LLC	KS	61984	WTGS	275.6	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	275.6
2019	7	62061	GD West Greenwich Victory I, LLC	IPP	GD West Greenwich Victory I, LLC	RI	62568	GDVIC	1.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.8
2019	7	54913	NSTAR Electric Company	Electric Utility	Hampden Solar PV	MA	62073	LG390	3.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.5
2019	7	61929	Runway Solar Farm	Electric Utility	Runway Solar Farm	SC	62397	1	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	7	60975	SR Innovation, LLC	IPP	SR Innovation - NIKE PV	TN	61332	NIKE2	1.7	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	1.7
2019	7	61588	San Pablo Raceway, LLC	IPP	San Pablo Raceway	CA	62004	SPRWY	100.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	100.0
2019	7	61502	Sholes Wind Energy Center, LLC	IPP	Sholes Wind Energy Center	NE	61889	WSN1	160.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	160.0
2019	7	60163	Soltage LLC	IPP	Ace Solar	SC	61937	18	1.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	1.0
2019	7	58658	Sunlight Partners	IPP	Cash Solar	NC	60178	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	7	58658	Sunlight Partners	IPP	Robin Solar	NC	60165	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	8	61608	Agilon Energy Holdings II, LLC	IPP	Victoria Port Power II LLC	TX	61966	VP2-1	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	50.0
2019	8	61608	Agilon Energy Holdings II, LLC	IPP	Victoria Port Power II LLC	TX	61966	VP2-2	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	50.0
2019	8	221	Alaska Village Elec Coop, Inc	Electric Utility	Quinhagak	AK	57057	1A	0.5	Petroleum Liquids	DFO	IC	(U) Under construction, less than or equal to 50 percent complete	0.5
2019	8	60877	Antelope DSR 3, LLC	IPP	Antelope DSR 3	CA	61265	ADSR3	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2019	8	59714	Antrim Wind Energy LLC	IPP	Antrim Wind	NH	59953	AWND1	28.4	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	28.8
2019	8	61934	CI III VK I TE Partnership LLC	IPP	Sage Solar I-III	UT	62399	77778	57.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	57.6
2019	8	59550	Croda Inc.	Industrial	Croda Atlas Point CHP	DE	59783	91199	2.0	Landfill Gas	LFG	IC	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	8	61610	Delaware River Solar, LLC	IPP	Big Tree Community Solar Farm	NY	62476	607	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	8	61610	Delaware River Solar, LLC	IPP	Burritt Rd Community Solar Farm	NY	62480	635	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	8	61610	Delaware River Solar, LLC	IPP	Dryden Rd #2 Community Solar Farm	NY	62477	372	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	8	61610	Delaware River Solar, LLC	IPP	Gaskill Rd Community Solar Farm	NY	62474	928	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	8	61610	Delaware River Solar, LLC	IPP	Washington St Community Solar Farm #1	NY	62472	617	2.2	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.2
2019	8	61610	Delaware River Solar, LLC	IPP	Washington St Community Solar Farm #3	NY	62473	1035	2.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.5
2019	8	61610	Delaware River Solar, LLC	IPP	Washington St Community Solar Farm #4	NY	62471	1034	2.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.5
2019	8	61610	Delaware River Solar, LLC	IPP	Woodoak Drive Community Solar Farm	NY	62479	175	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	8	58135	Ecos Energy LLC	IPP	Apple Hill Solar	VT	61037	APPL	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	8	59685	JPMorgan Chase Bank	Commercial	South Campus Solar	DE	59922	G1789		Solar Photovoltaic	SUN	PV	(OT) Other	1.8
2019	8	22091	New-Indy Ontario LLC	Industrial	New-Indy Ontario Mill	CA	10427	GEN2	29.4	Natural Gas Fired Combined Cycle	NG	CC	(V) Under construction, more than 50 percent complete	31.8
2019	8	58658	Sunlight Partners	IPP	Blue Bird Solar	NC	60177	PV1	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.0
2019	8	60193	Tamworth Holdings, LLC	IPP	Tamworth Holdings	NC	60394	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	8	60410	Tanager Holdings, LLC	IPP	Tanager Holdings	NC	60691	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	8	61884	USS Brude Solar CSG	IPP	USS Brude Solar CSG	MN	62361	USBRU	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	9	60328	Big Level Wind LLC	IPP	Big Level Wind	PA	60551	BLW01	90.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	90.0
2019	9	60719	Broadlands Wind Farm LLC	IPP	Broadlands Wind Farm	IL	61161	GEN01	300.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	300.0
2019	9	59365	Capital Power Corporation	IPP	Black Fork Wind Energy Project	OH	59907	GEN	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	9	61060	Cypress Creek Renewables	IPP	Lampwick	TX	61872	GEN1	7.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	7.5
2019	9	61054	Fluvanna Wind Energy 2 LLC	IPP	Gopher Creek Wind Farm	TX	61417	GCWF	158.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	158.0
2019	9	61374	Foxtail Wind, LLC	Electric Utility	Foxtail Wind, LLC	ND	61747	1	150.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	150.0
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Essex	VT	62383	GMPBE	2.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	2.0
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Essex	VT	62383	GMPSE	4.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	4.5
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Ferrisburgh	VT	62382	GMPBF	2.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	2.0
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Ferrisburgh	VT	62382	GMPSF	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Milton	VT	62381	GMPBM	2.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	2.0
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Milton	VT	62381	GMPSM	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	9	61957	Kearny Mesa Storage LLC	IPP	Kearny Mesa Storage LLC	CA	62441	U1	1.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	9	10273	Kimberly-Clark Corp	Industrial	Chester Operations	PA	50410	6	14.1	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	17.3
2019	9	61886	Lockett Windfarm, LLC	IPP	Lockett Windfarm	TX	62356	LOC	183.8	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	183.8
2019	9	58606	Mauka Fit One LLC	IPP	Mauka FIT One	HI	58662	3501	3.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.5
2019	9	60018	NET Power, LLC	IPP	NET Power La Porte Station	TX	60910	NPLPS	25.5	Other Natural Gas	NG	OT	(TS) Construction complete, but not yet in commercial operation	25.5
2019	9	61515	Phoebe Energy Project, LLC	IPP	Phoebe Solar	TX	61906	PHOEB	250.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	250.0
2019	9	61771	Ranchero Wind Farm LLC	IPP	Ranchero Wind Farm LLC	TX	62259	RAN	300.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	300.0
2019	9	16534	Sacramento Municipal Util Dist	Electric Utility	White Rock/Slab Creek	CA	435	H3	2.7	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	2.7
2019	9	17609	Southern California Edison Co	Electric Utility	DESI-1 Battery Energy Storage Facility	CA	60699	DESI1	2.4	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	2.4
2019	10	62051	Airport Solar LLC	IPP	Airport Solar	OR	62560	APS	47.3	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	47.3
2019	10	61973	Black Hills Electric Generation LLC	IPP	Busch Ranch II Wind Farm	CO	62445	WT	59.4	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	59.4
2019	10	61465	Brush Solar Center	IPP	Brush Solar Center	OR	61844	BRUSH	2.8	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.8
2019	10	61610	Delaware River Solar, LLC	IPP	Yellow Mills Rd #1 Community Solar Farm	NY	62517	1142	2.3	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.3
2019	10	61610	Delaware River Solar, LLC	IPP	Yellow Mills Rd #2 Community Solar Farm	NY	62518	1181	2.3	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.3
2019	10	61610	Delaware River Solar, LLC	IPP	Yellow Mills Rd #3 Community Solar Farm	NY	62519	1244	2.3	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.3
2019	10	60259	Green River Wind Farm, LLC	IPP	Green River Wind Farm	IL	60471	GRNRV	212.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	212.0
2019	10	61473	Morgan Solar Center	IPP	Morgan Solar Center	OR	61855	MORGN	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	10	54913	NSTAR Electric Company	Electric Utility	East Longmeadow Solar PV	MA	62059	LG400	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	10	62029	Renew Solar ABC Sacramento LLC	IPP	Renew Solar ABC Sacramento LLC	CA	62545	SACRA	1.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.7
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG4	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG5	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG6	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG7	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	17609	Southern California Edison Co	Electric Utility	DESI-2 Battery Storage Facility	CA	62460	DESI2	1.4	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.4
2019	10	58658	Sunlight Partners	IPP	Brooke Solar	NC	60140	PV1	4.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.5
2019	10	61472	Vale Solar Center	IPP	Vale Solar Center	OR	61856	VALE	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	10	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	CTG3	225.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	232.9
2019	10	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	CTG4	225.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	232.9
2019	10	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	STG2	250.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	260.1
2019	10	59260	Wright Solar Park LLC	IPP	Wright Solar Park	CA	59525	FRWSP	200.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	200.0
2019	11	61541	1634 Solar, LLC	IPP	1634 Solar	SC	61935	3	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	11	61544	Bani Solar, LLC	IPP	Bani Solar	SC	61938	4	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	11	61519	Blackville Solar Farm, LLC	IPP	Blackville Solar Farm, LLC	SC	61918	1	7.2	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.2
2019	11	62063	Blue Summit III Wind, LLC	IPP	Blue Summit III Wind	TX	62566	BS3	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.2
2019	11	60656	Chestnut Solar LLC	IPP	Chestnut Solar	NC	61011	PV1	74.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	74.9
2019	11	61610	Delaware River Solar, LLC	IPP	State Route 64N Community Solar Farm	NY	62520	1089	1.2	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	1.2
2019	11	61610	Delaware River Solar, LLC	IPP	Villa Roma Rd #1	NY	62525	40	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	11	61610	Delaware River Solar, LLC	IPP	Villa Roma Rd #2	NY	62526	41	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	11	61610	Delaware River Solar, LLC	IPP	Villa Roma Rd #3	NY	62527	390	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	11	61610	Delaware River Solar, LLC	IPP	Villa Roma Rd #4	NY	62528	391	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	CT5	191.2	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	191.2
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	CT7	191.2	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	191.2
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	ST6	102.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	102.0
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	ST8	102.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	102.0
2019	11	61857	Five Forks Solar	IPP	Five Forks Solar	NC	59951	5FRK	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	11	61401	North 301 Solar	IPP	North 301 Solar	NC	61778	N301	26.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	26.9
2019	11	61521	Pegasus Wind, LLC	IPP	Pegasus Wind	MI	61916	PWEC	146.1	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	146.1
2019	11	62047	Roadrunner Solar, LLC	IPP	Roadrunner, LLC	TX	62561	RODR1	200.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	200.0
2019	11	59770	Shorthorn Holdings, LLC	IPP	Shorthorn Holdings	SC	60028	PV1	15.4	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	15.4
2019	11	2770	Terra-Gen Operating Co-Wind	IPP	Voyager Wind I	CA	60594	VYGR1	131.1	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	131.1
2019	11	61276	West Liberty Renewables LLC	IPP	West Liberty Wind Farm	IA	61057	T1	2.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	2.5
2019	11	61276	West Liberty Renewables LLC	IPP	West Liberty Wind Farm	IA	61057	T2	2.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	2.5
2019	12	60600	Adams Solar, LLC	IPP	Adams Solar	NC	60949	PV1	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	12	61344	Advanced Microgrid Solutions	IPP	Hybrid Holdings 1 Capistrano	CA	62515	HH4MW	4.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	4.0
2019	12	61617	Alpha Value Solar, LLC	IPP	Alpha Value Solar	NC	62054	AVS01	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	12	61118	Ameresco, Inc - Candlewood	IPP	Candlewood Solar	CT	61517	CANDL	25.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	25.0
2019	12	15399	Avangrid Renewables LLC	IPP	Coyote Ridge	SD	61047	WT1	98.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	98.0
2019	12	15399	Avangrid Renewables LLC	IPP	Karankawa Wind LLC	TX	61343	WT1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	15399	Avangrid Renewables LLC	IPP	Montague Wind Power Facility LLC	OR	58099	1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	15399	Avangrid Renewables LLC	IPP	Otter Creek Wind Farm LLC	IL	61344	WT1	129.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	129.0
2019	12	15399	Avangrid Renewables LLC	IPP	Tatanka Ridge	SD	61046	WT1	98.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	98.0
2019	12	61474	Baker City Solar	IPP	Baker City Solar	OR	61854	BAKER	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2019	12	61985	Beech Ridge II Wind Energy Center	IPP	Beech Ridge II Wind Energy Center	WV	62482	GEN1	56.2	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	56.2
2019	12	60560	Big Blue River Wind Farm LLC	IPP	Big Blue River Wind Farm	IN	60907	WT1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	60289	Blazing Star Wind Farm, LLC	IPP	Blazing Star Wind Farm 1	MN	60504	BLZG1	200.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	200.0
2019	12	60816	Boston Medical Center	Commercial	Boston Medical Center CHP Plant	MA	61186	BATT	1.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	60714	Burke Wind LLC	IPP	Burke Wind, LLC	ND	61100	GE23	199.4	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	199.4
2019	12	59365	Capital Power Corporation	IPP	Garrison Butte Wind, LLC	ND	60066	GEN	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2019	12	58508	Carolina Solar Energy II LLC	IPP	McGrigor Farm Solar	NC	60440	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	12	58508	Carolina Solar Energy II LLC	IPP	Tides Lane Farm	NC	60429	PV1	3.7	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.7
2019	12	61773	Childress Solar Park LLC	IPP	Misae Solar	TX	62249	77777	240.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	240.0
2019	12	61817	Collard Holdings, LLC	IPP	Collard Holdings Solar	NC	62317	PV	10.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2019	12	56769	Consolidated Edison Development Inc.	IPP	Burt County Wind	NE	61511	BCNE	75.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	75.0
2019	12	60290	Crocker Wind Farm, LLC	IPP	Crocker Wind Farm	SD	60505	CRCKR	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0
2019	12	61416	Crowned Ridge Wind, LLC	IPP	Crowned Ridge Wind Energy Center	SD	60503	CTTL1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	59464	Current Energy Group	IPP	Hickory	NC	59829	5515	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	12	5109	DTE Electric Company	Electric Utility	Dearborn Energy Center	MI	62289	GTG-1	15.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	15.0
2019	12	5109	DTE Electric Company	Electric Utility	Dearborn Energy Center	MI	62289	GTG-2	15.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	15.0
2019	12	5109	DTE Electric Company	Electric Utility	Dearborn Energy Center	MI	62289	STG-1	5.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	5.0
2019	12	61610	Delaware River Solar, LLC	IPP	Frey Rd #1 Community Solar Farm	NY	62504	1159	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	12	61610	Delaware River Solar, LLC	IPP	Frey Rd #2 Community Solar Farm	NY	62521	1442	1.4	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	1.4
2019	12	58468	Dominion Renewable Energy	Electric Utility	Colonial Trail West	VA	61985	CTWS	142.4	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	142.4
2019	12	61911	Dougherty County Solar, LLC	IPP	Dougherty County Solar, LLC	GA	62375	PV1	120.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	120.0
2019	12	6455	Duke Energy Florida, LLC	Electric Utility	Lake Placid Solar Power Plant	FL	62541	PV1	45.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	45.0
2019	12	6455	Duke Energy Florida, LLC	Electric Utility	Trenton Solar Power Plant	FL	62543	PV1	74.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.9
2019	12	56215	E ON Climate Renewables N America LLC	IPP	Cranell Wind Farm LLC	TX	62416	WT1	220.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	220.0
2019	12	56215	E ON Climate Renewables N America LLC	IPP	Peyton Creek Wind Farm LLC	TX	62417	WT1	220.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	220.0
2019	12	56215	E ON Climate Renewables N America LLC	IPP	West of the Pecos Solar	TX	62415	WOTP1	100.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	100.0
2019	12	57170	EDF Renewable Asset Holdings, Inc.	IPP	Valentine Solar, LLC	CA	62288	VAL01	111.2	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	111.2
2019	12	58970	Ecoplexus, Inc	IPP	E Nash PV1	NC	60002	NASH1	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2019	12	58970	Ecoplexus, Inc	IPP	Everett PV1	NC	60997	EVRT1	10.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2019	12	58970	Ecoplexus, Inc	IPP	High Shoals PV1	NC	59997	HISHO	16.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	16.0
2019	12	58970	Ecoplexus, Inc	IPP	Willoughby PV1	NC	60003	WILL1	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2019	12	58135	Ecos Energy LLC	IPP	Lake Perris Solar	CA	60973	LKPR	1.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.5
2019	12	58135	Ecos Energy LLC	IPP	San Jacinto Solar	CA	60972	SJAC	1.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.5
2019	12	58135	Ecos Energy LLC	IPP	Weybridge 1 Solar	VT	61038	WEY1	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	12	61915	Emmons-Logan Wind, LLC	IPP	Emmons-Logan Wind, LLC	ND	62380	ELLLC	300.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	300.0
2019	12	60496	Enerparc Inc.	IPP	Neenach Solar Center	CA	60826	ECA03	1.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.5
2019	12	60496	Enerparc Inc.	IPP	Scituate RI Solar, LLC	RI	61841	SCITU	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2019	12	60147	Enerparc Solar Development, LLC	IPP	Pike Road Solar	NC	60360	51116	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	12	56615	First Solar Project Development	IPP	Windhub Solar A LLC	CA	59878	GEN01	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2019	12	6541	Formosa Plastics Corp	Industrial	Formosa Utility Venture Ltd	TX	10554	3ST1	38.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	40.0
2019	12	6541	Formosa Plastics Corp	Industrial	Formosa Utility Venture Ltd	TX	10554	3TBG1	97.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	102.0
2019	12	6541	Formosa Plastics Corp	Industrial	Formosa Utility Venture Ltd	TX	10554	3TBG2	97.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	102.0
2019	12	61873	GA Solar 4	IPP	Twiggs Solar	GA	61696	TWIGG	200.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	200.0
2019	12	7140	Georgia Power Co	Electric Utility	Robins Air Force Base Solar	GA	61648	1	139.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	139.0
2019	12	61611	Glaciers Edge Wind Project LLC	IPP	Glaciers Edge Wind Project	IA	62035	GEW	202.7	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	202.7
2019	12	61888	Gloversville Community Solar LLC	IPP	Gloversville Landfill Solar	NY	62357	08158	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	12	61912	Grazing Yak Solar, LLC	IPP	Grazing Yak Solar	CO	62376	PV1	35.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	35.0
2019	12	60222	Haida Energy, Inc.	Electric Utility	Hiilangaay Hydro	AK	59037	GEN 1	5.0	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	12	60534	Halifax Solar LLC	IPP	Halifax Solar LLC	NC	60884	HALFX	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	12	62046	High Lonesome Wind Power, LLC	IPP	High Lonesome Wind Power, LLC	TX	62562	HILO	449.5	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	449.5
2019	12	61001	Hu Honua Bioenergy, LLC	IPP	Hu Honua Bioenergy Facility	HI	61364	HHB	32.0	Other Waste Biomass	OBS	ST	(U) Under construction, less than or equal to 50 percent complete	36.0
2019	12	9234	Indiana Municipal Power Agency	Electric Utility	Crawfordsville 2 Solar Park	IN	62484	SCRA2	7.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	7.9
2019	12	9234	Indiana Municipal Power Agency	Electric Utility	Crawfordsville 3 Solar Park	IN	62485	SCRA3	4.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.8
2019	12	61853	Innogy Renewables US LLC	IPP	Mason Dixon Wind Farm	PA	60212	1	79.9	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	79.9
2019	12	49893	Invenergy Services LLC	IPP	Camilla Solar Energy Project	GA	61785	CAMSR	160.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	160.0
2019	12	49893	Invenergy Services LLC	IPP	Wilkinson Solar LLC	NC	62544	GEN1	74.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.0
2019	12	61960	Lapetus Energy Project LLC	IPP	Lapetus	TX	62448	LAP	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2019	12	56939	Lexington Chenoa Wind Farm II LLC	IPP	Bright Stalk Wind Farm II	IL	57622	GEN1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	56940	Lexington Chenoa Wind Farm LLC	IPP	Bright Stalk Wind Farm I	IL	57623	GEN1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	11664	Mark Technologies Corp	IPP	Alta Mesa Project Phase IV	CA	55352	GEN1	40.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	40.0
2019	12	61770	Mesteno Wind	IPP	Mesteno	TX	62258	MES	200.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	201.6
2019	12	12341	MidAmerican Energy Co	Electric Utility	Orient Wind Farm	IA	61077	2	398.8	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	398.8
2019	12	61459	Minco Wind V, LLC	IPP	Minco Wind V, LLC	OK	61837	MV	220.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	220.0
2019	12	56622	NextEra Energy Resources	IPP	Shaw Creek Solar, LLC	SC	61790	SHAWC	74.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.9
2019	12	61480	Ontario Solar Center	IPP	Ontario Solar Center	OR	61860	ONTRO	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	12	58764	Origis Energy USA, Inc	IPP	OR Solar 2, LLC	OR	61200	ORSR2	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN1	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN2	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN3	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN4	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN5	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2019	12	62009	Palmer Solar LLC	IPP	Palmer Solar	CO	62495	20181	60.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	60.0
2019	12	56545	Pattern Operators LP	IPP	Crazy Mountain Wind LLC	MT	61859	WT	80.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	80.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	12	61758	Prevailing Wind Park, LLC	IPP	Prevailing Wind Park	SD	62247	PWPSD	220.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	220.0
2019	12	61586	Rankin Solar Center, LLC	IPP	Rankin Solar Center, LLC	SC	61996	RANKI	10.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2019	12	61899	SR Arlington II, LLC	IPP	SR Arlington II	GA	62367	ARLII	102.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	102.5
2019	12	61635	SR Hazlehurst III, LLC	IPP	Hazlehurst III	GA	62057	HZIII	40.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	40.0
2019	12	61701	SR Meridian III	IPP	Meridian III	MS	62163	MRDII	52.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	52.5
2019	12	61634	SR Terrell, LLC	IPP	SR Terrell	GA	62058	TERRL	74.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.0
2019	12	60897	Salinas Valley Solid Waste Authority	IPP	Crazy Horse Solar Project	CA	61285	PV1	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	12	16609	San Diego Gas & Electric Co	Electric Utility	Top Gun Energy Storage	CA	61366	TGES	30.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	30.0
2019	12	61321	Seabrook Solar, LLC	IPP	Seabrook Solar	SC	61701	GEN1	70.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	72.5
2019	12	62023	Skeleton Creek Wind, LLC	IPP	Skeleton Creek Wind, LLC	OK	62494	SKC	250.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	250.0
2019	12	60387	Skylar Resources, LP	IPP	Townsite Solar Project	NV	60654	GEN01	160.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	180.0
2019	12	17650	Southern Power Co	IPP	Reading Wind Project	KS	60999	READW	200.1	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	200.1
2019	12	17650	Southern Power Co	IPP	Wildhorse Mountain Wind Facility	OK	61866	1	100.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	100.0
2019	12	61668	Strauss Wind LLC	IPP	Strauss Wind Farm	CA	62113	ST-CA	98.8	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	98.8
2019	12	58658	Sunlight Partners	IPP	Eagle Solar	NC	60161	PV1	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.0
2019	12	58658	Sunlight Partners	IPP	Tate Solar	NC	60160	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	12	61847	USS Centerfield Solar LLC	IPP	USS Centerfield Solar CSG	MN	62335	USCEN	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	61846	USS Hockey Pad Solar LLC	IPP	USS Hockey Pad Solar CSG	MN	62334	USHP	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	61840	USS Rapidan Solar	IPP	USS Rapidan Solar CSG	MN	62338	USRAP	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	12	60599	Washington Solar, LLC	IPP	Washington Solar	NC	60948	PV1	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	12	59316	Whitetail Solar LLC	IPP	Whitetail Solar	SC	59569	PV1	10.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2019	12	59731	Windham Solar LLC	IPP	Lebanon Solar 1	CT	59991	LEB1	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	12	59731	Windham Solar LLC	IPP	Lebanon Solar 2	CT	59992	LEB2	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2020	1	55918	Acciona Wind Energy USA LLC	IPP	Palmas Wind, LLC	TX	61773	PW	142.6	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	144.9
2020	1	60350	CPV Fairview, LLC	IPP	CPV Fairview Energy Center	PA	60589	GEN2	342.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	372.0
2020	1	60350	CPV Fairview, LLC	IPP	CPV Fairview Energy Center	PA	60589	GEN3	416.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	453.0
2020	1	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U001		Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	174.2
2020	1	61610	Delaware River Solar, LLC	IPP	County Route 11 Community Solar Farm	NY	62507	1419	4.1	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.1
2020	1	61610	Delaware River Solar, LLC	IPP	Furnace Rd Community Solar Farm	NY	62508	1420	3.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.0
2020	1	61610	Delaware River Solar, LLC	IPP	Route 22 Community Solar Farm	NY	62524	1444	3.7	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.7
2020	1	13478	Entergy New Orleans, LLC	Electric Utility	New Orleans Power	LA	60928	1	250.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	250.0
2020	1	56615	First Solar Project Development	IPP	Sun Streams, LLC	AZ	60827	GEN01	150.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	150.0
2020	1	56615	First Solar Project Development	IPP	Sunshine Valley Solar	NV	59826	GEN01	103.4	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	103.4
2020	1	6452	Florida Power & Light Co	Electric Utility	Southfork Solar	FL	62493	1	74.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	74.5
2020	1	6452	Florida Power & Light Co	Electric Utility	Sweetbay Solar Center	FL	62394	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2020	1	61594	Highlander Solar Station 1 LLC	IPP	Highlander Solar Station 1	VA	62014	HLND1	165.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	165.0
2020	1	9417	Interstate Power and Light Co	Electric Utility	Whispering Willow North	IA	62079	1	199.9	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	199.9
2020	1	58658	Sunlight Partners	IPP	Grove Solar	NC	60181	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	1	18454	Tampa Electric Co	Electric Utility	Wimauma Solar	FL	61667	1	74.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.5
2020	1	20323	Wellhead Energy, LLC	IPP	Stanton Energy Reliability Center	CA	60698	GT1	45.9	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	60.5
2020	1	20323	Wellhead Energy, LLC	IPP	Stanton Energy Reliability Center	CA	60698	GT2	45.9	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	60.5
2020	2	7626	City of Greenfield - (IA)	Electric Utility	Greenfield	IA	1144	1	2.2	Petroleum Liquids	DFO	IC	(T) Regulatory approvals received. Not under construction	2.2
2020	2	7626	City of Greenfield - (IA)	Electric Utility	Greenfield	IA	1144	2	2.2	Petroleum Liquids	DFO	IC	(T) Regulatory approvals received. Not under construction	2.2
2020	2	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U002		Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	174.2
2020	2	61610	Delaware River Solar, LLC	IPP	Route 19 #1 Community Solar Farm	NY	62500	1258	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2020	2	61610	Delaware River Solar, LLC	IPP	Route 19 #2 Community Solar Farm	NY	62502	1415	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	2	61610	Delaware River Solar, LLC	IPP	Route 5 & 20 Community Solar Farm	NY	62523	1093	2.3	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.3
2020	2	61610	Delaware River Solar, LLC	IPP	Telegraph Rd #1 Community Solar Farm	NY	62496	1268	3.8	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.8
2020	2	61610	Delaware River Solar, LLC	IPP	Telegraph Rd #2 Community Solar Farm	NY	62498	1413	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2020	2	58970	Ecoplexus, Inc	IPP	Boykin PV1	NC	59996	BOYK1	17.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	17.0
2020	2	58970	Ecoplexus, Inc	IPP	Underwood PV2	NC	60998	UNWD2	16.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	16.0
2020	2	9191	Idaho Power Co	Electric Utility	Shoshone Falls	ID	818	4	3.2	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	3.2
2020	2	59010	Rhubarb One LLC	IPP	Rhubarb One SC	SC	59596	PV1	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2020	3	61670	AES Huntington Beach Energy, LLC	IPP	AES Huntington Beach Energy Project	CA	62116	1A	194.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	231.0
2020	3	61670	AES Huntington Beach Energy, LLC	IPP	AES Huntington Beach Energy Project	CA	62116	1B	194.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	231.0
2020	3	61670	AES Huntington Beach Energy, LLC	IPP	AES Huntington Beach Energy Project	CA	62116	1S	215.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	216.0
2020	3	61006	Bearkat TE Partnership LLC	IPP	Bearkat	TX	59972	BRKA2	103.4	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	103.4
2020	3	60350	CPV Fairview, LLC	IPP	CPV Fairview Energy Center	PA	60589	GEN1	1,100.0	Natural Gas Fired Combined Cycle	NG	CC	(U) Under construction, less than or equal to 50 percent complete	1,100.0
2020	3	59365	Capital Power Corporation	IPP	Cardinal Point LLC	IL	59902	GEN	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2020	3	61978	Convergent Energy and Power LP	IPP	Orange County Energy Storage 2	CA	62497	OCES2	9.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	9.0
2020	3	61978	Convergent Energy and Power LP	IPP	Orange County Energy Storage 3	CA	62499	OCES3	6.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	6.0
2020	3	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U003		Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	174.2
2020	3	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U004		Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	263.3
2020	3	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U005		Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	263.3
2020	3	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U006		Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	263.3
2020	3	5109	DTE Electric Company	Electric Utility	Polaris Wind Park	MI	62290	1	168.6	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	168.6
2020	3	6455	Duke Energy Florida, LLC	Electric Utility	Columbia Solar Power Plant	FL	61982	PV1	74.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.9
2020	3	6455	Duke Energy Florida, LLC	Electric Utility	Debary Solar Power Plant	FL	62542	PV1	74.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.5
2020	3	60718	Energy Resources USA, Inc.	IPP	Tom Bevill Lock and Dam Hydroelectric	AL	61749	GEN1	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	4.0
2020	3	60718	Energy Resources USA, Inc.	IPP	Tom Bevill Lock and Dam Hydroelectric	AL	61749	GEN2	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	4.0
2020	3	60718	Energy Resources USA, Inc.	IPP	Tom Bevill Lock and Dam Hydroelectric	AL	61749	GEN3	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	4.0
2020	3	60688	FGE Goodnight, LLC	IPP	Goodnight	TX	59246	GOOD1	500.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	500.0
2020	3	9417	Interstate Power and Light Co	Electric Utility	Golden Plains	IA	62081	1	198.8	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	198.8
2020	3	61251	LA3 West Baton Rouge, L.L.C.	IPP	LA3 West Baton Rouge Solar Facility	LA	61646	LA3WB	50.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	3	60971	NYC ENERGY LLC	IPP	NISA Electric Generation Project	NY	61331	GEN1	59.7	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	70.5
2020	3	60971	NYC ENERGY LLC	IPP	NISA Electric Generation Project	NY	61331	STG1	20.2	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	22.0
2020	3	58718	Na Pua Makani Power Partners LLC	IPP	Na Pua Makani Wind Project	HI	58837	WT1	25.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	25.0
2020	3	56545	Pattern Operators LP	IPP	G.S.E. One LLC	TX	62505	1	82.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	83.0
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC1	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC10	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC2	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC3	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC4	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC5	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC6	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC7	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC8	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC9	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	20421	Western Minnesota Mun Pwr Agny	Electric Utility	Red Rock Hydro Plant	IA	58434	1	27.5	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	18.2
2020	3	20421	Western Minnesota Mun Pwr Agny	Electric Utility	Red Rock Hydro Plant	IA	58434	2	27.5	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	18.2

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2020	3	62048	Westlands Almond LLC	IPP	Almond	CA	62546	ALMND	19.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	19.9
2020	4	61669	AES Alamitos Energy, LLC	IPP	AES Alamitos Energy Center	CA	62115	1A	194.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	231.0
2020	4	61669	AES Alamitos Energy, LLC	IPP	AES Alamitos Energy Center	CA	62115	1B	194.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	231.0
2020	4	61669	AES Alamitos Energy, LLC	IPP	AES Alamitos Energy Center	CA	62115	1S	215.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	216.0
2020	4	10623	City of Lakeland - (FL)	Electric Utility	C D McIntosh Jr	FL	676	GT2	115.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	135.0
2020	4	60167	Concord Blue Eagar, LLC	IPP	Concord Blue Eagar, LLC	AZ	60374	CB001	0.6	Other Waste Biomass	OBG	IC	(L) Regulatory approvals pending. Not under construction	0.6
2020	4	60167	Concord Blue Eagar, LLC	IPP	Concord Blue Eagar, LLC	AZ	60374	CB002	0.6	Other Waste Biomass	OBG	IC	(L) Regulatory approvals pending. Not under construction	0.6
2020	4	58695	Coronal Development Services	IPP	Casper Solar Center	MD	61320	CSPSC	36.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	36.7
2020	4	61060	Cypress Creek Renewables	IPP	Willard Solar	NC	60287	PV1	4.9	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	4	56201	Engie North America	IPP	East Fork Wind Project, LLC	KS	62220	WTGS	195.8	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	195.8
2020	4	6452	Florida Power & Light Co	Electric Utility	Echo River Solar	FL	62490	1	74.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	74.5
2020	4	6452	Florida Power & Light Co	Electric Utility	Hibiscus Solar Energy Center	FL	62206	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2020	4	6452	Florida Power & Light Co	Electric Utility	Okeechobee Solar	FL	62491	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2020	4	56545	Pattern Operators LP	IPP	Solemio LLC	TX	62522	1	79.8	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	80.0
2020	4	61592	Pleinmont Solar 1 LLC	IPP	Pleinmont Solar 1	VA	62012	PLNM1	75.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	75.0
2020	4	60217	San Bernardino Valley Mun. Water Dist.	Electric Utility	Waterman Turnout Hydroelectric	CA	60466	WTHF	1.0	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	1.0
2020	5	61683	Amadeus Wind LLC	IPP	Amadeus Wind Farm	TX	62142	AM-TX	250.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	250.0
2020	5	1752	Biola University	Commercial	Biola University	CA	54296	EG-1H	1.5	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	1.5
2020	5	1752	Biola University	Commercial	Biola University	CA	54296	EG-2H	1.5	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	1.5
2020	5	58416	California State University, Northridge	Commercial	CSU Northridge Plant	CA	58422	G6PV	0.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	0.8
2020	5	61060	Cypress Creek Renewables	IPP	Pine Valley Solar Farm, LLC	NC	60298	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	5	7140	Georgia Power Co	Electric Utility	Moody Air Force Base Solar	GA	62377	1	49.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	49.5
2020	5	60379	Howardtown Farm, LLC	IPP	Howardtown Farm	NC	60630	PV1	10.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2020	5	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT1	2.6	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	2.6
2020	5	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT2	2.6	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	2.6
2020	5	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT3	2.6	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	2.6
2020	5	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT4	2.6	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	2.6
2020	5	56545	Pattern Operators LP	IPP	Old Jackson Solar LLC	TX	62501	1	127.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	128.0
2020	5	56545	Pattern Operators LP	IPP	Willow Creek Wind Power LLC	SD	62431	1	103.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	105.0
2020	6	61524	226HC 8me LLC	IPP	Holstein 1 Solar Farm	TX	61962	HSF01	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2020	6	59272	41MB 8me, LLC	IPP	Borden Solar Farm	CA	59531	BRDN	50.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	6	61711	Ashley Solar (SC)	IPP	Ashley Solar (SC)	SC	62179	21	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61712	Atlantic Solar	IPP	Atlantic Solar	SC	62180	22	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2020	6	61713	B & K Solar	IPP	B & K Solar	SC	62181	23	63.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	63.0
2020	6	61714	Battle Solar	IPP	Battle Solar	SC	62182	24	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61715	Bell Solar	IPP	Bell Solar	SC	62183	25	6.1	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	6.1
2020	6	61716	Big Fork Solar	IPP	Big Fork Solar	SC	62184	26	74.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	74.9
2020	6	61717	Birch Solar	IPP	Birch Solar	SC	62185	27	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK1	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	6	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK1	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	6	61718	Chapman Solar	IPP	Chapman Solar	SC	62186	28	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	58391	Chilocco Wind Farm LLC	IPP	Chilocco Wind Farm	OK	58406	1	200.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	200.0
2020	6	60270	Clark Canyon Hydro, LLC	IPP	Clark Canyon Hydro-Electric Facility	MT	60483	FRNS1	2.4	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.4
2020	6	60270	Clark Canyon Hydro, LLC	IPP	Clark Canyon Hydro-Electric Facility	MT	60483	FRNS2	2.4	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.4
2020	6	61719	Clark Solar	IPP	Clark Solar	SC	62187	29	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61720	Colleton Solar	IPP	Colleton Solar	SC	62188	30	75.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	75.0
2020	6	61721	Collins Farm Solar	IPP	Collins Farm Solar	SC	62189	31	5.4	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.4
2020	6	49846	Covanta Honolulu Resource Recovery	Commercial	H Power	HI	10334	PV1	2.1	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.1
2020	6	61722	Crossroads Solar	IPP	Crossroads Solar	SC	62190	32	67.7	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	67.7
2020	6	61729	Culpepper Solar	IPP	Culpepper Solar	SC	62221	33	69.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	69.5
2020	6	61730	Dadswell Solar	IPP	Dadswell Solar	SC	62222	34	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2020	6	61731	Denmark Solar	IPP	Denmark Solar	SC	62211	35	6.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	6.0
2020	6	11241	Entergy Louisiana LLC	Electric Utility	Lake Charles Power	LA	60927	1A	250.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	250.0
2020	6	11241	Entergy Louisiana LLC	Electric Utility	Lake Charles Power	LA	60927	1B	250.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	250.0
2020	6	11241	Entergy Louisiana LLC	Electric Utility	Lake Charles Power	LA	60927	1C	500.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	500.0
2020	6	61732	Fairfield Solar	IPP	Fairfield Solar	SC	62212	36	10.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2020	6	56615	First Solar Project Development	IPP	Morada del Sol, LLC	TX	61049	PV1	239.3	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	247.0
2020	6	61733	Fishwater Solar	IPP	Fishwater Solar	SC	62213	37	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	GEN1	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2020	6	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	GEN2	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2020	6	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	GEN3	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2020	6	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	GEN4	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2020	6	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	GEN5	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2020	6	61735	Foreman Solar	IPP	Foreman Solar	SC	62215	39	6.4	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	6.4
2020	6	61737	GEB Solar	IPP	GEB Solar	SC	62217	40	60.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	60.0
2020	6	61736	Gaines Solar	IPP	Gaines Solar	SC	62216	41	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61738	Gedosch Solar II	IPP	Gedosch Solar II	SC	62218	42	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	60050	Halyard Energy Henderson, LLC	IPP	Halyard Henderson Energy Center	TX	60268	TBN2	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	232.0
2020	6	60002	Halyard Energy Wharton, LLC	IPP	Halyard Wharton Energy Center	TX	60221	TBN2	162.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	177.0
2020	6	60659	Hickory Run Energy, LLC	IPP	Hickory Run Energy Station	PA	61028	CTG1	283.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	311.0
2020	6	60659	Hickory Run Energy, LLC	IPP	Hickory Run Energy Station	PA	61028	CTG2	283.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	311.0
2020	6	60659	Hickory Run Energy, LLC	IPP	Hickory Run Energy Station	PA	61028	STG1	437.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	450.0
2020	6	61746	Holliday Solar I	IPP	Holliday Solar I	SC	62229	43	75.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	75.0
2020	6	60986	Imperial Valley Solar 2, LLC	IPP	Mount Signal Solar 2	CA	61353	IVS2	153.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	153.5
2020	6	56167	Imperial Valley Solar, LLC	IPP	Imperial Valley Solar, LLC	CA	56917	2	400.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	400.0
2020	6	61747	Indigo Solar	IPP	Indigo Solar	SC	62230	44	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61748	Ion Solar	IPP	Ion Solar	SC	62231	45	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	6	61749	Jackson Solar	IPP	Jackson Solar	SC	62232	46	14.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	14.0
2020	6	61750	Jefferson Solar	IPP	Jefferson Solar	SC	62233	47	8.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	8.2
2020	6	61751	Juniper Solar	IPP	Juniper Solar	SC	62234	48	65.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	65.5
2020	6	61752	Lone Star Solar	IPP	Lone Star Solar	SC	62235	49	66.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	66.0
2020	6	61753	Luz Solar	IPP	Luz Solar	SC	62236	50	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61755	Marshall Solar	IPP	Marshall Solar	SC	62238	52	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61796	Martin Central Solar	IPP	Martin Central Solar	SC	62285	53	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61787	Martin East Solar	IPP	Martin East Solar	SC	62276	54	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61788	Martin West Solar	IPP	Martin West Solar	SC	62277	55	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61789	McClain Solar	IPP	McClain Solar	SC	62278	56	17.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	17.3
2020	6	61790	McCormick Solar	IPP	McCormick Solar	SC	62279	57	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61791	Melsam Solar	IPP	Melsam Solar	SC	62280	58	60.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	60.5
2020	6	61792	Middleton Solar	IPP	Middleton Solar	SC	62281	59	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2020	6	59357	Navasota Energy Generation Holdings	IPP	Clear Springs Energy Center	TX	59615	CTG-1	178.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Clear Springs Energy Center	TX	59615	CTG-2	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Clear Springs Energy Center	TX	59615	CTG-3	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Union Valley Energy Center	TX	59616	CTG-1	178.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Union Valley Energy Center	TX	59616	CTG-2	178.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Union Valley Energy Center	TX	59616	CTG-3	178.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Van Alstyne Energy Center	TX	59617	CTG-1	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Van Alstyne Energy Center	TX	59617	CTG-2	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Van Alstyne Energy Center	TX	59617	CTG-3	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	13402	Nevada Irrigation District	IPP	Loma Rica Hydroelectric Powerhouse	CA	60988	HY1	1.4	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	1.4
2020	6	61793	Pee Dee Solar I	IPP	Pee Dee Solar I	SC	62282	60	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61794	Pee Dee Solar II	IPP	Pee Dee Solar II	SC	62283	61	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61795	Power Solar	IPP	Power Solar	SC	62284	62	3.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.0
2020	6	61804	Pruger Solar I	IPP	Pruger Solar I	SC	62292	63	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61805	Pruger Solar II	IPP	Pruger Solar II	SC	62293	64	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61806	Pruger Solar III	IPP	Pruger Solar III	SC	62294	65	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61807	Quest Solar	IPP	Quest Solar	SC	62299	66	40.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	40.0
2020	6	60982	RE Maplewood LLC	IPP	RE Maplewood	TX	61346	PV1	250.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	250.0
2020	6	61808	Rollins Solar	IPP	Rollins Solar	SC	62295	67	63.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	63.0
2020	6	61809	Ross Solar	IPP	Ross Solar	SC	62296	68	75.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	75.0
2020	6	61810	Rutledge Solar	IPP	Rutledge Solar	SC	62297	69	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61814	Sandifer Solar	IPP	Sandifer Solar	SC	62298	70	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61828	Scarlet Solar	IPP	Scarlet Solar	SC	62307	71	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61829	Shem Solar	IPP	Shem Solar	SC	62308	72	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61830	Shining Sun Solar	IPP	Shining Sun Solar	SC	62309	73	40.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	40.0
2020	6	61831	Shorthorn Solar	IPP	Shorthorn Solar	SC	62310	74	60.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	60.5
2020	6	61832	Snoopy Solar	IPP	Snoopy Solar	SC	62311	75	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61833	Southard Solar	IPP	Southard Solar	SC	62312	76	6.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	6.0
2020	6	61834	Stamey Solar	IPP	Stamey Solar	SC	62313	77	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61835	Tarpon Solar I	IPP	Tarpon Solar I	SC	62314	78	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61836	Tedder Solar	IPP	Tedder Solar	SC	62315	79	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61837	Ten Governors Solar	IPP	Ten Governors Solar	SC	62316	80	28.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	28.0
2020	6	61862	Thomas Solar	IPP	Thomas Solar	SC	62352	81	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61861	Topaz Solar	IPP	Topaz Solar (SC)	SC	62349	82	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61860	Trask East Solar	IPP	Trask East Solar	SC	62346	83	12.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	12.0
2020	6	61859	Ulmer Solar	IPP	Ulmer Solar	SC	62343	85	22.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	22.0
2020	6	61868	WSW Solar	IPP	WSW Solar	SC	62350	86	30.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	30.0
2020	6	61863	Washington Solar (SC)	IPP	Washington Solar (SC)	SC	62342	87	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61864	Washington Solar II (SC)	IPP	Washington Solar II (SC)	SC	62344	88	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61865	Wayfair Solar	IPP	Wayfair Solar	SC	62345	89	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61866	Weaver Solar	IPP	Weaver Solar	SC	62347	90	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	58761	White Camp Solar LLC	IPP	White Camp Solar	TX	58888	WCAMP	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2020	6	60519	Williams Solar, LLC	IPP	Williams Solar, LLC	TX	60859	PV1	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	6	61869	Wysong Solar	IPP	Wysong Solar	SC	62351	92	2.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.3
2020	6	61870	Yemassee Solar	IPP	Yemassee Solar	SC	62353	93	10.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2020	6	61871	York Solar	IPP	York Solar	SC	62354	94	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	7	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	4A	122.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	122.0
2020	7	61678	RE Rambler LLC	IPP	Rambler	TX	62141	RMBLR	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2020	8	60776	Aksamit Resource Management	IPP	Milligan III Wind Farm	NE	61159	M3001	73.4	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	73.4
2020	8	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK2	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	8	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK2	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	8	62050	Castleman Power Development LLC	IPP	SJRR Power LLC	TX	62548	SJ-1	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	8	62050	Castleman Power Development LLC	IPP	SJRR Power LLC	TX	62548	SJ-2	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	8	62050	Castleman Power Development LLC	IPP	SJRR Power LLC	TX	62548	SJ-3	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	8	62050	Castleman Power Development LLC	IPP	SJRR Power LLC	TX	62548	SJ-4	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	8	58146	Gaelectric LLC	IPP	Jawbone Wind Project	MT	58175	JWPI	80.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	80.0
2020	8	14232	Otter Tail Power Co	Electric Utility	Merricourt Wind Project	ND	57048	1	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2020	8	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	GTG1	41.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	41.0
2020	8	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	STG1	75.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	75.0
2020	8	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	PV1	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	9	7277	Calpine Corporation	IPP	Buckeye Geothermal Power Plant	CA	57180	1	49.9	Geothermal	GEO	ST	(L) Regulatory approvals pending. Not under construction	56.9
2020	9	7277	Calpine Corporation	IPP	Wild Horse Power Plant	CA	57181	1	40.0	Geothermal	GEO	ST	(L) Regulatory approvals pending. Not under construction	48.0
2020	9	9417	Interstate Power and Light Co	Electric Utility	Richland	IA	62080	1	130.1	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	130.1
2020	9	60952	Mt. Jackson Solar LLC	IPP	Mt. Jackson Solar	VA	61318	SOLAR	15.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.7
2020	9	62047	Roadrunner Solar, LLC	IPP	Roadrunner, LLC	TX	62561	RODR2	200.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	200.0
2020	9	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	GTG2	41.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	41.0
2020	9	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	GTG3	41.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	41.0
2020	9	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	STG2	75.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	75.0
2020	9	62044	TG High Prairie Wind, LLC	IPP	High Prairie Wind Farm	MO	62563	HPWF	400.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	400.0
2020	9	61534	Techren Solar III LLC	IPP	Techren Solar III LLC	NV	61931	TECH3	25.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	25.0
2020	9	61535	Techren Solar IV LLC	IPP	Techren Solar IV LLC	NV	61932	TECH4	25.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	25.0
2020	9	61890	Tenaska Nobles 2 Power Partners, LLC	IPP	Nobles 2 Wind Project	MN	62364	WT1	250.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	250.0
2020	9	20856	Wisconsin Power & Light Co	Electric Utility	Kossuth	IA	62103	1	150.5	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	150.5
2020	10	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK3	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	10	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK3	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	10	59319	Cotton Solar, LLC	IPP	Cotton Solar	SC	59572	PV1	16.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	16.0
2020	10	61951	Dodge County Wind, LLC	IPP	Dodge County Wind	MN	62437	WT	170.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	170.0
2020	10	58468	Dominion Renewable Energy	Electric Utility	Spring Grove I	VA	61986	SGIS	97.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	97.9
2020	10	5580	East Kentucky Power Coop, Inc	Electric Utility	Green Valley LFGTE	KY	56278	4	0.8	Landfill Gas	LFG	IC	(P) Planned for installation, but regulatory approvals not initiated	0.8
2020	10	56615	First Solar Project Development	IPP	Cove Mountain Solar 2	UT	62470	GEN01	122.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	122.0
2020	10	61734	Flip Solar	IPP	Flip Solar	SC	62214	38	15.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	15.8
2020	10	61942	Griffin Trail Wind, LLC	IPP	Griffin Trail Wind	TX	62411	GTWND	225.6	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	225.6
2020	10	61697	Hillcrest Solar I, LLC	IPP	Hillcrest Solar	OH	62200	HILLC	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2020	10	61853	Innogy Renewables US LLC	IPP	Scioto Ridge Wind Farm	OH	58780	1	189.2	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	189.2
2020	10	60569	Lincoln Land Wind, LLC	IPP	Lincoln Land Wind	IL	58925	SAN1	30.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	30.0
2020	10	61593	Pleinmont Solar 2 LLC	IPP	Pleinmont Solar 2	VA	62013	PLNM2	240.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	240.0
2020	10	61590	Richmond Spider Solar LLC	IPP	Richmond Spider Solar	VA	62011	RMDSS	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	10	60568	Sugar Creek Wind One LLC	IPP	Sugar Creek Wind One LLC	IL	58924	SUG1	175.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	175.0
2020	10	61637	TUUSSO Energy, LLC	IPP	Camas Solar Project	WA	62071	CAMAS	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	10	61637	TUUSSO Energy, LLC	IPP	Fumaria Solar Project	WA	62070	FUMAR	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2020	10	61637	TUUSSO Energy, LLC	IPP	Penstemon Solar Project	WA	62069	PENST	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	10	61637	TUUSSO Energy, LLC	IPP	Typha Solar Project	WA	62068	TYPHA	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	10	61637	TUUSSO Energy, LLC	IPP	Urtica Solar Project	WA	62067	URTIC	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	10	59056	Tri Global Energy, LLC	IPP	Canyon Wind Project, LLC	TX	60271	WT1	360.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	360.0
2020	10	60192	Warbler Holdings, LLC	IPP	Warbler Holdings	NC	60393	PV1	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.0
2020	11	62049	Aquamarine Westside LLC	IPP	Aquamarine	CA	62547	AQUAM	250.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	250.0
2020	11	14354	PacifiCorp	Electric Utility	TB Flats	WY	62516	1	503.2	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	503.2
2020	11	61331	Popular Camp Wind Farm LLC	IPP	Poplar Camp Wind Farm	VA	61111	PC1	72.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	72.0
2020	11	61516	Stratford Solar Center, LLC	IPP	Stratford Solar Center, LLC	VA	61908	STRAT	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2020	11	18617	Tesoro Alaska Company LLC	Industrial	Tesoro Kenai Cogeneration Plant	AK	52184	GEN3	6.3	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	7.8
2020	11	19539	University of Iowa	Commercial	University of Iowa Main Power Plant	IA	54775	GEN12	5.8	Natural Gas Steam Turbine	NG	ST	(L) Regulatory approvals pending. Not under construction	5.8
2020	11	19539	University of Iowa	Commercial	University of Iowa Main Power Plant	IA	54775	GEN13	10.0	Natural Gas Steam Turbine	NG	ST	(L) Regulatory approvals pending. Not under construction	10.0
2020	12	62006	7X Energy, Inc.	IPP	Taygete Energy Project LLC	TX	62483	PV1	255.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	255.0
2020	12	60526	Alternative Power Development Northwest, LLC	IPP	Carter Solar One, LLC	ID	60896	CRTON	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	60526	Alternative Power Development Northwest, LLC	IPP	Jackpot Solar East, LLC	ID	60899	JPTEA	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	60526	Alternative Power Development Northwest, LLC	IPP	Jackpot Solar North, LLC	ID	60897	JPTNO	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	60526	Alternative Power Development Northwest, LLC	IPP	Jackpot Solar South, LLC	ID	60898	JPTSO	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	60526	Alternative Power Development Northwest, LLC	IPP	Jackpot Solar West, LLC	ID	60900	JPTWE	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	61949	Assembly Solar, LLC	IPP	Assembly Solar Project	MI	62422	ASP01	50.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	12	15399	Avangrid Renewables LLC	IPP	La Joya NM	NM	61044	WT1	166.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	166.0
2020	12	15399	Avangrid Renewables LLC	IPP	Roaring Brook, LLC	NY	61041	WT1	78.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	78.0
2020	12	61257	Blazing Star 2 LLC	IPP	Blazing Star 2 Wind Farm	MN	61650	BLZS2	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0
2020	12	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK4	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	12	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK4	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	12	59365	Capital Power Corporation	IPP	Nolin Hills Wind, LLC	OR	60070	GEN	350.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	350.0
2020	12	59365	Capital Power Corporation	IPP	Tisch Mills Wind	WI	60674	TISCH	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2020	12	58508	Carolina Solar Energy II LLC	IPP	Cabaniss Solar	NC	60430	PV1	4.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.2
2020	12	58508	Carolina Solar Energy II LLC	IPP	Sellers Farm Solar	NC	60439	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	12	59432	Clear Creek Power	IPP	Highland Park Project	CO	59659	HPWT	181.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	181.0
2020	12	61978	Convergent Energy and Power LP	IPP	Henrietta D Energy Storage LLC	CA	60641	HDES1	10.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	10.0
2020	12	58695	Coronal Development Services	IPP	Biggs Ford Solar Center	MD	61321	BFSC	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2020	12	61302	Depot Solar Center, LLC	IPP	Depot Solar Center, LLC	VA	61691	DEPOT	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2020	12	61709	Desert Harvest, LLC	IPP	Desert Harvest, LLC	CA	62177	DH001	150.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	150.0
2020	12	61785	EDP Renewables North America LLC	IPP	Crossing Trails Wind Farm	CO	62489	GEN1	104.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	104.0
2020	12	56987	East Blackland Solar Project 1 LLC	IPP	Pflugerville Solar Farm	TX	57659	PSF	144.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	144.0
2020	12	5860	Empire District Electric Co	Electric Utility	Kings Point Wind Energy Center	MO	62475	KPW1	149.4	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	149.4
2020	12	5860	Empire District Electric Co	Electric Utility	Neosho Ridge Wind Energy Center	KS	62481	NRW1	301.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	301.0
2020	12	5860	Empire District Electric Co	Electric Utility	North Fork Ridge Wind Energy Center	MO	62478	NFRW1	149.4	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	149.4
2020	12	56615	First Solar Project Development	IPP	American Kings Solar, LLC	CA	60777	GEN01	123.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	123.0
2020	12	56615	First Solar Project Development	IPP	Cove Mountain Solar	UT	62469	GEN01	58.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	58.0
2020	12	56615	First Solar Project Development	IPP	Little Bear 3	CA	62463	GEN01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2020	12	56615	First Solar Project Development	IPP	Little Bear 4	CA	62464	GEN01	50.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	50.0
2020	12	56615	First Solar Project Development	IPP	Little Bear 5	CA	62465	GEN01	50.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	50.0
2020	12	56615	First Solar Project Development	IPP	Little Bear Solar 1, LLC	CA	59870	GEN01	40.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	40.0
2020	12	56615	First Solar Project Development	IPP	Windhub Solar B, LLC	CA	59969	GEN01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2020	12	60888	GCL New Energy, Inc.	IPP	Pioneer Solar (CO), LLC	CO	61991	PI-QF	80.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	80.0
2020	12	61166	Green Power Energy LLC	IPP	Cody Road Wind Farm	NY	61592	WT1	2.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	2.4
2020	12	61166	Green Power Energy LLC	IPP	Cody Road Wind Farm	NY	61592	WT2	2.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	2.4
2020	12	61166	Green Power Energy LLC	IPP	Cody Road Wind Farm	NY	61592	WT3	2.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	2.4
2020	12	61166	Green Power Energy LLC	IPP	Cody Road Wind Farm	NY	61592	WT4	2.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	2.4
2020	12	61166	Green Power Energy LLC	IPP	Cody Road Wind Farm	NY	61592	WT5	2.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	2.4
2020	12	60040	Hale Wind Energy	IPP	Hale Community Wind Farm	TX	59247	HALE2	240.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	240.0
2020	12	61638	Harrison Power LLC	Industrial	Cadiz Power Plant	OH	62153	GEN 1	550.0	Natural Gas Fired Combined Cycle	NG	CS	(P) Planned for installation, but regulatory approvals not initiated	660.0
2020	12	61638	Harrison Power LLC	Industrial	Cadiz Power Plant	OH	62153	GEN 2	550.0	Natural Gas Fired Combined Cycle	NG	CS	(P) Planned for installation, but regulatory approvals not initiated	660.0
2020	12	61853	Innogy Renewables US LLC	IPP	Baron Winds Farm	NY	60596	1	272.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	272.0
2020	12	61853	Innogy Renewables US LLC	IPP	Cassadaga Wind Farm	NY	58777	1	126.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	126.0
2020	12	61853	Innogy Renewables US LLC	IPP	Coyote Crest Wind Farm	WA	58778	1	127.5	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	127.5
2020	12	61853	Innogy Renewables US LLC	IPP	Horse Thief Wind Project, LLC	MT	59758	1	80.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	80.0
2020	12	61853	Innogy Renewables US LLC	IPP	Mud Springs Wind Project, LLC	MT	59756	1	80.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	80.0
2020	12	61853	Innogy Renewables US LLC	IPP	Pryor Caves Wind Project, LLC	MT	59757	1	80.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	80.0
2020	12	61421	LeGore Bridge Solar Center, LLC	IPP	LeGore Bridge Solar Center	MD	61796	LGBSC	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	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	58849	Mariah del Este LLC	IPP	Mariah East	TX	59006	MARN	152.5	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	152.5
2020	12	61422	Mason Dixon Solar Center, LLC	IPP	Mason Dixon Solar Center	MD	61797	PV	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	61710	Maverick Solar, LLC	IPP	Maverick Solar, LLC	CA	62178	MAV01	225.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	225.0
2020	12	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	14328	Pacific Gas & Electric Co.	Electric Utility	Elkhorn Battery Energy Storage System	CA	62564	ELKHO	182.5	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	182.5
2020	12	59137	Palmer Renewable Energy	IPP	Palmer Renewable Energy	MA	59336	PRE	42.0	Wood/Wood Waste Biomass	WDS	ST	(T) Regulatory approvals received. Not under construction	42.0
2020	12	56545	Pattern Operators LP	IPP	Summit Ridge I Wind Farm	OR	58894	SRWF	192.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	192.0
2020	12	61826	Pawcatuck Solar Center, LLC	IPP	Pawcatuck Solar Center, LLC	CT	62318	PAWCA	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2020	12	59967	Phoenix Energy	IPP	North Fork Community Power	CA	60192	NFCP1	2.0	Other Waste Biomass	OBG	IC	(OT) Other	2.0
2020	12	15248	Portland General Electric Co	Electric Utility	Faraday	OR	3045	7	9.0	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	9.0
2020	12	15248	Portland General Electric Co	Electric Utility	Faraday	OR	3045	8	9.0	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	9.0
2020	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	I-A	687.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	687.0
2020	12	61946	Prairie State Power, LLC	IPP	Prairie State Solar Project	IL	62420	PSS01	99.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	99.0
2020	12	61069	RE Gaskell West LLC	IPP	RE Gaskell West 2 LLC	CA	61446	PV2	45.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	45.0
2020	12	61069	RE Gaskell West LLC	IPP	RE Gaskell West 3 LLC	CA	61447	PV3	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	61069	RE Gaskell West LLC	IPP	RE Gaskell West 4 LLC	CA	61448	PV4	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	61069	RE Gaskell West LLC	IPP	RE Gaskell West 5 LLC	CA	61449	PV5	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	61589	RE Mustang Two LLC	IPP	Mustang Two	CA	62015	M2BAR	50.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	50.0
2020	12	61589	RE Mustang Two LLC	IPP	Mustang Two	CA	62015	M2WHI	100.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	100.0
2020	12	61727	Reloj del Sol Wind Farm LLC	IPP	Reloj del Sol Wind Farm	TX	62207	RELOJ	209.4	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	209.4
2020	12	61624	SR Snipesville	IPP	Snipesville	GA	62165	SNIPE	61.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	61.0
2020	12	61954	Techren Solar V LLC	IPP	Techren Solar V	NV	62440	TECH5	50.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	50.0
2020	12	2782	Terra-Gen Operating Co-Geo	IPP	Dixie Valley Power Partnership	NV	10681	GEN1	25.0	Geothermal	GEO	ST	(P) Planned for installation, but regulatory approvals not initiated	28.0
2020	12	59056	Tri Global Energy, LLC	IPP	Changing Winds	TX	59243	CHAN1	288.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	288.0
2020	12	59056	Tri Global Energy, LLC	IPP	Cone Renewable Energy Project, LLC	TX	60272	WT1	300.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	300.0
2020	12	59056	Tri Global Energy, LLC	IPP	Crosby County Wind Farm, LLC	TX	60273	WT1	120.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	120.0
2020	12	56633	Trishe Wind Minnesota	IPP	Trishe Wind Minnesota	MN	57255	1	40.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	40.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2020	12	19316	Two Elk Generation Partners LP	IPP	Two Elk Generating Station	WY	55360	GEN1	275.0	Conventional Steam Coal	WC	ST	(U) Under construction, less than or equal to 50 percent complete	320.0
2020	12	60694	Washburn Wind Energy LLC	IPP	Washburn Wind Farm	IA	61071	WASH	70.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	70.0
2020	12	60847	West Fork Wind, LLC	IPP	West Fork Wind	IN	61214	WT1	150.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	150.0
2020	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN1	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2020	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN2	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2020	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN3	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2020	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN4	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2020	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN5	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	1	61033	Boswell Wind Project I, LLC	IPP	Boswell Wind I	WY	61393	BOSW1	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	1	61034	Boswell Wind Project II, LLC	IPP	Boswell Wind II	WY	61394	BOSW2	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	1	61035	Boswell Wind Project III, LLC	IPP	Boswell Wind III	WY	61395	BOSW3	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	1	61036	Boswell Wind Project IV, LLC	IPP	Boswell Wind IV	WY	61396	BOSW4	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	1	58765	FGE Texas I LLC	IPP	FGE Texas I	TX	58931	CA1	249.9	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	265.2
2021	1	58765	FGE Texas I LLC	IPP	FGE Texas I	TX	58931	GT1	226.7	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.9
2021	1	58765	FGE Texas I LLC	IPP	FGE Texas I	TX	58931	GT2	226.7	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.9
2021	1	58702	Fluence	IPP	AES ES ALAMITOS, LLC	CA	61204	ALMTS	100.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	100.0
2021	1	60131	South Field Energy, LLC	IPP	South Field Energy	OH	60356	SFECC	1,060.0	Natural Gas Fired Combined Cycle	NG	CC	(U) Under construction, less than or equal to 50 percent complete	1,105.0
2021	1	18454	Tampa Electric Co	Electric Utility	Lake Hancock Solar	FL	61657	PV1	49.6	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	50.0
2021	1	18454	Tampa Electric Co	Electric Utility	Mountain View Solar (FL)	FL	61664	GEN1	52.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	52.5
2021	1	19876	Virginia Electric & Power Co	Electric Utility	Coastal Virginia Offshore Wind (CVOW)	VA	59693	OSW1	12.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	12.0
2021	2	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	R1	18.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	18.8
2021	2	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	R2	18.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	18.8
2021	2	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	R3	18.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	18.8
2021	2	59686	Coronado Power Ventures LLC	IPP	Pinecrest Energy Center	TX	59923	CTG-1	229.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	232.0
2021	2	59686	Coronado Power Ventures LLC	IPP	Pinecrest Energy Center	TX	59923	CTG-2	229.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	232.0
2021	2	59686	Coronado Power Ventures LLC	IPP	Pinecrest Energy Center	TX	59923	STG	289.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	289.0
2021	3	61684	Diablo Energy Storage, LLC	IPP	Diablo Energy Storage	CA	62175	DIBLO	250.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	250.0
2021	3	56615	First Solar Project Development	IPP	Desert Quartzite	CA	59871	GEN01	450.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	580.0
2021	3	61130	Helix Ravenswood, LLC	IPP	Ravenswood	NY	2500	RWES1	129.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	129.0
2021	3	61130	Helix Ravenswood, LLC	IPP	Ravenswood	NY	2500	RWES2	98.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	98.0
2021	3	61130	Helix Ravenswood, LLC	IPP	Ravenswood	NY	2500	RWES3	89.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	89.0
2021	3	60229	Quail Holdings, LLC	IPP	Quail Holdings	NC	60434	PV1	25.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	25.0
2021	3	16609	San Diego Gas & Electric Co	Electric Utility	Fallbrook Energy Storage	CA	61365	FBES	40.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	40.0
2021	3	60387	Skylar Resources, LP	IPP	Townsite Solar Project	NV	60654	GEN02	20.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	20.0
2021	3	58846	Southeast Renewable Fuels, LLC	Industrial	SRF Sorghum to Ethanol Advanced Biorefin	FL	58997	G1001	12.0	Other Waste Biomass	OBS	ST	(U) Under construction, less than or equal to 50 percent complete	15.0
2021	4	56615	First Solar Project Development	IPP	White Wing Solar	AZ	60572	GEN01	200.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	200.0
2021	4	59434	Mattawoman Energy, LLC	IPP	Mattawoman Energy Center	MD	59662	CGT11	286.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	286.0
2021	4	59434	Mattawoman Energy, LLC	IPP	Mattawoman Energy Center	MD	59662	CGT12	286.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	286.0
2021	4	59434	Mattawoman Energy, LLC	IPP	Mattawoman Energy Center	MD	59662	STG11	436.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	436.0
2021	4	14232	Otter Tail Power Co	Electric Utility	Astoria Station	SD	61144	1	260.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	260.0
2021	4	56789	TBE Montgomery LLC	IPP	TBE-Montgomery LLC	NY	57472	CTG	11.6	Other Waste Biomass	OBG	CT	(U) Under construction, less than or equal to 50 percent complete	12.0
2021	4	56789	TBE Montgomery LLC	IPP	TBE-Montgomery LLC	NY	57472	STG	7.4	Other Waste Biomass	OBG	CA	(U) Under construction, less than or equal to 50 percent complete	9.0
2021	5	61818	CC Polymers LLC	Industrial	M&G Resins USA	TX	60642	1	11.7	All Other	WH	OT	(P) Planned for installation, but regulatory approvals not initiated	14.3
2021	5	61818	CC Polymers LLC	Industrial	M&G Resins USA	TX	60642	2	11.7	All Other	WH	OT	(P) Planned for installation, but regulatory approvals not initiated	14.3
2021	5	14605	City of Peabody - (MA)	Electric Utility	Waters River	MA	1678	3	55.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	60.0
2021	5	62064	Hill Top Energy Center, LLC	IPP	Hill Top Energy Center, LLC	PA	62565	GEN1	619.1	Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	664.7
2021	5	59677	Middlesex Energy Center LLC	IPP	Middlesex Energy Center LLC	NJ	59909	CT001	570.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	570.0
2021	6	61523	225DD 8me LLC	IPP	Galloway Solar Farm	TX	61920	GSM01	360.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	360.0
2021	6	61525	231RC 8me LLC	IPP	Norton Solar Farm	TX	61967	NSM01	125.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	125.0
2021	6	60667	Aksamit Energy Development	IPP	Monument Road	NE	61033	MR001	66.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	66.0
2021	6	61825	Antelope Expansion 1B, LLC	IPP	Antelope Expansion 1B	CA	62320	ANE1B	17.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	17.0
2021	6	60395	California Ethanol Power, LLC	Industrial	CE&P Imperial Valley 1	CA	60670	1	50.0	All Other	OTH	CC	(T) Regulatory approvals received. Not under construction	50.0
2021	6	59964	ESC Brooke County Power I	IPP	ESC Brooke County Power I	WV	60202	BCCA1	261.2	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	280.5
2021	6	59964	ESC Brooke County Power I	IPP	ESC Brooke County Power I	WV	60202	BCCT1	252.3	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2021	6	59964	ESC Brooke County Power I	IPP	ESC Brooke County Power I	WV	60202	BCCT2	252.3	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2021	6	59966	ESC Harrison County Power	IPP	ESC Harrison County Power	WV	60206	HCCA1	205.4	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	207.4
2021	6	59966	ESC Harrison County Power	IPP	ESC Harrison County Power	WV	60206	HCCT1	319.1	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	371.5
2021	6	59965	ESC Tioga County Power	IPP	ESC Tioga County Power	PA	60205	TCCA1	302.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	331.5
2021	6	59965	ESC Tioga County Power	IPP	ESC Tioga County Power	PA	60205	TCCT1	253.1	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2021	6	59965	ESC Tioga County Power	IPP	ESC Tioga County Power	PA	60205	TCCT2	253.1	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2021	6	58597	Enivromission, Inc	IPP	La Paz Solar Tower	AZ	58652	1	200.0	Solar Thermal without Energy Storage	SUN	OT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2021	6	55937	Entergy Texas Inc.	Electric Utility	Montgomery County	TX	60925	1A	250.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	250.0
2021	6	55937	Entergy Texas Inc.	Electric Utility	Montgomery County	TX	60925	1B	250.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	250.0
2021	6	55937	Entergy Texas Inc.	Electric Utility	Montgomery County	TX	60925	1C	500.0	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	500.0
2021	6	56615	First Solar Project Development	IPP	Muscle Shoals	AL	62462	GEN01	227.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	227.0
2021	6	56615	First Solar Project Development	IPP	Portal Ridge Solar A, LLC	CA	60309	GEN01	18.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	18.5
2021	6	58880	Gallegos Wind Farm LLC	IPP	Gallegos Wind Farm, Phase 1	NM	59047	GEN 1	180.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	180.0
2021	6	60050	Halyard Energy Henderson, LLC	IPP	Halyard Henderson Energy Center	TX	60268	TBN1	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	232.0
2021	6	60002	Halyard Energy Wharton, LLC	IPP	Halyard Wharton Energy Center	TX	60221	TBN1	162.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	177.0
2021	6	59489	Perennial-Wind Chaser LLC	IPP	Perennial Wind Chaser Station	OR	59721	GT1	98.7	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	106.0
2021	6	59489	Perennial-Wind Chaser LLC	IPP	Perennial Wind Chaser Station	OR	59721	GT2	98.7	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	106.0
2021	6	59489	Perennial-Wind Chaser LLC	IPP	Perennial Wind Chaser Station	OR	59721	GT3	98.7	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	106.0
2021	6	59489	Perennial-Wind Chaser LLC	IPP	Perennial Wind Chaser Station	OR	59721	GT4	98.7	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	106.0
2021	6	60982	RE Maplewood LLC	IPP	RE Maplewood	TX	61346	PV2	250.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	250.0
2021	6	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	CT3	237.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.0
2021	6	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	CT4	237.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.0
2021	6	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	ST2	232.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	260.0
2021	6	18454	Tampa Electric Co	Electric Utility	Big Bend	FL	645	GT5	360.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	392.0
2021	6	18454	Tampa Electric Co	Electric Utility	Big Bend	FL	645	GT6	360.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	392.0
2021	7	59686	Coronado Power Ventures LLC	IPP	La Paloma Energy Center	TX	59924	CTG-1	211.5	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	230.0
2021	7	59686	Coronado Power Ventures LLC	IPP	La Paloma Energy Center	TX	59924	CTG-2	211.5	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	230.0
2021	7	59686	Coronado Power Ventures LLC	IPP	La Paloma Energy Center	TX	59924	STG-1	300.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	311.0
2021	7	58766	FGE Texas II LLC	IPP	FGE Texas II	TX	58930	CA1	249.9	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	265.2
2021	7	58766	FGE Texas II LLC	IPP	FGE Texas II	TX	58930	GT1	226.7	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.9
2021	7	58766	FGE Texas II LLC	IPP	FGE Texas II	TX	58930	GT2	226.7	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.9
2021	7	59056	Tri Global Energy, LLC	IPP	Easter	TX	59971	ESTR1	300.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	300.0
2021	8	56615	First Solar Project Development	IPP	Willow Spring Solar 3, LLC	CA	60325	GEN01	75.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	75.0
2021	10	58901	Hydro Green Energy	IPP	Braddock Lock and Dam	PA	59091	GEN1	5.3	Conventional Hydroelectric	WAT	HY	(OT) Other	5.3
2021	10	60720	Martinsdale Wind Farm LLC	IPP	Martinsdale Wind Farm	MT	61108	MTD	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	11	7140	Georgia Power Co	Electric Utility	Vogtle	GA	649	3	1,100.0	Nuclear	NUC	ST	(U) Under construction, less than or equal to 50 percent complete	1,100.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2021	11	61797	Hecate Energy LLC	IPP	Hecate Energy Columbia County Solar	NY	62273	HECC1	60.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	60.0
2021	11	61762	Long Ridge Energy Generation LLC	IPP	Hannibal Port Power Project	OH	61322	HPPP1	485.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	485.0
2021	12	61477	325MK 8me LLC	IPP	Eagle Shadow Mountain Solar Farm	NV	61852	ESMSF	300.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	300.0
2021	12	60796	91MC 8me LLC	IPP	Peak Valley Solar Farm	CA	61167	91MC8	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2021	12	61783	Alabama Ledge Wind Farm LLC	IPP	Alabama Ledge Wind Farm LLC	NY	62261	GEN1	79.8	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	79.8
2021	12	59192	Amity Energy, LLC	IPP	Amity Energy LLC	PA	59418	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2021	12	59192	Amity Energy, LLC	IPP	Amity Energy LLC	PA	59418	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2021	12	59192	Amity Energy, LLC	IPP	Amity Energy LLC	PA	59418	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN1	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN2	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN3	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN4	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN5	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	61768	Arrow Canyon Solar LLC	IPP	Arrow Canyon Solar	NV	62248	1	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2021	12	15399	Avangrid Renewables LLC	IPP	Lund Hill	WA	61045	WT1	60.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	60.0
2021	12	56606	Calpine New Jersey Generation LLC	IPP	Deepwater	NJ	2384	CT1	235.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	242.0
2021	12	56606	Calpine New Jersey Generation LLC	IPP	Deepwater	NJ	2384	ST1	198.5	Natural Gas Steam Turbine	NG	ST	(L) Regulatory approvals pending. Not under construction	214.0
2021	12	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC5	18.5	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	18.8
2021	12	61060	Cypress Creek Renewables	IPP	Battle Mountain Solar Project	NV	61098	BMSP	101.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	101.0
2021	12	61785	EDP Renewables North America LLC	IPP	Saddle Mountain East Wind Farm	WA	62263	GEN1	126.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	126.0
2021	12	59380	Enel Green Power NA, Inc.	IPP	Pomerado Energy Storage, LLC	CA	61390	PMRDO	3.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	3.0
2021	12	58684	Hop Bottom Energy LLC	IPP	Hop Bottom	PA	58800	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2021	12	58684	Hop Bottom Energy LLC	IPP	Hop Bottom	PA	58800	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2021	12	58684	Hop Bottom Energy LLC	IPP	Hop Bottom	PA	58800	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2021	12	61853	Innogy Renewables US LLC	IPP	Buckeye Wind Farm	OH	58776	1	99.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	99.0
2021	12	58378	Jordan Hydroelectric LTD PTP	IPP	Flannagan Hydroelectric Project	VA	58827	LEFT	0.9	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.9
2021	12	58378	Jordan Hydroelectric LTD PTP	IPP	Flannagan Hydroelectric Project	VA	58827	RGHT	0.9	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.9
2021	12	60349	Juneau Hydropower, Inc	IPP	Sweetheart Lake Hydroelectric Facility	AK	60588	JHI01	6.6	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.6
2021	12	60349	Juneau Hydropower, Inc	IPP	Sweetheart Lake Hydroelectric Facility	AK	60588	JHI02	6.6	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.6
2021	12	60349	Juneau Hydropower, Inc	IPP	Sweetheart Lake Hydroelectric Facility	AK	60588	JHI03	6.6	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.6
2021	12	60221	North Slope LLC	IPP	North Slope, LLC	NY	60420	NSPV	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0
2021	12	61301	Plum Creek Wind Farm LLC	IPP	Plum Creek	MN	61687	PLMCK	400.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	400.0
2021	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	I-B	813.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	813.0
2021	12	61784	Rolling Upland Wind Farm LLC	IPP	Rolling Upland Wind Farm LLC	NY	62262	GEN1	60.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	60.0
2021	12	61900	SR Arlington, LLC	IPP	SR Arlington I	GA	62436	ARLI	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2021	12	60523	Springfield Project Development LLC	IPP	Homestead Wind LLC	IL	60871	HOMES	50.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2022	1	60687	Alpine Pacific Utilities Hydro	IPP	Fresno Dam Site Water Power Project	MT	61061	2	0.5	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.5
2022	1	60687	Alpine Pacific Utilities Hydro	IPP	Fresno Dam Site Water Power Project	MT	61061	3	0.5	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.5
2022	1	61060	Cypress Creek Renewables	IPP	Thigpen Farms Solar, LLC	NC	60850	PV1	5.0	Solar Photovoltaic	SUN	PV	(OT) Other	5.0
2022	1	60473	Renovo Energy Center	IPP	Renovo Energy Center	PA	60786	RECNY	480.0	Natural Gas Fired Combined Cycle	NG	CS	(L) Regulatory approvals pending. Not under construction	513.0
2022	1	60473	Renovo Energy Center	IPP	Renovo Energy Center	PA	60786	RECPJ	480.0	Natural Gas Fired Combined Cycle	NG	CS	(L) Regulatory approvals pending. Not under construction	513.0
2022	2	60797	68SF 8me LLC	IPP	Eland 1 Solar Farm	CA	61168	68SF8	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2022	2	61395	Indeck Niles, LLC	IPP	Indeck Niles Energy Center	MI	55460	CT1	386.8	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	386.8
2022	2	61395	Indeck Niles, LLC	IPP	Indeck Niles Energy Center	MI	55460	CT2	386.8	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	386.8
2022	2	61395	Indeck Niles, LLC	IPP	Indeck Niles Energy Center	MI	55460	ST1	397.8	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	397.8
2022	2	60836	NTE Connecticut, LLC	IPP	Killingly Energy Center	CT	61239	KEC	374.3	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	501.0
2022	2	60836	NTE Connecticut, LLC	IPP	Killingly Energy Center	CT	61239	KEC2	257.6	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	312.8
2022	4	5109	DTE Electric Company	Electric Utility	Blue Water Energy Center	MI	62192	11	359.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	394.4
2022	4	5109	DTE Electric Company	Electric Utility	Blue Water Energy Center	MI	62192	12	359.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	394.4
2022	4	5109	DTE Electric Company	Electric Utility	Blue Water Energy Center	MI	62192	1S	428.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	478.6
2022	4	61596	Lincoln Land Energy Center LLC	IPP	Lincoln Land Energy Center	IL	62022	GEN1	520.0	Natural Gas Fired Combined Cycle	NG	CS	(P) Planned for installation, but regulatory approvals not initiated	638.4
2022	4	61596	Lincoln Land Energy Center LLC	IPP	Lincoln Land Energy Center	IL	62022	GEN2	520.0	Natural Gas Fired Combined Cycle	NG	CS	(P) Planned for installation, but regulatory approvals not initiated	638.4
2022	4	55927	Power4Georgians LLC	Electric Utility	Plant Washington	GA	56675	MAIN	850.0	Conventional Steam Coal	SUB	ST	(T) Regulatory approvals received. Not under construction	850.0
2022	6	61386	C4GT, LLC	IPP	C4GT	VA	61760	C4GT	1,060.0	Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	1,060.0
2022	6	62008	Hale Kuawehi Solar LLC	IPP	Hale Kuawehi Solar	HI	62529	HKBA	30.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	30.0
2022	6	62008	Hale Kuawehi Solar LLC	IPP	Hale Kuawehi Solar	HI	62529	HKSOL	30.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	30.0
2022	6	62036	Paeahu Solar LLC	IPP	Paeahu Solar	HI	62534	PHBA	15.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	15.0
2022	6	62036	Paeahu Solar LLC	IPP	Paeahu Solar	HI	62534	PHSOL	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2022	6	54866	Robinson Power Company LLC	IPP	Robinson Power Company LLC	PA	56453	CTG1	950.0	Natural Gas Fired Combined Cycle	NG	CC	(L) Regulatory approvals pending. Not under construction	1,022.9
2022	7	60835	NTE Carolinas II, LLC	IPP	Reidsville Energy Center	NC	61240	REC	259.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	310.2
2022	7	60835	NTE Carolinas II, LLC	IPP	Reidsville Energy Center	NC	61240	REC2	227.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	233.7
2022	9	58881	Apex Bethel Energy Center	IPP	Apex Bethel Energy Center	TX	59048	ABEC1	158.5	Natural Gas with Compressed Air Storage	NG	CE	(T) Regulatory approvals received. Not under construction	158.5
2022	9	58881	Apex Bethel Energy Center	IPP	Apex Bethel Energy Center	TX	59048	ABEC2	158.5	Natural Gas with Compressed Air Storage	NG	CE	(T) Regulatory approvals received. Not under construction	158.5
2022	10	59761	McLean Homestead, LLC	IPP	McLean Homestead	NC	60020	PV1	4.9	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.9
2022	10	61906	Rye Development	IPP	Allegheny L&D2 Hydroelectric Project	PA	62401	NA1	2.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	4.5
2022	10	61906	Rye Development	IPP	Arkabutla Lake Hydroelectric Project	MS	62402	NA1	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	10	61906	Rye Development	IPP	Beverly L&D Hydroelectric Project	OH	62403	NA1	1.2	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	1.5
2022	10	61906	Rye Development	IPP	Devola L&D Hydroelectric Project	OH	62435	NA1	1.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	10	61906	Rye Development	IPP	Emsworth BC Hydroelectric Project	PA	62434	NA1	3.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	5.5
2022	10	61906	Rye Development	IPP	Emsworth L&D Hydroelectric Project	PA	62433	NA1	5.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.5
2022	10	61906	Rye Development	IPP	Enid Lake Hydroelectric Project	MS	62432	NA1	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	10	61906	Rye Development	IPP	Grays Landing L&D Hydroelectric Project	PA	62388	NA1	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	10	61906	Rye Development	IPP	Grenada Lake Hydroelectric Project	MS	62430	NA1	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	5.0
2022	10	61906	Rye Development	IPP	KY No. 11 L&D Hydroelectric Project	KY	62390	NA1	0.3	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	0.5
2022	10	61906	Rye Development	IPP	Lowell L&D Hydroelectric Project	OH	62429	NA1	2.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	10	61906	Rye Development	IPP	Maxwell L&D Hydroelectric Project	PA	62385	NA1	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	10	61906	Rye Development	IPP	Monongahela L&D4 Hydroelectric Project	PA	62404	NA1	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	10	61906	Rye Development	IPP	Montgomery L&D Hydroelectric Project	PA	62400	NA1	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	9.5
2022	10	61906	Rye Development	IPP	Morgantown L&D Hydroelectric Project	WV	62387	NA1	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	10	61906	Rye Development	IPP	Opekiska L&D Hydroelectric Project	WV	62386	NA1	2.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	3.0
2022	10	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA1	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	10	61906	Rye Development	IPP	Philo L&D Hydroelectric Project	OH	62427	NA1	1.2	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	1.5
2022	10	61906	Rye Development	IPP	Point Marion L&D Hydroelectric Project	PA	62384	NA1	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	10	61906	Rye Development	IPP	Rokeby L&D Hydroelectric Project	OH	62426	NA1	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	10	61906	Rye Development	IPP	Sardis Lake Hydroelectric Project	MS	62425	NA1	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	7.5
2022	11	7140	Georgia Power Co	Electric Utility	Vogtle	GA	649	4	1,100.0	Nuclear	NUC	ST	(U) Under construction, less than or equal to 50 percent complete	1,100.0
2022	11	61906	Rye Development	IPP	Allegheny L&D2 Hydroelectric Project	PA	62401	NA2	2.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	4.5
2022	11	61906	Rye Development	IPP	Arkabutla Lake Hydroelectric Project	MS	62402	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Beverly L&D Hydroelectric Project	OH	62403	NA2	1.2	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	1.5
2022	11	61906	Rye Development	IPP	Devola L&D Hydroelectric Project	OH	62435	NA2	1.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2022	11	61906	Rye Development	IPP	Emsworth BC Hydroelectric Project	PA	62434	NA2	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	5.5
2022	11	61906	Rye Development	IPP	Emsworth L&D Hydroelectric Project	PA	62433	NA2	6.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.5
2022	11	61906	Rye Development	IPP	Enid Lake Hydroelectric Project	MS	62432	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Grays Landing L&D Hydroelectric Project	PA	62388	NA2	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	11	61906	Rye Development	IPP	Grenada Lake Hydroelectric Project	MS	62430	NA2	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	5.0
2022	11	61906	Rye Development	IPP	KY No. 11 L&D Hydroelectric Project	KY	62390	NA2	0.3	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	0.5
2022	11	61906	Rye Development	IPP	KY No. 11 L&D Hydroelectric Project	KY	62390	NA3	0.3	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	0.5
2022	11	61906	Rye Development	IPP	KY No. 11 L&D Hydroelectric Project	KY	62390	NA4	0.3	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	0.5
2022	11	61906	Rye Development	IPP	KY No. 11 L&D Hydroelectric Project	KY	62390	NA5	0.3	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	0.5
2022	11	61906	Rye Development	IPP	Lowell L&D Hydroelectric Project	OH	62429	NA2	2.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Malta L&D Hydroelectric Project	OH	62428	NA1	1.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	11	61906	Rye Development	IPP	Malta L&D Hydroelectric Project	OH	62428	NA2	1.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	11	61906	Rye Development	IPP	Maxwell L&D Hydroelectric Project	PA	62385	NA2	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	11	61906	Rye Development	IPP	Monongahela L&D4 Hydroelectric Project	PA	62404	NA2	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	11	61906	Rye Development	IPP	Montgomery L&D Hydroelectric Project	PA	62400	NA2	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	9.5
2022	11	61906	Rye Development	IPP	Montgomery L&D Hydroelectric Project	PA	62400	NA3	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	9.5
2022	11	61906	Rye Development	IPP	Montgomery L&D Hydroelectric Project	PA	62400	NA4	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	9.5
2022	11	61906	Rye Development	IPP	Morgantown L&D Hydroelectric Project	WV	62387	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Opekiska L&D Hydroelectric Project	WV	62386	NA2	2.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	3.0
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA2	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA3	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA4	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA5	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA6	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Philo L&D Hydroelectric Project	OH	62427	NA2	1.2	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	1.5
2022	11	61906	Rye Development	IPP	Point Marion L&D Hydroelectric Project	PA	62384	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Rokeby L&D Hydroelectric Project	OH	62426	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	11	61906	Rye Development	IPP	Sardis Lake Hydroelectric Project	MS	62425	NA2	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	7.5
2022	12	56771	Black Hills Service Company LLC	Electric Utility	Cheyenne Prairie Generating Station	WY	57703	02B	40.0	Natural Gas Fired Combustion Turbine	NG	GT	(OT) Other	40.0
2022	12	56771	Black Hills Service Company LLC	Electric Utility	Cheyenne Prairie Generating Station	WY	57703	03A	40.0	Natural Gas Fired Combustion Turbine	NG	GT	(OT) Other	40.0
2022	12	59380	Enel Green Power NA, Inc.	IPP	Cascade Energy Storage, LLC	CA	61801	10002	25.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	25.0
2022	12	59380	Enel Green Power NA, Inc.	IPP	Sierra Energy Storage, LLC	CA	61803	10003	10.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	10.0
2022	12	56615	First Solar Project Development	IPP	Aiya Solar Project	NV	59869	GEN01	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2022	12	60411	Friesian Holdings, LLC	IPP	Friesian Holdings	NC	60692	PV1	75.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	75.0
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG1	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG2	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG3	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG4	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG5	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG6	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2023	5	12199	Montana-Dakota Utilities Co	Electric Utility	R M Heskett	ND	2790	4	88.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	88.0
2023	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS3	226.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	241.0
2023	6	60798	69SV 8me LLC	IPP	Eland 2 Solar Farm	CA	61169	69SV8	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2023	10	61914	Juwi Inc	IPP	Spanish Peaks Solar	CO	62379	47301	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2023	12	60064	Clean Path Energy Center, LLC	IPP	Clean Path Energy Center	NM	60289	CPEC1	680.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	680.0
2023	12	60064	Clean Path Energy Center, LLC	IPP	Clean Path Energy Center	NM	60289	PVGEN	55.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	55.0
2023	12	59380	Enel Green Power NA, Inc.	IPP	Kingston Energy Storage, LLC	CA	61802	10001	50.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	50.0
2023	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	II-A	750.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	750.0
2024	1	2719	CalWind Resources Inc	IPP	Tehachapi Wind Resource II	CA	54909	PLAN	15.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	15.5
2024	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS1	98.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	116.0
2024	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS2	98.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	116.0
2024	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS4	226.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	241.0
2024	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS5	226.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	241.0
2024	12	60799	33UI 8me LLC	IPP	Long Ridge Solar Farm	UT	61170	33UI8	300.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	300.0
2024	12	56814	Black Creek Renewable Energy LLC	IPP	Sampson County Disposal	NC	57492	GEN7	1.6	Landfill Gas	LFG	IC	(T) Regulatory approvals received. Not under construction	1.6
2024	12	56814	Black Creek Renewable Energy LLC	IPP	Sampson County Disposal	NC	57492	GEN8	1.6	Landfill Gas	LFG	IC	(T) Regulatory approvals received. Not under construction	1.6
2024	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	I-C	500.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	500.0
2024	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	II-B	750.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	750.0
2025	1	7189	Gila Bend Power Partners LLC	IPP	Gila Bend Power Generation Station	AZ	55507	1	156.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	170.0
2025	2	7189	Gila Bend Power Partners LLC	IPP	Gila Bend Power Generation Station	AZ	55507	2	156.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	170.0
2025	2	7189	Gila Bend Power Partners LLC	IPP	Gila Bend Power Generation Station	AZ	55507	3	156.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	170.0
2025	2	7189	Gila Bend Power Partners LLC	IPP	Gila Bend Power Generation Station	AZ	55507	4	390.0	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	390.0
2025	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS6	226.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	241.0
2025	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS7	226.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	241.0
2025	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS8	226.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	241.0
2026	5	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM1	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2026	6	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM2	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2026	7	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM3	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2026	9	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM4	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2026	9	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM5	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2026	10	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM6	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2026	11	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM7	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2026	12	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM8	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2027	1	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM9	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2027	2	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM10	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2027	3	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM11	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2027	4	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM12	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2027	12	60223	Ketchikan Electric Company	Electric Utility	Mahoney Lake Hydroelectric	AK	59027	GEN 1	9.6	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	9.6

NOTES:
Capacity from facilities with a total generator nameplate capacity less than 1 MW are excluded from this table.
Entity ID and Plant ID are official, unique identification numbers assigned by EIA; Generator IDs are assigned by plant owners and/or operators.

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2019	3	11560	City of Manassas - (VA)	Electric Utility	Dean Drive Area Electric Generators	VA	56491	PG1	1.6	Petroleum Liquids	DFO	IC
2019	3	11560	City of Manassas - (VA)	Electric Utility	Dean Drive Area Electric Generators	VA	56491	PG2	1.6	Petroleum Liquids	DFO	IC
2019	3	4161	Constellation Power Source Gen	IPP	Riverside (MD)	MD	1559	GT7	19.0	Petroleum Liquids	DFO	GT
2019	3	6455	Duke Energy Florida, LLC	Electric Utility	Higgins	FL	630	P1	20.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	3	58945	EthosEnergy Power Plant Services	IPP	Quantum Pasco Power LP	FL	54424	EDG1	1.2	Petroleum Liquids	DFO	IC
2019	3	58945	EthosEnergy Power Plant Services	IPP	Quantum Pasco Power LP	FL	54424	EDG2	1.2	Petroleum Liquids	DFO	IC
2019	3	7570	Great River Energy	Electric Utility	Elk River	MN	2039	1	8.9	Municipal Solid Waste	MSW	ST
2019	3	7570	Great River Energy	Electric Utility	Elk River	MN	2039	2	9.0	Municipal Solid Waste	MSW	ST
2019	3	7570	Great River Energy	Electric Utility	Elk River	MN	2039	3	16.9	Municipal Solid Waste	MSW	ST
2019	3	59879	Greenleaf Energy LLC	Electric CHP	Greenleaf 1 Power Plant	CA	10350	GEN1	42.0	Natural Gas Fired Combined Cycle	NG	CT
2019	3	59879	Greenleaf Energy LLC	Electric CHP	Greenleaf 1 Power Plant	CA	10350	GEN2	8.0	Natural Gas Fired Combined Cycle	NG	CA
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Yorktown	VA	3809	1	159.0	Conventional Steam Coal	BIT	ST
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Yorktown	VA	3809	2	164.0	Conventional Steam Coal	BIT	ST
2019	4	56756	Bellefontaine Gas Producers LLC	IPP	Bellefontaine Gas Producers LLC	OH	57433	1	1.6	Landfill Gas	LFG	IC
2019	4	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC2	0.9	Natural Gas Internal Combustion Engine	NG	IC
2019	4	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC4	0.7	Petroleum Liquids	DFO	IC
2019	4	7136	Georgia-Pacific Consr Prods LP-Naheola	Industrial	Georgia-Pacific Consr Prods LP-Naheola	AL	10699	GEN1	12.4	Wood/Wood Waste Biomass	BLQ	ST
2019	4	7136	Georgia-Pacific Consr Prods LP-Naheola	Industrial	Georgia-Pacific Consr Prods LP-Naheola	AL	10699	GEN2	12.4	Wood/Wood Waste Biomass	BLQ	ST
2019	4	55768	RC Cape May Holdings LLC	IPP	B L England	NJ	2378	2	146.0	Conventional Steam Coal	BIT	ST
2019	4	55768	RC Cape May Holdings LLC	IPP	B L England	NJ	2378	3	146.0	Petroleum Liquids	RFO	ST
2019	4	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	5	55.0	Conventional Steam Coal	SUB	ST
2019	4	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	6	55.0	Conventional Steam Coal	SUB	ST
2019	4	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	7	83.0	Conventional Steam Coal	SUB	ST
2019	4	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	8	83.0	Conventional Steam Coal	SUB	ST
2019	4	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	9	83.0	Conventional Steam Coal	SUB	ST
2019	5	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	2a	0.5	Petroleum Liquids	DFO	IC
2019	5	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	4	0.3	Petroleum Liquids	DFO	IC
2019	5	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	4B	0.8	Petroleum Liquids	DFO	IC
2019	5	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	5A	0.8	Petroleum Liquids	DFO	IC
2019	5	29926	Entergy Nuclear Generation Co	IPP	Pilgrim Nuclear Power Station	MA	1590	1	677.2	Nuclear	NUC	ST
2019	5	60771	Marcus Hook 50 L.P	Electric CHP	Marcus Hook Refinery Cogen	PA	50074	GEN1	48.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	5	12773	Monmouth Energy Inc	IPP	Monmouth Landfill Gas to Energy	NJ	55618	GEN1	3.3	Landfill Gas	LFG	GT
2019	5	12773	Monmouth Energy Inc	IPP	Monmouth Landfill Gas to Energy	NJ	55618	GEN2	3.3	Landfill Gas	LFG	GT
2019	5	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	12	2.8	Petroleum Liquids	DFO	GT
2019	5	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	13	2.9	Petroleum Liquids	DFO	GT
2019	5	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS1	0.9	Conventional Hydroelectric	WAT	HY
2019	5	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS2	0.9	Conventional Hydroelectric	WAT	HY
2019	5	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS3	0.9	Conventional Hydroelectric	WAT	HY
2019	5	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS4	0.9	Conventional Hydroelectric	WAT	HY
2019	5	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS5	0.9	Conventional Hydroelectric	WAT	HY
2019	5	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS6	0.9	Conventional Hydroelectric	WAT	HY
2019	5	15248	Portland General Electric Co	Electric Utility	Faraday	OR	3045	1	3.9	Conventional Hydroelectric	WAT	HY
2019	5	15248	Portland General Electric Co	Electric Utility	Faraday	OR	3045	2	3.9	Conventional Hydroelectric	WAT	HY
2019	5	15248	Portland General Electric Co	Electric Utility	Faraday	OR	3045	3	3.4	Conventional Hydroelectric	WAT	HY
2019	5	15248	Portland General Electric Co	Electric Utility	Faraday	OR	3045	4	5.6	Conventional Hydroelectric	WAT	HY
2019	5	15248	Portland General Electric Co	Electric Utility	Faraday	OR	3045	5	5.1	Conventional Hydroelectric	WAT	HY
2019	6	58620	AEP Generation Resources Inc	IPP	Conesville	OH	2840	5	375.0	Conventional Steam Coal	BIT	ST
2019	6	58620	AEP Generation Resources Inc	IPP	Conesville	OH	2840	6	375.0	Conventional Steam Coal	BIT	ST
2019	6	55795	Bethlehem Renewable Energy LLC	IPP	Bethlehem Renewable Energy LLC	PA	56572	1	3.7	Landfill Gas	LFG	GT
2019	6	4161	Constellation Power Source Gen	IPP	Gould Street	MD	1553	3	97.0	Natural Gas Steam Turbine	NG	ST
2019	6	4458	Covanta Warren Energy Resource Co LP	IPP	Covanta Warren Energy	NJ	10012	1	10.0	Municipal Solid Waste	MSW	ST
2019	6	55796	Eastern Landfill Gas LLC	IPP	Eastern Landfill Gas LLC	MD	56571	1	1.3	Landfill Gas	LFG	IC
2019	6	55796	Eastern Landfill Gas LLC	IPP	Eastern Landfill Gas LLC	MD	56571	2	1.3	Landfill Gas	LFG	IC
2019	6	55796	Eastern Landfill Gas LLC	IPP	Eastern Landfill Gas LLC	MD	56571	3	1.3	Landfill Gas	LFG	IC
2019	7	61138	City Point Energy Center	Electric CHP	James River Genco LLC	VA	10377	GEN1	46.3	Conventional Steam Coal	BIT	ST
2019	7	61138	City Point Energy Center	Electric CHP	James River Genco LLC	VA	10377	GEN2	46.3	Conventional Steam Coal	BIT	ST
2019	7	17633	Southern Indiana Gas & Elec Co	Electric Utility	Northeast (IN)	IN	1013	1	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	7	17633	Southern Indiana Gas & Elec Co	Electric Utility	Northeast (IN)	IN	1013	2	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	8	221	Alaska Village Elec Coop, Inc	Electric Utility	Quinhagak	AK	57057	UNIT1	0.4	Petroleum Liquids	DFO	IC
2019	8	22091	New-Indy Ontario LLC	Industrial	New-Indy Ontario Mill	CA	10427	GEN1	34.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	8	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	4	103.8	Conventional Hydroelectric	WAT	HY
2019	9	8776	City of Holyoke Gas and Electric Dept.	Electric Utility	Harris Energy Realty	MA	54981	ALBA	0.3	Conventional Hydroelectric	WAT	HY
2019	9	8776	City of Holyoke Gas and Electric Dept.	Electric Utility	Harris Energy Realty	MA	54981	ALBD	0.4	Conventional Hydroelectric	WAT	HY
2019	9	34672	DTE Energy Services	Electric CHP	Mobile Energy Services LLC	AL	50407	GEN5	56.1	Wood/Wood Waste Biomass	WDS	ST
2019	9	34672	DTE Energy Services	Electric CHP	Mobile Energy Services LLC	AL	50407	GEN6	33.2	Wood/Wood Waste Biomass	WDS	ST
2019	9	55951	Exelon Nuclear	IPP	Three Mile Island	PA	8011	1	802.8	Nuclear	NUC	ST
2019	9	10273	Kimberly-Clark Corp	Industrial	Chester Operations	PA	50410	5	67.0	Petroleum Coke	PC	ST

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2019	10	22484	AES Redondo Beach LLC	IPP	AES Redondo Beach LLC	CA	356	7	480.0	Natural Gas Steam Turbine	NG	ST
2019	10	1752	Biola University	Commercial	Biola University	CA	54296	EG1	0.6	Natural Gas Internal Combustion Engine	NG	IC
2019	10	1752	Biola University	Commercial	Biola University	CA	54296	EG2	0.6	Natural Gas Internal Combustion Engine	NG	IC
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	1	189.0	Conventional Steam Coal	BIT	ST
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	2	189.0	Conventional Steam Coal	BIT	ST
2019	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	1	175.0	Natural Gas Steam Turbine	NG	ST
2019	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	2	175.0	Natural Gas Steam Turbine	NG	ST
2019	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	6	495.0	Natural Gas Steam Turbine	NG	ST
2019	12	23693	AES Huntington Beach LLC	IPP	AES Huntington Beach LLC	CA	335	1	225.8	Natural Gas Steam Turbine	NG	ST
2019	12	56753	AgPower Jerome LLC	Electric CHP	Double A Digester	ID	57425	1	1.5	Other Waste Biomass	OBG	IC
2019	12	56753	AgPower Jerome LLC	Electric CHP	Double A Digester	ID	57425	2	1.5	Other Waste Biomass	OBG	IC
2019	12	56753	AgPower Jerome LLC	Electric CHP	Double A Digester	ID	57425	3	1.5	Other Waste Biomass	OBG	IC
2019	12	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	1	2.1	Petroleum Liquids	DFO	IC
2019	12	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	2	1.0	Petroleum Liquids	DFO	IC
2019	12	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	3	0.6	Petroleum Liquids	DFO	IC
2019	12	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	IC5	1.2	Petroleum Liquids	DFO	IC
2019	12	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	IC6	1.2	Petroleum Liquids	DFO	IC
2019	12	4161	Constellation Power Source Gen	IPP	Riverside (MD)	MD	1559	GT8	20.0	Petroleum Liquids	DFO	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT05	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT06	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT07	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT08	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT09	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT10	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT11	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT12	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	59879	Greenleaf Energy LLC	Electric CHP	Greenleaf 2 Power Plant	CA	10349	GEN1	49.5	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	8688	Hofstra University	Commercial	Hofstra University	NY	51035	GEN1	1.1	Natural Gas Internal Combustion Engine	NG	IC
2019	12	8688	Hofstra University	Commercial	Hofstra University	NY	51035	GEN2	1.1	Natural Gas Internal Combustion Engine	NG	IC
2019	12	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Lake Road (MO)	MO	2098	4	97.1	Natural Gas Steam Turbine	NG	ST
2019	12	11479	Madison Gas & Electric Co	Electric Utility	Fitchburg	WI	3991	1	16.6	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	11479	Madison Gas & Electric Co	Electric Utility	Fitchburg	WI	3991	2	15.8	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	16572	Salt River Project	Electric Utility	Navajo	AZ	4941	NAV1	750.0	Conventional Steam Coal	BIT	ST
2019	12	16572	Salt River Project	Electric Utility	Navajo	AZ	4941	NAV2	750.0	Conventional Steam Coal	BIT	ST
2019	12	16572	Salt River Project	Electric Utility	Navajo	AZ	4941	NAV3	750.0	Conventional Steam Coal	BIT	ST
2019	12	17698	Southwestern Electric Power Co	Electric Utility	Lieberman	LA	1417	2	26.0	Natural Gas Steam Turbine	NG	ST
2019	12	17718	Southwestern Public Service Co	Electric Utility	Cunningham	NM	2454	1	71.0	Natural Gas Steam Turbine	NG	ST
2019	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	1	38.0	Natural Gas Steam Turbine	NG	ST
2019	12	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	ST1	81.0	Natural Gas Steam Turbine	NG	ST
2019	12	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	ST2	81.0	Natural Gas Steam Turbine	NG	ST
2020	1	9155	Inland Empire Energy Ctr LLC	IPP	Inland Empire Energy Center	CA	55853	1	345.0	Natural Gas Fired Combined Cycle	NG	CS
2020	1	9155	Inland Empire Energy Ctr LLC	IPP	Inland Empire Energy Center	CA	55853	2	345.0	Natural Gas Fired Combined Cycle	NG	CS
2020	1	61854	Veolia Energy Operating Service	Electric CHP	Spruance Genco LLC	VA	54081	GEN1	52.5	Conventional Steam Coal	BIT	ST
2020	1	61854	Veolia Energy Operating Service	Electric CHP	Spruance Genco LLC	VA	54081	GEN2	52.5	Conventional Steam Coal	BIT	ST
2020	2	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG1	2.8	Natural Gas Internal Combustion Engine	NG	IC
2020	2	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG2	2.8	Natural Gas Internal Combustion Engine	NG	IC
2020	2	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG3	2.8	Natural Gas Internal Combustion Engine	NG	IC
2020	3	6452	Florida Power & Light Co	Electric CHP	Indiantown Cogeneration LP	FL	50976	GEN1	330.0	Conventional Steam Coal	BIT	ST
2020	4	6027	Entergy Nuclear Indian Point 2	IPP	Indian Point 2	NY	2497	2	1,018.5	Nuclear	NUC	ST
2020	4	11820	Massachusetts Inst of Tech	Commercial	Mass Inst Tech Cntrl Utilities/Cogen Plt	MA	54907	CTG1	19.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	4	17897	St Mary's Hospital	Commercial	Saint Marys Hospital Power Plant	MN	54262	6	2.7	Natural Gas Internal Combustion Engine	NG	IC
2020	5	6455	Duke Energy Florida, LLC	Electric Utility	Avon Park	FL	624	P1	24.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	6455	Duke Energy Florida, LLC	Electric Utility	Avon Park	FL	624	P2	24.0	Petroleum Liquids	DFO	GT
2020	5	6455	Duke Energy Florida, LLC	Electric Utility	Higgins	FL	630	P2	25.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	6455	Duke Energy Florida, LLC	Electric Utility	Higgins	FL	630	P3	31.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	6455	Duke Energy Florida, LLC	Electric Utility	Higgins	FL	630	P4	31.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	6526	FirstEnergy Generation Corp	IPP	FirstEnergy W H Sammis	OH	2866	1	180.0	Conventional Steam Coal	BIT	ST
2020	5	6526	FirstEnergy Generation Corp	IPP	FirstEnergy W H Sammis	OH	2866	2	180.0	Conventional Steam Coal	BIT	ST
2020	5	6526	FirstEnergy Generation Corp	IPP	FirstEnergy W H Sammis	OH	2866	3	180.0	Conventional Steam Coal	BIT	ST
2020	5	6526	FirstEnergy Generation Corp	IPP	FirstEnergy W H Sammis	OH	2866	4	180.0	Conventional Steam Coal	BIT	ST
2020	5	50161	FirstEnergy Nuclear Operating Company	IPP	Davis Besse	OH	6149	1	894.0	Nuclear	NUC	ST
2020	5	16721	S D Warren Co.- Westbrook	Industrial	S D Warren Westbrook	ME	50447	GN18	0.4	Conventional Hydroelectric	WAT	HY
2020	5	16721	S D Warren Co.- Westbrook	Industrial	S D Warren Westbrook	ME	50447	GN19	0.4	Conventional Hydroelectric	WAT	HY
2020	5	16721	S D Warren Co.- Westbrook	Industrial	S D Warren Westbrook	ME	50447	GN20	0.4	Conventional Hydroelectric	WAT	HY
2020	6	58620	AEP Generation Resources Inc	IPP	Conesville	OH	2840	4	780.0	Conventional Steam Coal	BIT	ST
2020	6	7483	City of Grand Haven - (MI)	Electric Utility	Grand Haven Diesel Plant	MI	1826	1	8.4	Natural Gas Internal Combustion Engine	NG	IC
2020	6	7483	City of Grand Haven - (MI)	Electric Utility	J B Sims	MI	1825	3	69.1	Conventional Steam Coal	BIT	ST

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT1	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT2	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT3	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT4	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT5	14.6	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT6	15.6	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT7	14.5	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT8	16.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Westport	MD	1560	GT5	115.8	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	6035	Exelon Power	IPP	Fairless Hills	PA	7701	A	30.0	Landfill Gas	LFG	ST
2020	6	6035	Exelon Power	IPP	Fairless Hills	PA	7701	B	30.0	Landfill Gas	LFG	ST
2020	6	6035	Exelon Power	IPP	Pennsbury	PA	7690	1	2.0	Landfill Gas	LFG	GT
2020	6	6035	Exelon Power	IPP	Pennsbury	PA	7690	2	2.0	Landfill Gas	LFG	GT
2020	6	60422	H.A. Wagner LLC	IPP	Herbert A Wagner	MD	1554	2	118.0	Conventional Steam Coal	RC	ST
2020	7	57463	Kimberly-Clark Worldwide Inc	Industrial	Fullerton Mill CHP	CA	58083	GTG1	12.0	Natural Gas Fired Combined Cycle	NG	CT
2020	7	57463	Kimberly-Clark Worldwide Inc	Industrial	Fullerton Mill CHP	CA	58083	STG1	1.0	Natural Gas Fired Combined Cycle	NG	CA
2020	7	14328	Pacific Gas & Electric Co.	Electric Utility	Cow Creek	CA	229	1	0.9	Conventional Hydroelectric	WAT	HY
2020	7	14328	Pacific Gas & Electric Co.	Electric Utility	Cow Creek	CA	229	2	0.9	Conventional Hydroelectric	WAT	HY
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN1	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN2	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN3	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN4	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN5	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN6	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN7	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	10	55739	Edgecombe Operating Services LLC	Electric CHP	Edgecombe Genco LLC	NC	10384	GEN1	57.8	Conventional Steam Coal	BIT	ST
2020	10	55739	Edgecombe Operating Services LLC	Electric CHP	Edgecombe Genco LLC	NC	10384	GEN2	57.8	Conventional Steam Coal	BIT	ST
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL00	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL01	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL02	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL03	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL04	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL05	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL06	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL07	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL08	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL09	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL10	0.1	Other Waste Biomass	OBG	FC
2020	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	3	332.0	Natural Gas Steam Turbine	NG	ST
2020	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	4	335.0	Natural Gas Steam Turbine	NG	ST
2020	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	5	485.0	Natural Gas Steam Turbine	NG	ST
2020	12	23693	AES Huntington Beach LLC	IPP	AES Huntington Beach LLC	CA	335	2	225.8	Natural Gas Steam Turbine	NG	ST
2020	12	22484	AES Redondo Beach LLC	IPP	AES Redondo Beach LLC	CA	356	5	175.0	Natural Gas Steam Turbine	NG	ST
2020	12	22484	AES Redondo Beach LLC	IPP	AES Redondo Beach LLC	CA	356	6	175.0	Natural Gas Steam Turbine	NG	ST
2020	12	22484	AES Redondo Beach LLC	IPP	AES Redondo Beach LLC	CA	356	8	480.0	Natural Gas Steam Turbine	NG	ST
2020	12	17833	City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	MO	2161	4	56.0	Natural Gas Steam Turbine	NG	ST
2020	12	17833	City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	MO	2161	5	97.0	Natural Gas Steam Turbine	NG	ST
2020	12	15908	GenOn California South, LP	IPP	Ellwood	CA	8076	01	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	9210	International Paper Co-Riegelwood	Industrial	International Paper Riegelwood Mill	NC	54656	NO 1	7.8	Wood/Wood Waste Biomass	BLQ	ST
2020	12	50006	Invista	Industrial	Camden South Carolina	SC	10795	GEN1	5.5	Natural Gas Steam Turbine	NG	ST
2020	12	50006	Invista	Industrial	Camden South Carolina	SC	10795	GEN2	5.5	Natural Gas Steam Turbine	NG	ST
2020	12	56155	Lansing Board of Water and Light	Electric Utility	Eckert Station	MI	1831	4	64.0	Conventional Steam Coal	SUB	ST
2020	12	56155	Lansing Board of Water and Light	Electric Utility	Eckert Station	MI	1831	5	63.1	Conventional Steam Coal	SUB	ST
2020	12	56155	Lansing Board of Water and Light	Electric Utility	Eckert Station	MI	1831	6	62.8	Conventional Steam Coal	SUB	ST
2020	12	11479	Madison Gas & Electric Co	Electric Utility	Nine Springs	WI	9674	GT1	14.2	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	11479	Madison Gas & Electric Co	Electric Utility	Sycamore (WI)	WI	3993	1	11.2	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	11479	Madison Gas & Electric Co	Electric Utility	Sycamore (WI)	WI	3993	2	16.6	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	12199	Montana-Dakota Utilities Co	Electric Utility	Lewis & Clark	MT	6089	1	53.1	Conventional Steam Coal	LIG	ST
2020	12	55269	NextEra Energy Duane Arnold LLC	IPP	Duane Arnold Energy Center	IA	1060	1	601.4	Nuclear	NUC	ST
2020	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	4	0.8	Petroleum Liquids	DFO	IC
2020	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	5	0.8	Petroleum Liquids	DFO	IC
2020	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	2	90.0	Natural Gas Steam Turbine	NG	ST
2020	12	19099	TransAlta Centralia Gen LLC	IPP	Transalta Centralia Generation	WA	3845	1	670.0	Conventional Steam Coal	RC	ST
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	3	21.5	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	4	14.3	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	5	45.1	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	6	33.7	Natural Gas Fired Combustion Turbine	NG	GT

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Sheepskin	WI	4059	1	27.2	Natural Gas Fired Combustion Turbine	NG	GT
2021	1	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	1	6.5	Natural Gas Fired Combined Cycle	NG	CA
2021	1	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	2	6.5	Natural Gas Fired Combined Cycle	NG	CA
2021	1	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	3	7.0	Natural Gas Fired Combined Cycle	NG	CA
2021	1	15908	GenOn California South, LP	IPP	Ormond Beach	CA	350	1	741.0	Natural Gas Steam Turbine	NG	ST
2021	1	15908	GenOn California South, LP	IPP	Ormond Beach	CA	350	2	750.0	Natural Gas Steam Turbine	NG	ST
2021	1	14328	Pacific Gas & Electric Co.	Electric Utility	Kilarc	CA	253	1	1.6	Conventional Hydroelectric	WAT	HY
2021	1	14328	Pacific Gas & Electric Co.	Electric Utility	Kilarc	CA	253	2	1.6	Conventional Hydroelectric	WAT	HY
2021	1	15248	Portland General Electric Co	Electric Utility	Boardman	OR	6106	1	585.0	Conventional Steam Coal	SUB	ST
2021	4	6028	Entergy Nuclear Indian Point 3	IPP	Indian Point 3	NY	8907	3	1,037.8	Nuclear	NUC	ST
2021	5	58435	Collinwood BioEnergy	Industrial	Collinwood BioEnergy Facility	OH	58439	CBE01	1.0	Other Waste Biomass	OBG	IC
2021	5	50161	FirstEnergy Nuclear Operating Company	IPP	Beaver Valley	PA	6040	1	907.0	Nuclear	NUC	ST
2021	5	50161	FirstEnergy Nuclear Operating Company	IPP	Perry	OH	6020	1	1,240.0	Nuclear	NUC	ST
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	2	58.0	Conventional Steam Coal	SUB	ST
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	3	80.0	Conventional Steam Coal	SUB	ST
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	D1	0.2	Petroleum Liquids	DFO	IC
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	D2	0.1	Petroleum Liquids	DFO	IC
2021	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	3	383.4	Conventional Steam Coal	SUB	ST
2021	6	18454	Tampa Electric Co	Electric Utility	Big Bend	FL	645	ST2	385.0	Conventional Steam Coal	BIT	ST
2021	9	17166	Sierra Pacific Power Co	Electric Utility	Fort Churchill	NV	2330	2	113.0	Natural Gas Steam Turbine	NG	ST
2021	10	50161	FirstEnergy Nuclear Operating Company	IPP	Beaver Valley	PA	6040	2	901.0	Nuclear	NUC	ST
2021	12	18301	City of Sumner - (IA)	Electric Utility	Sumner	IA	1191	1	2.6	Petroleum Liquids	DFO	IC
2021	12	18301	City of Sumner - (IA)	Electric Utility	Sumner	IA	1191	2	1.1	Petroleum Liquids	DFO	IC
2021	12	12199	Montana-Dakota Utilities Co	Electric Utility	R M Heskett	ND	2790	1	29.5	Conventional Steam Coal	LIG	ST
2021	12	12199	Montana-Dakota Utilities Co	Electric Utility	R M Heskett	ND	2790	2	74.8	Conventional Steam Coal	LIG	ST
2022	1	59409	Eco Services Corp.	Industrial	Houston Plant	TX	52065	GEN2	1.5	All Other	WH	ST
2022	6	56192	Entergy Nuclear Palisades LLC	IPP	Palisades	MI	1715	1	804.2	Nuclear	NUC	ST
2022	7	15298	Talen Montana LLC	IPP	Colstrip	MT	6076	1	307.0	Conventional Steam Coal	SUB	ST
2022	7	15298	Talen Montana LLC	IPP	Colstrip	MT	6076	2	307.0	Conventional Steam Coal	SUB	ST
2022	8	6909	Gainesville Regional Utilities	Electric Utility	Deerhaven Generating Station	FL	663	1	75.0	Natural Gas Steam Turbine	NG	ST
2022	8	60791	Monroe County (NY)	Commercial	Iola Powerhouse & Cogeneration Facility	NY	62424	1	1.4	Natural Gas Internal Combustion Engine	NG	IC
2022	8	60791	Monroe County (NY)	Commercial	Iola Powerhouse & Cogeneration Facility	NY	62424	2	1.4	Natural Gas Internal Combustion Engine	NG	IC
2022	8	60791	Monroe County (NY)	Commercial	Iola Powerhouse & Cogeneration Facility	NY	62424	3	1.4	Natural Gas Internal Combustion Engine	NG	IC
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	1	6.2	Conventional Hydroelectric	WAT	HY
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	2	6.4	Conventional Hydroelectric	WAT	HY
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	3	6.9	Conventional Hydroelectric	WAT	HY
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	4	0.4	Conventional Hydroelectric	WAT	HY
2022	12	15470	Duke Energy Indiana, LLC	Electric Utility	R Gallagher	IN	1008	2	140.0	Conventional Steam Coal	BIT	ST
2022	12	15470	Duke Energy Indiana, LLC	Electric Utility	R Gallagher	IN	1008	4	140.0	Conventional Steam Coal	BIT	ST
2022	12	54803	Dynegy Oakland, LLC	IPP	Dynegy Oakland Power Plant	CA	6211	GEN1	55.0	Petroleum Liquids	JF	GT
2022	12	54803	Dynegy Oakland, LLC	IPP	Dynegy Oakland Power Plant	CA	6211	GEN2	55.0	Petroleum Liquids	JF	GT
2022	12	54803	Dynegy Oakland, LLC	IPP	Dynegy Oakland Power Plant	CA	6211	GEN3	55.0	Petroleum Liquids	JF	GT
2022	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	1	74.0	Natural Gas Steam Turbine	NG	ST
2022	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	2	76.0	Natural Gas Steam Turbine	NG	ST
2022	12	5701	El Paso Electric Co	Electric Utility	Rio Grande	NM	2444	6	45.0	Natural Gas Steam Turbine	NG	ST
2022	12	5701	El Paso Electric Co	Electric Utility	Rio Grande	NM	2444	7	46.0	Natural Gas Steam Turbine	NG	ST
2022	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	3	61.0	Petroleum Liquids	DFO	GT
2022	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	4	61.0	Petroleum Liquids	DFO	GT
2022	12	13781	Northern States Power Co - Minnesota	Electric Utility	Sherburne County	MN	6090	2	682.0	Conventional Steam Coal	SUB	ST
2022	12	15466	Public Service Co of Colorado	Electric Utility	Comanche (CO)	CO	470	1	325.0	Conventional Steam Coal	SUB	ST
2022	12	17718	Southwestern Public Service Co	Electric Utility	Nichols	TX	3484	1	107.0	Natural Gas Steam Turbine	NG	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	1	12.0	Conventional Steam Coal	BIT	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	2	12.0	Conventional Steam Coal	BIT	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	3	12.0	Conventional Steam Coal	BIT	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	ST4	64.0	Conventional Steam Coal	BIT	ST
2022	12	19436	Union Electric Co - (MO)	Electric Utility	Meramec	MO	2104	1	118.0	Natural Gas Steam Turbine	NG	ST
2022	12	19436	Union Electric Co - (MO)	Electric Utility	Meramec	MO	2104	2	118.0	Natural Gas Steam Turbine	NG	ST
2022	12	19436	Union Electric Co - (MO)	Electric Utility	Meramec	MO	2104	3	260.0	Conventional Steam Coal	SUB	ST
2022	12	19436	Union Electric Co - (MO)	Electric Utility	Meramec	MO	2104	4	334.0	Conventional Steam Coal	SUB	ST
2023	1	11135	City of Logan - (UT)	Electric Utility	Hydro III	UT	3675	HY1	0.7	Conventional Hydroelectric	WAT	HY
2023	1	11135	City of Logan - (UT)	Electric Utility	Hydro III	UT	3675	HY2	0.7	Conventional Hydroelectric	WAT	HY
2023	1	61956	South Nassau Communities Hospital	Commercial	South Nassau Communities Hospital	NY	62447	1	1.1	Petroleum Liquids	DFO	IC
2023	1	61956	South Nassau Communities Hospital	Commercial	South Nassau Communities Hospital	NY	62447	2	0.8	Petroleum Liquids	DFO	IC
2023	1	61956	South Nassau Communities Hospital	Commercial	South Nassau Communities Hospital	NY	62447	3	1.0	Petroleum Liquids	DFO	IC
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT1	1.5	Landfill Gas	LFG	IC
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT2	1.8	Landfill Gas	LFG	IC
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT3	1.8	Landfill Gas	LFG	IC

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTA	20.5	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTB	20.5	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTC	20.5	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	STM	24.0	Natural Gas Fired Combined Cycle	NG	CA
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTA	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTB	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTC	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	STM	28.0	Natural Gas Fired Combined Cycle	NG	CA
2023	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	1	2.0	Petroleum Liquids	DFO	IC
2023	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	2	2.0	Petroleum Liquids	DFO	IC
2023	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	3	2.0	Petroleum Liquids	DFO	IC
2023	10	18715	Texas Municipal Power Agency	Electric Utility	Gibbons Creek	TX	6136	1	470.0	Conventional Steam Coal	SUB	ST
2023	12	5860	Empire District Electric Co	Electric Utility	Empire Energy Center	MO	6223	1	82.0	Natural Gas Fired Combustion Turbine	NG	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	1	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	2	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	3	36.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	4	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	1	9.0	Wood/Wood Waste Biomass	WDS	ST
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	2	7.0	Wood/Wood Waste Biomass	WDS	ST
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Laverne Battery	MN	58579	1	1.0	Batteries	MWH	BA
2023	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Horseshoe Lake	OK	2951	6	163.0	Natural Gas Steam Turbine	NG	ST
2023	12	14127	Omaha Public Power District	Electric Utility	North Omaha	NE	2291	1	64.8	Natural Gas Steam Turbine	NG	ST
2023	12	14127	Omaha Public Power District	Electric Utility	North Omaha	NE	2291	2	90.8	Natural Gas Steam Turbine	NG	ST
2023	12	14127	Omaha Public Power District	Electric Utility	North Omaha	NE	2291	3	86.0	Natural Gas Steam Turbine	NG	ST
2023	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	A B Brown	IN	6137	1	245.0	Conventional Steam Coal	BIT	ST
2023	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	A B Brown	IN	6137	2	245.0	Conventional Steam Coal	BIT	ST
2023	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	F B Culley	IN	1012	2	90.0	Conventional Steam Coal	BIT	ST
2023	12	17718	Southwestern Public Service Co	Electric Utility	Nichols	TX	3484	2	106.0	Natural Gas Steam Turbine	NG	ST
2024	1	11843	Maui Electric Co Ltd	Electric Utility	Kahului	HI	6056	1	4.7	Petroleum Liquids	RFO	ST
2024	1	11843	Maui Electric Co Ltd	Electric Utility	Kahului	HI	6056	2	4.8	Petroleum Liquids	RFO	ST
2024	1	11843	Maui Electric Co Ltd	Electric Utility	Kahului	HI	6056	3	11.0	Petroleum Liquids	RFO	ST
2024	1	11843	Maui Electric Co Ltd	Electric Utility	Kahului	HI	6056	4	11.9	Petroleum Liquids	RFO	ST
2024	7	1951	White Pine Electric Power LLC	IPP	White Pine Electric Power	MI	10148	GEN3	18.0	Natural Gas Steam Turbine	NG	ST
2024	11	14328	Pacific Gas & Electric Co.	Electric Utility	Diablo Canyon	CA	6099	1	1,122.0	Nuclear	NUC	ST
2024	12	16604	City of San Antonio - (TX)	Electric Utility	J T Deely	TX	6181	1	420.0	Conventional Steam Coal	SUB	ST
2024	12	16604	City of San Antonio - (TX)	Electric Utility	J T Deely	TX	6181	2	420.0	Conventional Steam Coal	SUB	ST
2024	12	16604	City of San Antonio - (TX)	Electric Utility	V H Braunig	TX	3612	1	217.0	Natural Gas Steam Turbine	NG	ST
2024	12	16604	City of San Antonio - (TX)	Electric Utility	V H Braunig	TX	3612	2	230.0	Natural Gas Steam Turbine	NG	ST
2024	12	16604	City of San Antonio - (TX)	Electric Utility	V H Braunig	TX	3612	3	412.0	Natural Gas Steam Turbine	NG	ST
2024	12	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	1	111.8	Natural Gas Steam Turbine	NG	ST
2024	12	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	2	156.3	Natural Gas Steam Turbine	NG	ST
2024	12	12384	Midwest Generations EME LLC	IPP	Will County	IL	884	4	510.0	Conventional Steam Coal	SUB	ST
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Apple River	WI	6231	1	0.4	Conventional Hydroelectric	WAT	HY
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Apple River	WI	6231	3	0.5	Conventional Hydroelectric	WAT	HY
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Apple River	WI	6231	4	0.5	Conventional Hydroelectric	WAT	HY
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	1	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	2	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	3	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	4	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Sherburne County	MN	6090	1	680.0	Conventional Steam Coal	SUB	ST
2024	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	3	93.0	Natural Gas Steam Turbine	NG	ST
2025	4	7801	Gulf Power Co	Electric Utility	Pea Ridge	FL	7715	1	4.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	4	7801	Gulf Power Co	Electric Utility	Pea Ridge	FL	7715	2	4.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	4	7801	Gulf Power Co	Electric Utility	Pea Ridge	FL	7715	3	4.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	8	13781	Northern States Power Co - Minnesota	Electric Utility	White River (WI)	WI	3989	1	0.2	Conventional Hydroelectric	WAT	HY
2025	8	13781	Northern States Power Co - Minnesota	Electric Utility	White River (WI)	WI	3989	2	0.2	Conventional Hydroelectric	WAT	HY
2025	8	14328	Pacific Gas & Electric Co.	Electric Utility	Diablo Canyon	CA	6099	2	1,118.0	Nuclear	NUC	ST
2025	9	17166	Sierra Pacific Power Co	Electric Utility	Fort Churchill	NV	2330	1	113.0	Natural Gas Steam Turbine	NG	ST
2025	11	13781	Northern States Power Co - Minnesota	Electric Utility	Trego	WI	4012	1	0.4	Conventional Hydroelectric	WAT	HY
2025	11	13781	Northern States Power Co - Minnesota	Electric Utility	Trego	WI	4012	2	0.3	Conventional Hydroelectric	WAT	HY
2025	12	56155	Lansing Board of Water and Light	Electric Utility	Erickson Station	MI	1832	1	154.5	Conventional Steam Coal	SUB	ST
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Angus Anson	SD	7237	1	90.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Angus Anson	SD	7237	2	90.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Saxon Falls	WI	1756	1	0.5	Conventional Hydroelectric	WAT	HY
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Saxon Falls	WI	1756	2	0.5	Conventional Hydroelectric	WAT	HY
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Superior Falls	MI	1757	1	0.5	Conventional Hydroelectric	WAT	HY
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Superior Falls	MI	1757	2	0.5	Conventional Hydroelectric	WAT	HY

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	1	44.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	2	55.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	3	44.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	4	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	5	52.0	Petroleum Liquids	DFO	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	6	48.0	Petroleum Liquids	DFO	GT
2025	12	15466	Public Service Co of Colorado	Electric Utility	Comanche (CO)	CO	470	2	335.0	Conventional Steam Coal	SUB	ST
2025	12	17166	Sierra Pacific Power Co	Electric Utility	North Valmy	NV	8224	1	254.0	Conventional Steam Coal	SUB	ST
2025	12	17166	Sierra Pacific Power Co	Electric Utility	North Valmy	NV	8224	2	268.0	Conventional Steam Coal	SUB	ST
2025	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	Broadway (IN)	IN	1011	2	65.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	17718	Southwestern Public Service Co	Electric Utility	Cunningham	NM	2454	2	183.0	Natural Gas Steam Turbine	NG	ST
2025	12	17718	Southwestern Public Service Co	Electric Utility	Maddox	NM	2446	2	61.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	17718	Southwestern Public Service Co	Electric Utility	Maddox	NM	2446	3	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	19099	TransAlta Centralia Gen LLC	IPP	Transalta Centralia Generation	WA	3845	2	670.0	Conventional Steam Coal	RC	ST
2025	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Craig (CO)	CO	6021	1	427.0	Conventional Steam Coal	SUB	ST
2026	1	21622	The University of Texas at Dallas	Commercial	University of Texas at Dallas	TX	54607	GEN1	3.5	Natural Gas Internal Combustion Engine	NG	IC
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT1	12.7	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT2	11.9	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT3	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT4	9.4	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	16604	City of San Antonio - (TX)	Electric Utility	O W Sommers	TX	3611	1	420.0	Natural Gas Steam Turbine	NG	ST
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	3	97.0	Natural Gas Steam Turbine	NG	ST
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	4	83.0	Natural Gas Fired Combined Cycle	NG	CA
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	CT1	72.0	Natural Gas Fired Combined Cycle	NG	CT
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	CT2	72.0	Natural Gas Fired Combined Cycle	NG	CT
2026	12	5860	Empire District Electric Co	Electric Utility	Empire Energy Center	MO	6223	2	82.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	56997	Marina Energy LLC	IPP	L'Oreal Piscataway	NJ	57868	UNIT1	0.8	Solar Photovoltaic	SUN	PV
2026	12	15466	Public Service Co of Colorado	Electric Utility	Alamosa	CO	464	CT1	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	15466	Public Service Co of Colorado	Electric Utility	Alamosa	CO	464	CT2	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	15466	Public Service Co of Colorado	Electric Utility	Fort Lupton	CO	8067	1	44.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	15466	Public Service Co of Colorado	Electric Utility	Fort Lupton	CO	8067	2	44.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	15466	Public Service Co of Colorado	Electric Utility	Fruita	CO	471	1	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	15466	Public Service Co of Colorado	Electric Utility	Valmont	CO	477	6	43.0	Natural Gas Fired Combustion Turbine	NG	GT
2027	2	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	HH	0.5	Solar Photovoltaic	SUN	PV
2027	2	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	HII	0.4	Solar Photovoltaic	SUN	PV
2027	2	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	HJC	0.2	Solar Photovoltaic	SUN	PV
2027	2	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	UNIT1	2.7	Solar Photovoltaic	SUN	PV
2027	6	11208	Los Angeles Department of Water & Power	Electric Utility	Intermountain Power Project	UT	6481	1	900.0	Conventional Steam Coal	BIT	ST
2027	6	11208	Los Angeles Department of Water & Power	Electric Utility	Intermountain Power Project	UT	6481	2	900.0	Conventional Steam Coal	BIT	ST
2027	12	15466	Public Service Co of Colorado	Electric Utility	Cherokee	CO	469	4	310.0	Natural Gas Steam Turbine	NG	ST
2027	12	15466	Public Service Co of Colorado	Electric Utility	Salida	CO	474	2	0.6	Conventional Hydroelectric	WAT	HY
2027	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	4	190.0	Natural Gas Steam Turbine	NG	ST
2028	1	56997	Marina Energy LLC	IPP	Freeze Solar	NJ	60759	PV1	1.4	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller 400M	NJ	62438	A	0.8	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller 400M	NJ	62438	B	0.2	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller 400M	NJ	62438	C	0.2	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	HM	0.8	Solar Photovoltaic	SUN	PV
2028	12	16604	City of San Antonio - (TX)	Electric Utility	O W Sommers	TX	3611	2	410.0	Natural Gas Steam Turbine	NG	ST
2028	12	56997	Marina Energy LLC	IPP	ACCC Mays Landing	NJ	60802	PV1	1.4	Solar Photovoltaic	SUN	PV
2028	12	56997	Marina Energy LLC	IPP	IFF Hazlet	NJ	60709	GRND	3.0	Solar Photovoltaic	SUN	PV
2028	12	17718	Southwestern Public Service Co	Electric Utility	Maddox	NM	2446	1	112.0	Natural Gas Steam Turbine	NG	ST
2029	10	56667	Loraine Windpower Project	IPP	Loraine Windpark Project LLC	TX	57303	LWG1	75.0	Onshore Wind Turbine	WND	WT
2030	12	56625	Flat Water Wind Farm LLC	IPP	Flat Water Wind Farm LLC	NE	57283	WTG1	60.0	Onshore Wind Turbine	WND	WT
2030	12	17718	Southwestern Public Service Co	Electric Utility	Nichols	TX	3484	3	244.0	Natural Gas Steam Turbine	NG	ST
2031	12	17718	Southwestern Public Service Co	Electric Utility	Jones	TX	3482	1	243.0	Natural Gas Steam Turbine	NG	ST
2034	12	17718	Southwestern Public Service Co	Electric Utility	Jones	TX	3482	2	243.0	Natural Gas Steam Turbine	NG	ST
2034	12	17718	Southwestern Public Service Co	Electric Utility	Quay County	NM	58125	1	17.0	Petroleum Liquids	DFO	GT
2036	12	17718	Southwestern Public Service Co	Electric Utility	Harrington	TX	6193	1	339.0	Conventional Steam Coal	SUB	ST
2037	12	17718	Southwestern Public Service Co	Electric Utility	Tolk	TX	6194	1	532.0	Conventional Steam Coal	SUB	ST
2037	12	17718	Southwestern Public Service Co	Electric Utility	Tolk	TX	6194	2	535.0	Conventional Steam Coal	SUB	ST
2038	12	17718	Southwestern Public Service Co	Electric Utility	Harrington	TX	6193	2	339.0	Conventional Steam Coal	SUB	ST
2040	12	17718	Southwestern Public Service Co	Electric Utility	Cunningham	NM	2454	3	106.0	Natural Gas Fired Combustion Turbine	NG	GT
2040	12	17718	Southwestern Public Service Co	Electric Utility	Cunningham	NM	2454	4	103.0	Natural Gas Fired Combustion Turbine	NG	GT
2040	12	17718	Southwestern Public Service Co	Electric Utility	Harrington	TX	6193	3	340.0	Conventional Steam Coal	SUB	ST
2043	12	58840	Copenhagen Wind Farm, LLC	IPP	Copenhagen Wind Farm	NY	58979	CPHGN	79.9	Onshore Wind Turbine	WND	WT
2047	7	60455	PVN Milliken, LLC	IPP	PVN Milliken, LLC	CA	60790	PV	3.0	Solar Photovoltaic	SUN	PV
2056	12	17718	Southwestern Public Service Co	Electric Utility	Jones	TX	3482	3	166.0	Natural Gas Fired Combustion Turbine	NG	GT

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2058	12	17718	Southwestern Public Service Co	Electric Utility	Jones	TX	3482	4	168.0	Natural Gas Fired Combustion Turbine	NG	GT

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

Table 6.7.A. Capacity Factors for Utility Scale Generators Primarily Using Fossil Fuels, January 2013-February 2019

	Coal	Natural Gas				Petroleum		
Period		Natural Gas Fired Combined Cycle	Natural Gas Fired Combustion Turbine	Steam Turbine	Internal Combustion Engine	Steam Turbine	Petroleum Liquids Fired Combustion Turbine	Internal Combustion Engine
Annual Factors								
2013	59.8%	48.2%	4.9%	10.6%	6.1%	12.1%	0.8%	2.2%
2014	61.1%	48.3%	5.2%	10.4%	8.5%	12.5%	1.1%	1.4%
2015	54.7%	55.9%	6.9%	11.5%	8.9%	13.3%	1.1%	2.2%
2016	53.3%	55.5%	8.3%	12.4%	9.6%	11.5%	1.1%	2.6%
2017	53.7%	51.3%	6.7%	10.5%	9.9%	13.5%	0.9%	2.3%
2018	54.0%	57.6%	11.8%	13.7%	NA	13.9%	2.5%	NA
Year 2017								
January	59.9%	46.7%	5.3%	4.3%	9.2%	11.6%	0.7%	3.0%
February	49.7%	44.4%	5.4%	3.8%	7.9%	10.3%	0.8%	2.4%
March	46.3%	44.8%	6.5%	7.2%	7.8%	13.0%	0.8%	2.7%
April	43.6%	42.5%	5.6%	8.7%	8.0%	10.1%	0.6%	1.9%
May	48.4%	45.8%	6.0%	9.1%	8.2%	15.9%	0.8%	2.0%
June	58.5%	56.0%	7.3%	14.1%	10.3%	15.8%	0.8%	2.0%
July	67.1%	67.0%	9.1%	20.8%	13.0%	18.5%	0.9%	2.1%
August	62.9%	65.5%	8.0%	16.1%	12.3%	14.9%	0.9%	2.3%
Sept	53.8%	55.7%	7.8%	13.3%	10.9%	14.2%	1.1%	2.3%
October	47.5%	48.2%	6.6%	12.4%	10.2%	11.7%	0.9%	2.1%
November	49.3%	45.6%	5.8%	7.0%	10.1%	12.3%	0.7%	2.1%
December	56.2%	52.3%	6.4%	8.5%	10.3%	14.3%	1.4%	2.4%
Year 2018								
January	64.3%	53.9%	11.9%	13.1%	NA	19.0%	5.0%	NA
February	49.3%	55.0%	6.9%	6.7%	NA	11.8%	0.9%	NA
March	43.9%	51.4%	9.3%	8.6%	NA	10.9%	1.4%	NA
April	41.7%	47.9%	11.4%	8.7%	NA	12.7%	1.9%	NA
May	47.0%	52.3%	11.8%	16.8%	NA	9.2%	2.3%	NA
June	58.4%	61.8%	12.0%	17.9%	NA	15.2%	3.0%	NA
July	64.3%	72.8%	18.9%	25.7%	NA	15.5%	3.6%	NA
August	64.3%	72.1%	16.5%	22.5%	NA	15.8%	2.6%	NA
Sept	56.0%	66.1%	14.6%	16.6%	NA	17.8%	3.1%	NA
October	48.9%	55.3%	12.0%	14.0%	NA	13.9%	2.2%	NA
November	54.0%	50.5%	9.7%	9.1%	NA	13.4%	1.8%	NA
December	55.0%	50.7%	6.4%	3.4%	NA	11.6%	1.7%	NA
Year 2019								
January	57.1%	56.3%	7.2%	9.1%	NA	10.7%	1.0%	NA
February	50.7%	57.9%	7.9%	7.3%	NA	10.7%	0.9%	NA

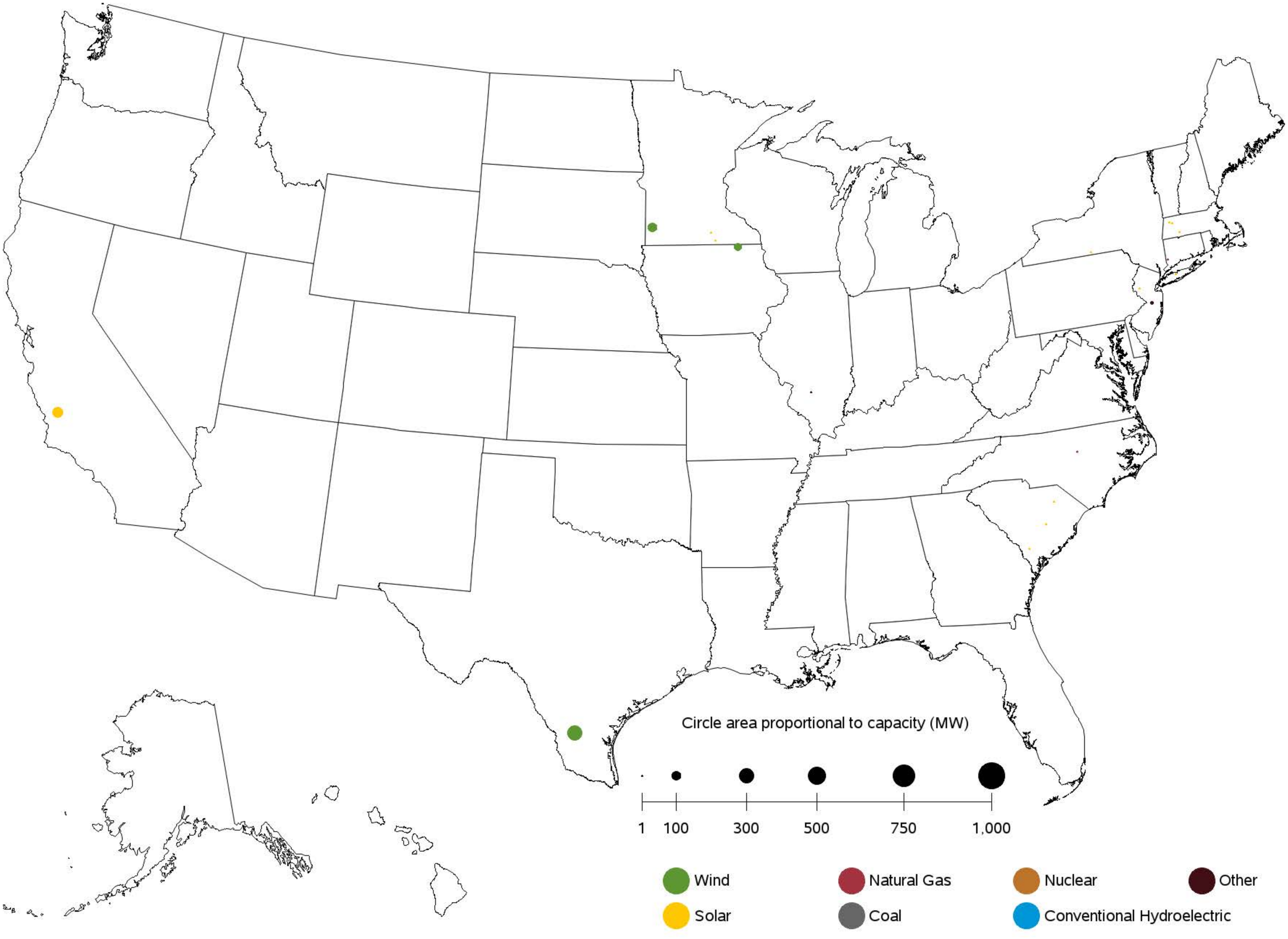
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. NA = Not Available
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Table 6.7.B. Capacity Factors for Utility Scale Generators Not Primarily Using Fossil Fuels, January 2013-February 2019

Period	Nuclear	Conventional Hydropower	Wind	Solar Photovoltaic	Solar Thermal	Landfill Gas and Muncipal Solid Waste	Other Biomass Including Wood	Geothermal
Annual Factors								
2013	89.9%	38.9%	32.4%	NA	NA	68.9%	56.7%	73.6%
2014	91.7%	37.3%	34.0%	25.9%	19.8%	68.9%	58.9%	74.0%
2015	92.3%	35.8%	32.2%	25.8%	22.1%	68.7%	55.3%	74.3%
2016	92.3%	38.2%	34.5%	25.1%	22.2%	69.7%	55.6%	73.9%
2017	92.2%	43.1%	34.6%	25.7%	21.8%	68.0%	57.8%	74.0%
2018	92.6%	42.8%	37.4%	26.1%	23.6%	73.3%	49.3%	77.3%
Year 2017								
January	98.7%	45.4%	32.6%	12.7%	7.3%	73.0%	59.7%	75.9%
February	95.0%	44.1%	38.6%	17.2%	11.7%	69.2%	59.9%	75.3%
March	87.8%	49.1%	40.6%	25.1%	22.9%	66.7%	60.7%	74.1%
April	79.1%	51.1%	41.1%	28.4%	24.9%	66.4%	52.3%	75.9%
May	82.7%	54.7%	36.2%	32.5%	31.0%	68.7%	49.9%	70.5%
June	93.4%	52.7%	32.9%	35.9%	37.9%	69.7%	56.7%	68.9%
July	96.2%	45.1%	25.6%	32.7%	25.4%	67.4%	60.4%	74.4%
August	97.7%	37.3%	21.8%	30.4%	27.6%	68.2%	60.8%	73.9%
Sept	94.9%	33.4%	29.5%	29.1%	29.2%	65.7%	55.2%	73.6%
October	89.0%	31.0%	40.2%	26.4%	24.1%	63.8%	54.1%	67.5%
November	92.9%	36.0%	39.1%	19.4%	10.3%	67.8%	59.9%	73.2%
December	99.4%	37.7%	38.0%	17.7%	9.0%	69.6%	63.3%	85.1%
Year 2018								
January	100.7%	45.1%	42.4%	18.7%	10.0%	72.1%	58.7%	76.6%
February	96.7%	49.2%	41.8%	22.9%	16.1%	76.7%	57.4%	80.5%
March	90.4%	45.1%	43.9%	26.3%	19.3%	73.2%	52.2%	78.2%
April	82.4%	49.9%	44.8%	31.2%	24.4%	71.6%	43.9%	70.3%
May	90.8%	54.2%	38.7%	31.9%	33.0%	68.9%	48.7%	78.9%
June	97.1%	51.7%	42.0%	34.5%	41.7%	76.5%	54.6%	76.2%
July	97.7%	43.4%	25.3%	31.6%	30.1%	75.6%	51.1%	78.0%
August	97.5%	37.7%	32.0%	31.0%	32.5%	75.3%	49.6%	78.0%
Sept	90.4%	32.8%	29.8%	27.7%	34.8%	70.2%	43.8%	78.4%
October	80.5%	31.1%	33.5%	23.1%	20.8%	71.9%	44.8%	72.6%
November	89.4%	37.1%	36.9%	18.8%	13.3%	73.7%	44.5%	78.8%
December	96.9%	37.3%	38.3%	15.1%	7.0%	74.3%	42.6%	80.8%
Year 2019								
January	99.7%	38.9%	38.5%	16.7%	8.5%	72.1%	51.6%	77.5%
February	96.8%	40.6%	39.2%	20.0%	11.0%	71.3%	51.0%	85.2%

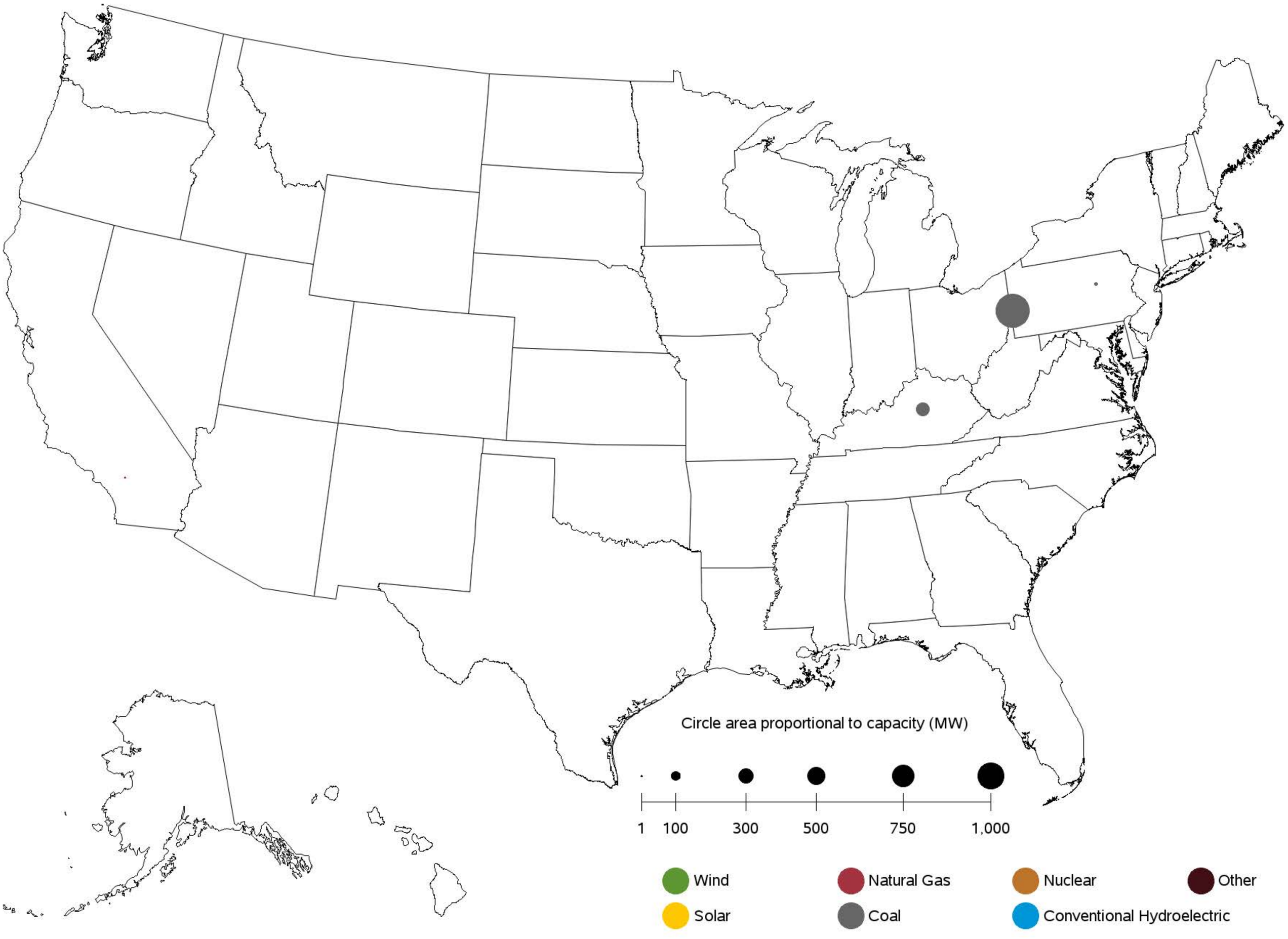
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. NA = Not Available
Notes: Solar Thermal Capacity Factors include generation from plants using concentrated solar power energy storage.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.A. Utility-Scale Generating Units Added in February 2019



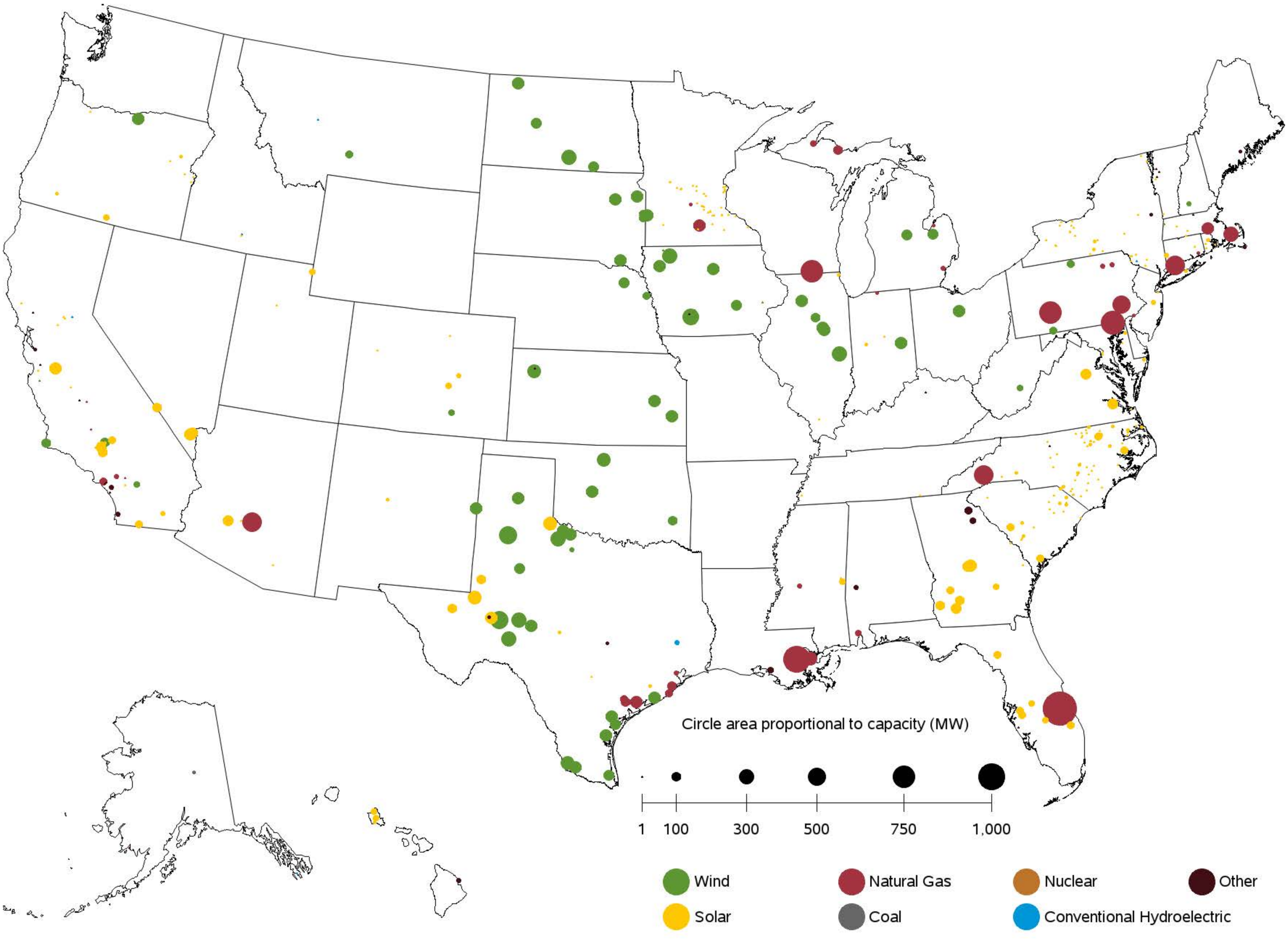
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

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



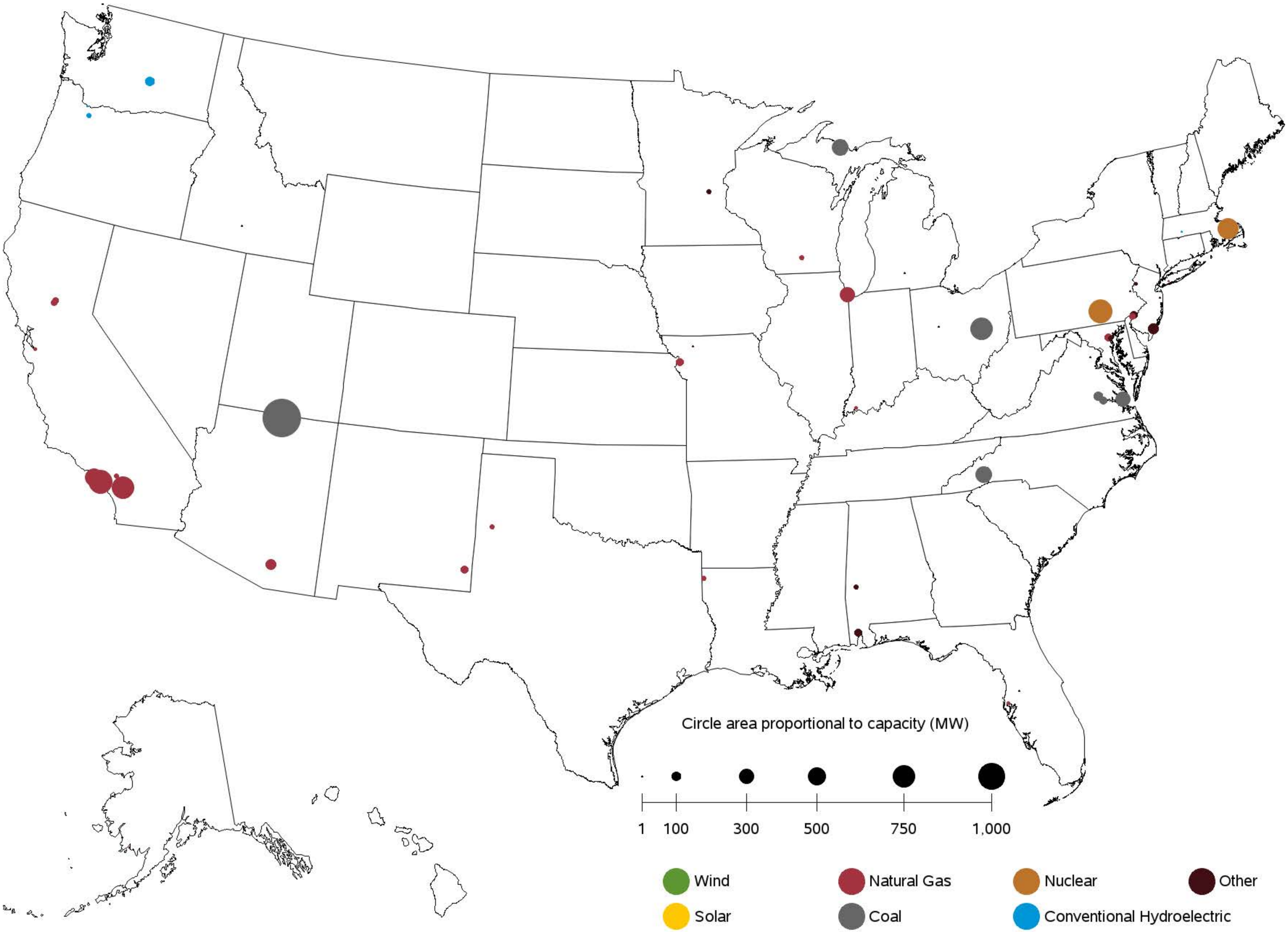
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.C. Utility-Scale Generating Units Planned to Come Online from March 2019 to February 2020



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

Figure 6.1.D. Utility-Scale Generating Units Planned to Retire from March 2019 to February 2020



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

Chapter 7

Imports and Exports

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

	Canada		Mexico		U.S. Total		
Period	Imports from	Exports to	Imports from	Exports to	Imports	Exports	Net Imports
Annual Totals							
2016	65,173,818	2,682,381	7,542,445	3,531,636	72,716,263	6,214,017	66,502,246
2017	59,909,320	3,312,798	5,775,597	6,058,005	65,684,917	9,370,803	56,314,114
2018	51,507,677	7,290,070	6,765,975	6,514,422	58,273,652	13,804,492	44,469,160
Year 2017							
January	6,345,401	172,909	673,166	310,843	7,018,567	483,752	6,534,815
February	5,120,144	359,401	552,254	330,610	5,672,398	690,011	4,982,387
March	5,612,473	663,648	410,568	334,509	6,023,041	998,157	5,024,884
April	5,262,194	619,414	299,908	486,903	5,562,102	1,106,317	4,455,785
May	4,912,110	341,657	171,906	489,911	5,084,016	831,568	4,252,448
June	5,637,814	242,997	355,162	568,400	5,992,976	811,397	5,181,579
July	5,328,084	65,828	585,167	642,440	5,913,251	708,268	5,204,983
August	5,874,172	63,435	634,751	709,103	6,508,923	772,538	5,736,385
Sept	4,715,752	139,000	512,536	553,042	5,228,288	692,042	4,536,246
October	3,504,501	165,550	447,906	544,420	3,952,407	709,970	3,242,437
November	3,379,626	263,999	550,385	558,909	3,930,011	822,908	3,107,103
December	4,217,049	214,960	581,888	528,915	4,798,937	743,875	4,055,062
Year 2018							
January	4,738,934	680,100	485,831	459,404	5,224,765	1,139,504	4,085,261
February	4,314,276	926,822	473,386	340,682	4,787,662	1,267,504	3,520,158
March	5,045,055	707,032	553,462	488,339	5,598,517	1,195,371	4,403,146
April	4,067,648	1,134,937	461,095	486,681	4,528,743	1,621,618	2,907,125
May	4,865,120	569,954	374,033	571,444	5,239,153	1,141,398	4,097,755
June	5,002,142	534,488	491,763	680,851	5,493,905	1,215,339	4,278,566
July	4,669,081	176,762	701,543	758,502	5,370,624	935,264	4,435,360
August	5,430,607	272,018	705,309	862,128	6,135,916	1,134,146	5,001,770
Sept	3,648,158	437,073	602,500	623,925	4,250,658	1,060,998	3,189,660
October	3,105,670	455,738	620,775	428,265	3,726,445	884,003	2,842,442
November	3,165,198	878,523	649,802	406,045	3,815,000	1,284,568	2,530,432
December	3,455,788	516,623	646,476	408,156	4,102,264	924,779	3,177,485

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

Chapter 8

Puerto Rico

Table 8.1 Puerto Rico- Sales of Electricity to Ultimate Customers: Total by End-Use Sector, 2009 - February 2019 (Thousand Megawatthours)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2009	6,673	8,937	3,094	0	18,704
2010	6,975	9,041	2,968	0	18,984
2011	6,587	8,832	2,832	0	18,251
2012	6,771	8,879	2,500	0	18,150
2013	6,320	8,969	2,504	0	17,793
2014	6,218	8,761	2,376	0	17,356
2015	6,314	8,586	2,355	0	17,255
2016	6,524	8,569	2,251	0	17,344
2017	5,045	6,820	1,747	0	13,611
Year 2017					
January	508	650	159	0	1,317
February	395	575	154	0	1,125
March	490	698	191	0	1,380
April	494	628	184	0	1,306
May	525	675	182	0	1,382
June	595	692	184	0	1,472
July	590	710	200	0	1,501
August	632	719	187	0	1,537
Sept	520	372	127	0	1,020
October	16	224	11	0	252
November	42	569	28	0	639
December	237	306	138	0	682
Year 2018					
January	389	558	142	0	1,089
February	393	760	175	0	1,328
March	450	531	98	0	1,080
April	466	784	273	0	1,524
May	566	802	165	0	1,533
June	507	592	208	0	1,308
July	578	680	145	0	1,404
August	577	688	209	0	1,475
Sept	527	722	186	0	1,436
October	698	847	191	0	1,736
November	457	593	172	0	1,222
December	494	642	162	0	1,298
Year 2019					
January	447	573	154	0	1,173
February	367	487	146	0	1,000
Year to Date					
2017	903	1,225	313	0	2,442
2018	782	1,318	317	0	2,417
2019	814	1,059	300	0	2,173
Rolling 12 Months Ending in February					
2018	4,924	6,913	1,750	0	13,587
2019	6,135	7,941	2,112	0	16,187

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

Table 8.2 Puerto Rico- Revenue from Sales of Electricity to Ultimate Customers: Total by End-Use Sector, 2009 - February 2019 (Million Dollars)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2009	1,313	1,868	518	0	3,699
2010	1,521	2,103	564	0	4,188
2011	1,748	2,483	663	0	4,894
2012	1,690	2,605	647	0	4,942
2013	1,633	2,474	570	0	4,678
2014	1,636	2,394	551	0	4,581
2015	1,282	1,850	417	0	3,549
2016	1,170	1,677	356	0	3,203
2017	1,123	1,549	344	0	3,016
Year 2017					
January	112	142	30	0	284
February	99	143	32	0	274
March	105	151	34	0	291
April	109	144	34	0	287
May	119	157	35	0	311
June	129	152	34	0	314
July	130	161	37	0	327
August	143	166	35	0	345
Sept	101	74	21	0	196
October	6	46	4	0	56
November	19	115	15	0	150
December	50	98	34	0	182
Year 2018					
January	86	159	32	0	277
February	76	171	32	0	279
March	110	149	22	0	280
April	84	161	54	0	300
May	104	165	23	0	292
June	108	133	40	0	281
July	122	166	29	0	317
August	114	149	39	0	302
Sept	109	162	34	0	306
October	137	181	36	0	353
November	102	142	34	0	278
December	112	154	31	0	298
Year 2019					
January	85	134	30	0	249
February	80	109	29	0	218
Year to Date					
2017	211	285	61	0	558
2018	162	330	64	0	556
2019	165	243	60	0	468
Rolling 12 Months Ending in February					
2018	1,074	1,594	346	0	3,014
2019	1,269	1,805	401	0	3,475

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

Table 8.3 Puerto Rico- Number of Ultimate Customers Served by Sector: Total by End-Use Sector, 2009 - February 2019

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2009	1,330,507	132,620	828	0	1,463,955
2010	1,339,703	133,029	790	0	1,473,522
2011	1,341,708	132,738	750	0	1,475,196
2012	1,349,750	131,264	721	0	1,481,735
2013	1,340,989	131,034	694	0	1,472,717
2014	1,328,546	129,122	662	0	1,458,330
2015	1,326,631	127,365	647	0	1,454,643
2016	1,332,152	127,179	633	0	1,459,964
2017	1,337,756	127,065	618	0	1,465,439
Year 2017					
January	1,336,481	127,251	627	0	1,464,359
February	1,337,101	127,229	626	0	1,464,956
March	1,335,413	127,147	620	0	1,463,180
April	1,337,164	127,086	620	0	1,464,870
May	1,337,956	127,048	618	0	1,465,622
June	1,339,373	127,119	616	0	1,467,108
July	1,338,891	127,049	614	0	1,466,554
August	1,337,758	127,026	615	0	1,465,399
Sept	1,338,973	127,056	615	0	1,466,644
October	1,337,261	126,948	615	0	1,464,824
November	1,338,117	126,941	613	0	1,465,671
December	1,338,583	126,877	612	0	1,466,072
Year 2018					
January	1,338,417	126,681	611	0	1,465,709
February	1,337,561	126,422	612	0	1,464,595
March	1,338,960	126,367	613	0	1,465,940
April	1,339,727	126,216	612	0	1,466,555
May	1,340,002	126,123	610	0	1,466,735
June	1,339,841	126,006	610	0	1,466,457
July	1,340,490	125,949	607	0	1,467,046
August	1,341,417	126,011	604	0	1,468,032
Sept	1,342,332	126,102	605	0	1,469,039
October	1,343,883	126,219	603	0	1,470,705
November	1,344,948	126,429	601	0	1,471,978
December	1,346,102	126,526	602	0	1,473,230
Year 2019					
January	1,347,101	126,497	601	0	1,474,199
February	1,348,081	126,423	600	0	1,475,104
Rolling 12 Months Ending in February					
2018	1,337,956	126,950	615	0	1,465,521
2019	1,342,740	126,239	606	0	1,469,585

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

Table 8.4 Puerto Rico- Average Price of Electricity to Ultimate Customers: Total by End-Use Sector, 2009 - February 2019 (Cents per Kilowatthour)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2009	19.68	20.91	16.73	--	19.78
2010	21.80	23.26	19.01	--	22.06
2011	26.54	28.11	23.39	--	26.82
2012	24.96	29.34	25.89	--	27.23
2013	25.84	27.59	22.77	--	26.29
2014	26.31	27.33	23.18	--	26.39
2015	20.31	21.55	17.71	--	20.57
2016	17.93	19.57	15.83	--	18.47
2017	22.26	22.72	19.70	--	22.16
Year 2017					
January	22.10	21.89	18.77	--	21.60
February	25.09	24.84	20.48	--	24.33
March	21.46	21.69	17.76	--	21.06
April	22.16	22.89	18.43	--	21.99
May	22.66	23.27	19.03	--	22.48
June	21.69	21.91	18.18	--	21.35
July	22.01	22.62	18.43	--	21.82
August	22.62	23.17	18.91	--	22.42
Sept	19.36	19.90	16.35	--	19.18
October	37.23	20.39	40.29	--	22.36
November	45.99	20.27	53.04	--	23.39
December	21.07	31.94	24.72	--	26.70
Year 2018					
January	22.11	28.53	22.32	--	25.43
February	19.32	22.48	18.45	--	21.02
March	24.40	27.97	22.42	--	25.97
April	18.09	20.56	19.86	--	19.68
May	18.38	20.61	13.77	--	19.05
June	21.24	22.46	19.23	--	21.47
July	21.17	24.32	19.78	--	22.56
August	19.81	21.63	18.51	--	20.48
Sept	20.75	22.50	18.18	--	21.30
October	19.58	21.36	18.69	--	20.35
November	22.31	24.00	19.55	--	22.74
December	22.77	24.05	19.33	--	22.97
Year 2019					
January	19.07	23.38	19.78	--	21.26
February	21.85	22.35	20.14	--	21.84
Year to Date					
2017	23.41	23.28	19.61	--	22.86
2018	20.71	25.05	20.18	--	23.01
2019	20.32	22.91	19.95	--	21.53
Rolling 12 Months Ending in February					
2018	21.80	23.06	19.80	--	22.19
2019	20.68	22.73	19.00	--	21.47

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

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

Period	Coal	Hydroelectric Conventional	Natural Gas	Other	Petroleum	Solar	Wind	Total
Annual Totals								
2007	454	98	1,335	0	2,978	0	0	4,865
2008	454	98	1,335	0	3,408	0	0	5,295
2009	454	98	1,335	0	3,472	0	0	5,359
2010	454	98	1,335	0	3,472	0	0	5,359
2011	454	98	1,335	0	3,472	5	0	5,365
2012	454	98	1,335	0	3,472	23	98	5,481
2013	454	98	1,335	0	3,472	26	98	5,484
2014	454	98	1,335	0	3,472	38	99	5,496
2015	454	98	1,335	9	3,476	70	99	5,541
2016	454	98	1,335	33	3,476	145	99	5,640
2017	454	98	1,335	33	3,476	145	99	5,640
2018	454	98	1,335	33	3,476	145	99	5,640
Year 2019								
January	454	98	1,335	33	3,476	145	99	5,640
February	454	98	1,335	33	3,476	145	99	5,640

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

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

Appendices

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**4**	**31**	**0**	**2**	**0**	**0**	**11**
Connecticut	0	45	0	1	0	0	38
Maine	22	63	0	9	0	0	14
Massachusetts	0	81	0	4	0	0	24
New Hampshire	0	18	0	0	0	0	23
Rhode Island	0	154	0	14	0	0	0
Vermont	0	261	0	0	0	0	21
Middle Atlantic	**3**	**12**	**51**	**1**	**13**	**0**	**4**
New Jersey	0	102	0	2	0	0	0
New York	0	10	0	2	0	0	2
Pennsylvania	3	36	77	1	19	0	15
East North Central	**0**	**11**	**13**	**1**	**4**	**0**	**13**
Illinois	0	37	0	7	0	0	57
Indiana	0	4	0	1	9	0	44
Michigan	2	8	0	2	0	0	24
Ohio	1	24	30	0	12	0	40
Wisconsin	0	14	0	3	0	0	18
West North Central	**0**	**8**	**0**	**4**	**0**	**0**	**9**
Iowa	0	22	0	5	0	0	31
Kansas	0	11	0	10	0	0	0
Minnesota	3	35	0	6	0	0	27
Missouri	0	14	0	7	0	0	22
Nebraska	3	44	0	55	0	0	25
North Dakota	0	4	0	49	0	0	19
South Dakota	0	33	0	51	0	0	13
South Atlantic	**1**	**5**	**7**	**1**	**0**	**0**	**10**
Delaware	0	59	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	10	0	1	0	0	52
Georgia	1	27	59	1	0	0	16
Maryland	0	9	0	1	0	0	2
North Carolina	0	8	0	1	0	0	14
South Carolina	0	17	0	1	0	0	20
Virginia	1	15	0	1	0	0	22
West Virginia	2	0	0	14	0	0	19
East South Central	**0**	**2**	**0**	**1**	**0**	**0**	**6**
Alabama	0	31	0	2	0	0	7
Kentucky	0	3	0	3	0	0	13
Mississippi	0	22	0	1	0	0	0
Tennessee	0	0	0	1	0	0	9
West South Central	**0**	**10**	**1**	**1**	**3**	**0**	**10**
Arkansas	0	31	0	2	0	0	14
Louisiana	0	121	0	2	7	0	26
Oklahoma	0	1	0	2	0	0	17
Texas	0	5	29	1	2	0	23
Mountain	**1**	**4**	**0**	**1**	**0**	**0**	**5**
Arizona	0	4	0	2	0	0	5
Colorado	0	25	0	3	0	0	20
Idaho	102	0	0	14	0	0	10
Montana	3	26	0	12	0	0	9
Nevada	0	0	0	1	0	0	2
New Mexico	0	38	0	5	0	0	66
Utah	0	1	0	4	0	0	27
Wyoming	3	2	0	8	0	0	29
Pacific Contiguous	**0**	**22**	**0**	**2**	**2**	**0**	**2**
California	0	11	0	2	2	0	8
Oregon	0	93	0	4	0	0	4
Washington	0	105	0	9	0	0	1
Pacific Noncontiguous	**13**	**1**	**0**	**23**	**0**	**0**	**23**
Alaska	32	3	0	23	0	0	24
Hawaii	0	1	0	0	0	0	74
U.S. Total	**0**	**2**	**5**	**0**	**3**	**0**	**3**

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

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

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

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**9**	**5**	**0**	**1**	**1**
Connecticut	0	0	0	30	12	0	0	1
Maine	0	0	0	117	7	0	0	6
Massachusetts	0	0	0	11	7	0	2	3
New Hampshire	0	0	0	0	15	0	0	3
Rhode Island	0	0	0	48	13	0	0	13
Vermont	0	0	0	28	14	0	0	14
Middle Atlantic	**0**	**0**	**0**	**9**	**4**	**0**	**1**	**1**
New Jersey	0	0	0	11	7	0	0	1
New York	0	0	0	16	6	0	2	1
Pennsylvania	0	0	0	37	7	0	0	1
East North Central	**0**	**0**	**0**	**13**	**3**	**0**	**5**	**0**
Illinois	0	0	0	35	4	0	0	1
Indiana	0	0	0	19	5	0	0	1
Michigan	0	0	0	23	6	0	11	1
Ohio	0	0	0	31	5	0	0	0
Wisconsin	0	0	0	59	9	0	64	1
West North Central	**0**	**0**	**0**	**10**	**3**	**0**	**8**	**1**
Iowa	0	0	0	92	4	0	0	2
Kansas	0	0	0	136	3	0	0	1
Minnesota	0	0	0	11	6	0	5	2
Missouri	0	0	0	34	7	0	0	1
Nebraska	0	0	0	62	6	0	0	2
North Dakota	0	0	0	0	6	0	47	2
South Dakota	0	0	0	257	12	0	0	7
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**0**
Delaware	0	0	0	48	41	0	0	1
District of Columbia	0	0	0	114	14	0	0	9
Florida	0	0	0	2	2	0	2	1
Georgia	0	0	0	7	4	0	0	1
Maryland	0	0	0	13	12	0	0	1
North Carolina	0	0	0	4	3	0	0	1
South Carolina	0	0	0	13	5	0	0	1
Virginia	0	0	0	12	7	0	0	1
West Virginia	0	0	0	0	13	0	0	2
East South Central	**0**	**0**	**0**	**9**	**3**	**0**	**23**	**1**
Alabama	0	0	0	16	4	0	0	1
Kentucky	0	0	0	48	16	0	0	1
Mississippi	0	0	0	5	4	0	0	1
Tennessee	0	0	0	23	8	0	81	1
West South Central	**0**	**0**	**0**	**3**	**2**	**0**	**3**	**1**
Arkansas	0	0	0	9	5	0	0	1
Louisiana	0	0	0	240	5	0	3	2
Oklahoma	0	0	0	49	3	0	0	1
Texas	0	0	0	3	2	0	5	1
Mountain	**0**	**3**	**0**	**3**	**2**	**0**	**4**	**1**
Arizona	0	0	0	4	5	0	0	1
Colorado	0	0	0	10	3	0	0	1
Idaho	0	13	0	16	10	0	0	7
Montana	0	0	0	67	13	0	0	4
Nevada	0	3	0	4	3	0	0	1
New Mexico	0	0	0	10	3	0	0	2
Utah	0	6	0	8	6	0	18	1
Wyoming	0	0	0	0	10	0	0	2
Pacific Contiguous	**0**	**1**	**0**	**2**	**2**	**0**	**2**	**1**
California	0	1	0	2	2	0	2	2
Oregon	0	9	0	15	8	0	0	2
Washington	0	0	0	63	7	0	0	1
Pacific Noncontiguous	**0**	**7**	**0**	**15**	**11**	**0**	**0**	**6**
Alaska	0	0	0	0	42	0	0	14
Hawaii	0	7	0	15	11	0	0	2
U.S. Total	**0**	**2**	**0**	**2**	**1**	**0**	**1**	**0**

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

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**4**	**31**	**0**	**2**	**0**	**0**	**11**
Connecticut	0	45	0	1	0	0	38
Maine	22	63	0	9	0	0	14
Massachusetts	0	81	0	4	0	0	24
New Hampshire	0	18	0	0	0	0	23
Rhode Island	0	154	0	14	0	0	0
Vermont	0	261	0	0	0	0	21
Middle Atlantic	**3**	**12**	**51**	**1**	**13**	**0**	**4**
New Jersey	0	102	0	2	0	0	0
New York	0	10	0	2	0	0	2
Pennsylvania	3	36	77	1	19	0	15
East North Central	**0**	**11**	**13**	**1**	**4**	**0**	**13**
Illinois	0	37	0	7	0	0	57
Indiana	0	4	0	1	9	0	44
Michigan	2	8	0	2	0	0	24
Ohio	1	24	30	0	12	0	40
Wisconsin	0	14	0	3	0	0	18
West North Central	**0**	**8**	**0**	**4**	**0**	**0**	**9**
Iowa	0	22	0	5	0	0	31
Kansas	0	11	0	10	0	0	0
Minnesota	3	35	0	6	0	0	27
Missouri	0	14	0	7	0	0	22
Nebraska	3	44	0	55	0	0	25
North Dakota	0	4	0	49	0	0	19
South Dakota	0	33	0	51	0	0	13
South Atlantic	**1**	**5**	**7**	**1**	**0**	**0**	**10**
Delaware	0	59	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	10	0	1	0	0	52
Georgia	1	27	59	1	0	0	16
Maryland	0	9	0	1	0	0	2
North Carolina	0	8	0	1	0	0	14
South Carolina	0	17	0	1	0	0	20
Virginia	1	15	0	1	0	0	22
West Virginia	2	0	0	14	0	0	19
East South Central	**0**	**2**	**0**	**1**	**0**	**0**	**6**
Alabama	0	31	0	2	0	0	7
Kentucky	0	3	0	3	0	0	13
Mississippi	0	22	0	1	0	0	0
Tennessee	0	0	0	1	0	0	9
West South Central	**0**	**10**	**1**	**1**	**3**	**0**	**10**
Arkansas	0	31	0	2	0	0	14
Louisiana	0	121	0	2	7	0	26
Oklahoma	0	1	0	2	0	0	17
Texas	0	5	29	1	2	0	23
Mountain	**1**	**4**	**0**	**1**	**0**	**0**	**5**
Arizona	0	4	0	2	0	0	5
Colorado	0	25	0	3	0	0	20
Idaho	102	0	0	14	0	0	10
Montana	3	26	0	12	0	0	9
Nevada	0	0	0	1	0	0	2
New Mexico	0	38	0	5	0	0	66
Utah	0	1	0	4	0	0	27
Wyoming	3	2	0	8	0	0	29
Pacific Contiguous	**0**	**22**	**0**	**2**	**2**	**0**	**2**
California	0	11	0	2	2	0	8
Oregon	0	93	0	4	0	0	4
Washington	0	105	0	9	0	0	1
Pacific Noncontiguous	**13**	**1**	**0**	**23**	**0**	**0**	**23**
Alaska	32	3	0	23	0	0	24
Hawaii	0	1	0	0	0	0	74
U.S. Total	**0**	**2**	**5**	**0**	**3**	**0**	**3**

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

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

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

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**9**	**5**	**0**	**1**	**1**
Connecticut	0	0	0	30	12	0	0	1
Maine	0	0	0	117	7	0	0	6
Massachusetts	0	0	0	11	7	0	2	3
New Hampshire	0	0	0	0	15	0	0	3
Rhode Island	0	0	0	48	13	0	0	13
Vermont	0	0	0	28	14	0	0	14
Middle Atlantic	**0**	**0**	**0**	**9**	**4**	**0**	**1**	**1**
New Jersey	0	0	0	11	7	0	0	1
New York	0	0	0	16	6	0	2	1
Pennsylvania	0	0	0	37	7	0	0	1
East North Central	**0**	**0**	**0**	**13**	**3**	**0**	**5**	**0**
Illinois	0	0	0	35	4	0	0	1
Indiana	0	0	0	19	5	0	0	1
Michigan	0	0	0	23	6	0	11	1
Ohio	0	0	0	31	5	0	0	0
Wisconsin	0	0	0	59	9	0	64	1
West North Central	**0**	**0**	**0**	**10**	**3**	**0**	**8**	**1**
Iowa	0	0	0	92	4	0	0	2
Kansas	0	0	0	136	3	0	0	1
Minnesota	0	0	0	11	6	0	5	2
Missouri	0	0	0	34	7	0	0	1
Nebraska	0	0	0	62	6	0	0	2
North Dakota	0	0	0	0	6	0	47	2
South Dakota	0	0	0	257	12	0	0	7
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**0**
Delaware	0	0	0	48	41	0	0	1
District of Columbia	0	0	0	114	14	0	0	9
Florida	0	0	0	2	2	0	2	1
Georgia	0	0	0	7	4	0	0	1
Maryland	0	0	0	13	12	0	0	1
North Carolina	0	0	0	4	3	0	0	1
South Carolina	0	0	0	13	5	0	0	1
Virginia	0	0	0	12	7	0	0	1
West Virginia	0	0	0	0	13	0	0	2
East South Central	**0**	**0**	**0**	**9**	**3**	**0**	**23**	**1**
Alabama	0	0	0	16	4	0	0	1
Kentucky	0	0	0	48	16	0	0	1
Mississippi	0	0	0	5	4	0	0	1
Tennessee	0	0	0	23	8	0	81	1
West South Central	**0**	**0**	**0**	**3**	**2**	**0**	**3**	**1**
Arkansas	0	0	0	9	5	0	0	1
Louisiana	0	0	0	240	5	0	3	2
Oklahoma	0	0	0	49	3	0	0	1
Texas	0	0	0	3	2	0	5	1
Mountain	**0**	**3**	**0**	**3**	**2**	**0**	**4**	**1**
Arizona	0	0	0	4	5	0	0	1
Colorado	0	0	0	10	3	0	0	1
Idaho	0	13	0	16	10	0	0	7
Montana	0	0	0	67	13	0	0	4
Nevada	0	3	0	4	3	0	0	1
New Mexico	0	0	0	10	3	0	0	2
Utah	0	6	0	8	6	0	18	1
Wyoming	0	0	0	0	10	0	0	2
Pacific Contiguous	**0**	**1**	**0**	**2**	**2**	**0**	**2**	**1**
California	0	1	0	2	2	0	2	2
Oregon	0	9	0	15	8	0	0	2
Washington	0	0	0	63	7	0	0	1
Pacific Noncontiguous	**0**	**7**	**0**	**15**	**11**	**0**	**0**	**6**
Alaska	0	0	0	0	42	0	0	14
Hawaii	0	7	0	15	11	0	0	2
U.S. Total	**0**	**2**	**0**	**2**	**1**	**0**	**1**	**0**

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

Table A.1.C. Relative Standard Error (Percent) for Small Scale Solar Generation and Capacity by Sector, Census Division and State, February 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**0**	**1**	**.**	**0**
Connecticut	0	1	0	.	0
Maine	1	2	0	.	1
Massachusetts	0	0	1	.	0
New Hampshire	0	0	0	.	0
Rhode Island	0	0	0	.	0
Vermont	2	7	57	.	3
Middle Atlantic	**0**	**0**	**1**	**.**	**0**
New Jersey	0	0	2	.	0
New York	0	0	1	.	0
Pennsylvania	1	2	0	.	1
East North Central	**2**	**3**	**2**	**.**	**2**
Illinois	4	9	0	.	5
Indiana	6	2	0	.	2
Michigan	3	18	15	.	6
Ohio	4	4	3	.	3
Wisconsin	8	9	2	.	5
West North Central	**2**	**1**	**5**	**.**	**1**
Iowa	6	3	33	.	3
Kansas	11	6	0	.	7
Minnesota	5	6	4	.	3
Missouri	2	1	0	.	1
Nebraska	14	37	32	.	13
North Dakota	0	0	0	.	0
South Dakota	0	0	0	.	0
South Atlantic	**1**	**1**	**1**	**.**	**1**
Delaware	4	3	12	.	3
District of Columbia	0	0	0	.	0
Florida	4	6	2	.	3
Georgia	108	69	0	.	64
Maryland	1	2	2	.	1
North Carolina	7	1	0	.	4
South Carolina	3	4	0	.	3
Virginia	8	6	5	.	6
West Virginia	0	0	0	.	0
East South Central	**3**	**3**	**0**	**.**	**2**
Alabama	0	0	0	.	0
Kentucky	4	3	0	.	3
Mississippi	4	8	0	.	4
Tennessee	0	0	0	.	0
West South Central	**2**	**3**	**0**	**.**	**2**
Arkansas	14	11	0	.	9
Louisiana	2	4	0	.	2
Oklahoma	12	8	0	.	9
Texas	4	4	0	.	3
Mountain	**0**	**1**	**3**	**.**	**0**
Arizona	0	1	10	.	0
Colorado	2	2	41	.	2
Idaho	3	9	0	.	3
Montana	11	12	0	.	9
Nevada	0	0	0	.	0
New Mexico	3	5	0	.	3
Utah	1	4	0	.	1
Wyoming	21	37	0	.	17
Pacific Contiguous	**0**	**1**	**0**	**.**	**0**
California	0	1	0	.	0
Oregon	2	7	6	.	3
Washington	2	23	32	.	4
Pacific Noncontiguous	**0**	**0**	**0**	**.**	**0**
Alaska	7	7	0	.	5
Hawaii	0	0	0	.	0
U.S. Total	**0**	**0**	**0**	**.**	**0**

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

Table A.2.A. Relative Standard Error (Percent) for Net Generation by Fuel Type: Electric Utilities by Census Division and State, February 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**58**	**0**	**51**	**0**	**0**	**23**
Connecticut	0	127	0	0	0	0	35
Maine	0	0	0	0	0	0	0
Massachusetts	0	139	0	691	0	0	48
New Hampshire	0	30	0	0	0	0	42
Rhode Island	0	0	0	0	0	0	0
Vermont	0	261	0	0	0	0	34
Middle Atlantic	**0**	**20**	**0**	**5**	**0**	**0**	**1**
New Jersey	0	0	0	147	0	0	0
New York	0	20	0	5	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**1**	**10**	**0**	**2**	**0**	**0**	**14**
Illinois	0	142	0	0	0	0	114
Indiana	0	4	0	4	0	0	44
Michigan	2	8	0	9	0	0	25
Ohio	4	111	0	1	0	0	46
Wisconsin	0	36	0	3	0	0	20
West North Central	**0**	**8**	**0**	**4**	**0**	**0**	**9**
Iowa	0	22	0	6	0	0	31
Kansas	0	11	0	11	0	0	0
Minnesota	3	34	0	5	0	0	33
Missouri	0	14	0	12	0	0	22
Nebraska	3	44	0	55	0	0	25
North Dakota	0	4	0	50	0	0	19
South Dakota	0	33	0	51	0	0	13
South Atlantic	**0**	**6**	**0**	**1**	**0**	**0**	**11**
Delaware	0	0	0	0	0	0	0
Florida	0	9	0	1	0	0	52
Georgia	0	25	0	2	0	0	17
Maryland	0	25	0	0	0	0	0
North Carolina	0	8	0	1	0	0	14
South Carolina	0	23	0	0	0	0	20
Virginia	0	24	0	1	0	0	21
West Virginia	0	0	0	0	0	0	29
East South Central	**0**	**1**	**0**	**2**	**0**	**0**	**6**
Alabama	0	17	0	6	0	0	7
Kentucky	0	3	0	3	0	0	13
Mississippi	0	66	0	1	0	0	0
Tennessee	0	0	0	1	0	0	9
West South Central	**0**	**12**	**0**	**2**	**0**	**0**	**11**
Arkansas	0	38	0	2	0	0	14
Louisiana	0	121	0	5	0	0	0
Oklahoma	0	1	0	3	0	0	17
Texas	0	7	0	4	0	0	23
Mountain	**1**	**4**	**0**	**1**	**0**	**0**	**5**
Arizona	0	4	0	3	0	0	5
Colorado	0	25	0	3	0	0	21
Idaho	0	0	0	8	0	0	10
Montana	0	585	0	23	0	0	9
Nevada	0	0	0	1	0	0	0
New Mexico	0	38	0	7	0	0	66
Utah	0	1	0	4	0	0	28
Wyoming	3	2	0	12	0	0	29
Pacific Contiguous	**0**	**18**	**0**	**3**	**0**	**0**	**2**
California	0	18	0	3	0	0	7
Oregon	0	0	0	9	0	0	4
Washington	0	194	0	11	0	0	1
Pacific Noncontiguous	**49**	**1**	**0**	**24**	**0**	**0**	**25**
Alaska	49	3	0	24	0	0	25
Hawaii	0	1	0	0	0	0	0
U.S. Total	**0**	**2**	**0**	**1**	**0**	**0**	**2**

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

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

Electric Utilities by Census Division and State, February 2019 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**32**	**11**	**0**	**0**	**12**
Connecticut	0	0	0	0	0	0	0	21
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	40	43	0	0	35
New Hampshire	0	0	0	0	0	0	0	16
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	55	15	0	0	19
Middle Atlantic	**0**	**0**	**0**	**39**	**39**	**0**	**0**	**2**
New Jersey	0	0	0	39	39	0	0	33
New York	0	0	0	0	0	0	0	2
Pennsylvania	0	0	0	0	0	0	0	0
East North Central	**0**	**0**	**0**	**20**	**11**	**0**	**48**	**1**
Illinois	0	0	0	93	48	0	0	1
Indiana	0	0	0	29	25	0	0	1
Michigan	0	0	0	24	15	0	0	1
Ohio	0	0	0	114	90	0	0	2
Wisconsin	0	0	0	0	18	0	48	1
West North Central	**0**	**0**	**0**	**72**	**4**	**0**	**14**	**1**
Iowa	0	0	0	110	4	0	0	2
Kansas	0	0	0	277	10	0	0	1
Minnesota	0	0	0	201	11	0	0	2
Missouri	0	0	0	0	71	0	0	1
Nebraska	0	0	0	182	33	0	0	3
North Dakota	0	0	0	0	9	0	47	2
South Dakota	0	0	0	0	21	0	0	8
South Atlantic	**0**	**0**	**0**	**2**	**4**	**0**	**0**	**0**
Delaware	0	0	0	138	138	0	0	86
Florida	0	0	0	1	1	0	0	1
Georgia	0	0	0	14	14	0	0	1
Maryland	0	0	0	119	119	0	0	0
North Carolina	0	0	0	16	16	0	0	1
South Carolina	0	0	0	219	11	0	0	1
Virginia	0	0	0	26	19	0	0	1
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**39**	**38**	**0**	**0**	**1**
Alabama	0	0	0	65	65	0	0	1
Kentucky	0	0	0	49	44	0	0	1
Mississippi	0	0	0	0	0	0	0	1
Tennessee	0	0	0	219	219	0	0	1
West South Central	**0**	**0**	**0**	**46**	**12**	**0**	**0**	**1**
Arkansas	0	0	0	271	271	0	0	1
Louisiana	0	0	0	240	240	0	0	3
Oklahoma	0	0	0	49	12	0	0	2
Texas	0	0	0	160	40	0	0	2
Mountain	**0**	**8**	**0**	**11**	**6**	**0**	**29**	**1**
Arizona	0	0	0	13	13	0	0	1
Colorado	0	0	0	165	4	0	0	1
Idaho	0	0	0	0	46	0	0	8
Montana	0	0	0	0	42	0	0	9
Nevada	0	0	0	0	0	0	0	1
New Mexico	0	0	0	23	23	0	0	2
Utah	0	8	0	0	8	0	48	1
Wyoming	0	0	0	0	15	0	0	3
Pacific Contiguous	**0**	**0**	**0**	**17**	**6**	**0**	**0**	**1**
California	0	0	0	17	7	0	0	3
Oregon	0	0	0	144	14	0	0	3
Washington	0	0	0	0	9	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**29**	**0**	**0**	**9**
Alaska	0	0	0	0	70	0	0	15
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**2**	**0**	**3**	**3**	**0**	**7**	**0**

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

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**58**	**0**	**51**	**0**	**0**	**23**
Connecticut	0	127	0	0	0	0	35
Maine	0	0	0	0	0	0	0
Massachusetts	0	139	0	691	0	0	48
New Hampshire	0	30	0	0	0	0	42
Rhode Island	0	0	0	0	0	0	0
Vermont	0	261	0	0	0	0	34
Middle Atlantic	**0**	**20**	**0**	**5**	**0**	**0**	**1**
New Jersey	0	0	0	147	0	0	0
New York	0	20	0	5	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**1**	**10**	**0**	**2**	**0**	**0**	**14**
Illinois	0	142	0	0	0	0	114
Indiana	0	4	0	4	0	0	44
Michigan	2	8	0	9	0	0	25
Ohio	4	111	0	1	0	0	46
Wisconsin	0	36	0	3	0	0	20
West North Central	**0**	**8**	**0**	**4**	**0**	**0**	**9**
Iowa	0	22	0	6	0	0	31
Kansas	0	11	0	11	0	0	0
Minnesota	3	34	0	5	0	0	33
Missouri	0	14	0	12	0	0	22
Nebraska	3	44	0	55	0	0	25
North Dakota	0	4	0	50	0	0	19
South Dakota	0	33	0	51	0	0	13
South Atlantic	**0**	**6**	**0**	**1**	**0**	**0**	**11**
Delaware	0	0	0	0	0	0	0
Florida	0	9	0	1	0	0	52
Georgia	0	25	0	2	0	0	17
Maryland	0	25	0	0	0	0	0
North Carolina	0	8	0	1	0	0	14
South Carolina	0	23	0	0	0	0	20
Virginia	0	24	0	1	0	0	21
West Virginia	0	0	0	0	0	0	29
East South Central	**0**	**1**	**0**	**2**	**0**	**0**	**6**
Alabama	0	17	0	6	0	0	7
Kentucky	0	3	0	3	0	0	13
Mississippi	0	66	0	1	0	0	0
Tennessee	0	0	0	1	0	0	9
West South Central	**0**	**12**	**0**	**2**	**0**	**0**	**11**
Arkansas	0	38	0	2	0	0	14
Louisiana	0	121	0	5	0	0	0
Oklahoma	0	1	0	3	0	0	17
Texas	0	7	0	4	0	0	23
Mountain	**1**	**4**	**0**	**1**	**0**	**0**	**5**
Arizona	0	4	0	3	0	0	5
Colorado	0	25	0	3	0	0	21
Idaho	0	0	0	8	0	0	10
Montana	0	585	0	23	0	0	9
Nevada	0	0	0	1	0	0	0
New Mexico	0	38	0	7	0	0	66
Utah	0	1	0	4	0	0	28
Wyoming	3	2	0	12	0	0	29
Pacific Contiguous	**0**	**18**	**0**	**3**	**0**	**0**	**2**
California	0	18	0	3	0	0	7
Oregon	0	0	0	9	0	0	4
Washington	0	194	0	11	0	0	1
Pacific Noncontiguous	**49**	**1**	**0**	**24**	**0**	**0**	**25**
Alaska	49	3	0	24	0	0	25
Hawaii	0	1	0	0	0	0	0
U.S. Total	**0**	**2**	**0**	**1**	**0**	**0**	**2**

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

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

Electric Utilities by Census Division and State, Year-to-Date through February 2019 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**32**	**11**	**0**	**0**	**12**
Connecticut	0	0	0	0	0	0	0	21
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	40	43	0	0	35
New Hampshire	0	0	0	0	0	0	0	16
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	55	15	0	0	19
Middle Atlantic	**0**	**0**	**0**	**39**	**39**	**0**	**0**	**2**
New Jersey	0	0	0	39	39	0	0	33
New York	0	0	0	0	0	0	0	2
Pennsylvania	0	0	0	0	0	0	0	0
East North Central	**0**	**0**	**0**	**20**	**11**	**0**	**48**	**1**
Illinois	0	0	0	93	48	0	0	1
Indiana	0	0	0	29	25	0	0	1
Michigan	0	0	0	24	15	0	0	1
Ohio	0	0	0	114	90	0	0	2
Wisconsin	0	0	0	0	18	0	48	1
West North Central	**0**	**0**	**0**	**72**	**4**	**0**	**14**	**1**
Iowa	0	0	0	110	4	0	0	2
Kansas	0	0	0	277	10	0	0	1
Minnesota	0	0	0	201	11	0	0	2
Missouri	0	0	0	0	71	0	0	1
Nebraska	0	0	0	182	33	0	0	3
North Dakota	0	0	0	0	9	0	47	2
South Dakota	0	0	0	0	21	0	0	8
South Atlantic	**0**	**0**	**0**	**2**	**4**	**0**	**0**	**0**
Delaware	0	0	0	138	138	0	0	86
Florida	0	0	0	1	1	0	0	1
Georgia	0	0	0	14	14	0	0	1
Maryland	0	0	0	119	119	0	0	0
North Carolina	0	0	0	16	16	0	0	1
South Carolina	0	0	0	219	11	0	0	1
Virginia	0	0	0	26	19	0	0	1
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**39**	**38**	**0**	**0**	**1**
Alabama	0	0	0	65	65	0	0	1
Kentucky	0	0	0	49	44	0	0	1
Mississippi	0	0	0	0	0	0	0	1
Tennessee	0	0	0	219	219	0	0	1
West South Central	**0**	**0**	**0**	**46**	**12**	**0**	**0**	**1**
Arkansas	0	0	0	271	271	0	0	1
Louisiana	0	0	0	240	240	0	0	3
Oklahoma	0	0	0	49	12	0	0	2
Texas	0	0	0	160	40	0	0	2
Mountain	**0**	**8**	**0**	**11**	**6**	**0**	**29**	**1**
Arizona	0	0	0	13	13	0	0	1
Colorado	0	0	0	165	4	0	0	1
Idaho	0	0	0	0	46	0	0	8
Montana	0	0	0	0	42	0	0	9
Nevada	0	0	0	0	0	0	0	1
New Mexico	0	0	0	23	23	0	0	2
Utah	0	8	0	0	8	0	48	1
Wyoming	0	0	0	0	15	0	0	3
Pacific Contiguous	**0**	**0**	**0**	**17**	**6**	**0**	**0**	**1**
California	0	0	0	17	7	0	0	3
Oregon	0	0	0	144	14	0	0	3
Washington	0	0	0	0	9	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**29**	**0**	**0**	**9**
Alaska	0	0	0	0	70	0	0	15
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**2**	**0**	**3**	**3**	**0**	**7**	**0**

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

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

Independent Power Producers by Census Division and State, February 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**50**	**0**	**2**	**0**	**0**	**12**
Connecticut	0	51	0	0	0	0	43
Maine	0	114	0	9	0	0	14
Massachusetts	0	138	0	4	0	0	28
New Hampshire	0	851	0	0	0	0	26
Rhode Island	0	235	0	15	0	0	0
Vermont	0	0	0	0	0	0	27
Middle Atlantic	**3**	**14**	**0**	**1**	**0**	**0**	**12**
New Jersey	0	113	0	2	0	0	0
New York	0	10	0	2	0	0	12
Pennsylvania	3	39	0	1	0	0	15
East North Central	**0**	**17**	**30**	**1**	**5**	**0**	**41**
Illinois	0	35	0	8	0	0	65
Indiana	0	0	0	0	0	0	0
Michigan	0	0	0	1	0	0	79
Ohio	0	23	30	0	16	0	72
Wisconsin	0	0	0	0	0	0	80
West North Central	**0**	**809**	**0**	**13**	**0**	**0**	**53**
Iowa	0	164	0	0	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	1,073	0	40	0	0	62
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**6**	**9**	**0**	**1**	**0**	**0**	**6**
Delaware	0	60	0	0	0	0	0
Florida	0	89	0	6	0	0	0
Georgia	0	430	0	2	0	0	124
Maryland	0	9	0	2	0	0	2
North Carolina	0	104	0	6	0	0	73
South Carolina	0	0	0	4	0	0	68
Virginia	0	9	0	2	0	0	77
West Virginia	9	0	0	50	0	0	39
East South Central	**0**	**8**	**0**	**0**	**0**	**0**	**239**
Alabama	0	9	0	0	0	0	0
Kentucky	0	0	0	0	0	0	239
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**7**	**0**	**1**	**0**	**0**	**24**
Arkansas	0	0	0	0	0	0	65
Louisiana	0	0	0	0	0	0	26
Oklahoma	0	0	0	0	0	0	0
Texas	0	9	0	1	0	0	0
Mountain	**3**	**19**	**0**	**4**	**0**	**0**	**26**
Arizona	0	0	0	1	0	0	0
Colorado	0	0	0	12	0	0	63
Idaho	0	0	0	33	0	0	32
Montana	3	23	0	4	0	0	78
Nevada	0	0	0	0	0	0	107
New Mexico	0	0	0	7	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**16**	**0**	**2**	**0**	**0**	**35**
California	0	0	0	3	0	0	47
Oregon	0	0	0	1	0	0	55
Washington	0	26	0	16	0	0	47
Pacific Noncontiguous	**5**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	37	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**1**	**6**	**19**	**0**	**2**	**0**	**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.

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

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

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**10**	**6**	**0**	**1**	**1**
Connecticut	0	0	0	31	12	0	0	1
Maine	0	0	0	117	8	0	0	7
Massachusetts	0	0	0	11	7	0	2	3
New Hampshire	0	0	0	0	17	0	0	3
Rhode Island	0	0	0	48	13	0	0	13
Vermont	0	0	0	33	24	0	0	19
Middle Atlantic	**0**	**0**	**0**	**10**	**5**	**0**	**0**	**1**
New Jersey	0	0	0	12	8	0	0	1
New York	0	0	0	16	6	0	0	1
Pennsylvania	0	0	0	41	8	0	0	1
East North Central	**0**	**0**	**0**	**16**	**3**	**0**	**20**	**0**
Illinois	0	0	0	36	4	0	0	1
Indiana	0	0	0	25	5	0	0	1
Michigan	0	0	0	46	8	0	26	1
Ohio	0	0	0	33	5	0	0	0
Wisconsin	0	0	0	61	12	0	0	2
West North Central	**0**	**0**	**0**	**10**	**3**	**0**	**0**	**3**
Iowa	0	0	0	165	7	0	0	4
Kansas	0	0	0	155	3	0	0	3
Minnesota	0	0	0	11	6	0	0	7
Missouri	0	0	0	35	7	0	0	4
Nebraska	0	0	0	66	6	0	0	6
North Dakota	0	0	0	0	6	0	0	6
South Dakota	0	0	0	257	14	0	0	14
South Atlantic	**0**	**0**	**0**	**3**	**3**	**0**	**2**	**1**
Delaware	0	0	0	52	51	0	0	2
District of Columbia	0	0	0	114	114	0	0	114
Florida	0	0	0	11	6	0	3	4
Georgia	0	0	0	8	7	0	0	2
Maryland	0	0	0	13	14	0	0	1
North Carolina	0	0	0	4	3	0	0	4
South Carolina	0	0	0	13	15	0	0	5
Virginia	0	0	0	13	10	0	0	2
West Virginia	0	0	0	0	13	0	0	7
East South Central	**0**	**0**	**0**	**9**	**10**	**0**	**0**	**0**
Alabama	0	0	0	16	14	0	0	0
Kentucky	0	0	0	264	92	0	0	9
Mississippi	0	0	0	5	10	0	0	0
Tennessee	0	0	0	23	27	0	0	26
West South Central	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**1**
Arkansas	0	0	0	9	22	0	0	1
Louisiana	0	0	0	0	62	0	0	3
Oklahoma	0	0	0	0	3	0	0	2
Texas	0	0	0	3	2	0	0	1
Mountain	**0**	**3**	**0**	**3**	**2**	**0**	**0**	**2**
Arizona	0	0	0	4	6	0	0	2
Colorado	0	0	0	10	4	0	0	4
Idaho	0	13	0	16	11	0	0	14
Montana	0	0	0	67	13	0	0	3
Nevada	0	3	0	4	3	0	0	2
New Mexico	0	0	0	11	3	0	0	3
Utah	0	8	0	8	6	0	0	5
Wyoming	0	0	0	0	13	0	0	10
Pacific Contiguous	**0**	**1**	**0**	**2**	**3**	**0**	**0**	**2**
California	0	1	0	2	3	0	0	2
Oregon	0	9	0	15	10	0	0	3
Washington	0	0	0	63	12	0	0	4
Pacific Noncontiguous	**0**	**7**	**0**	**18**	**14**	**0**	**0**	**5**
Alaska	0	0	0	0	92	0	0	35
Hawaii	0	7	0	18	14	0	0	4
U.S. Total	**0**	**2**	**0**	**2**	**1**	**0**	**1**	**0**

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

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**50**	**0**	**2**	**0**	**0**	**12**
Connecticut	0	51	0	0	0	0	43
Maine	0	114	0	9	0	0	14
Massachusetts	0	138	0	4	0	0	28
New Hampshire	0	851	0	0	0	0	26
Rhode Island	0	235	0	15	0	0	0
Vermont	0	0	0	0	0	0	27
Middle Atlantic	**3**	**14**	**0**	**1**	**0**	**0**	**12**
New Jersey	0	113	0	2	0	0	0
New York	0	10	0	2	0	0	12
Pennsylvania	3	39	0	1	0	0	15
East North Central	**0**	**17**	**30**	**1**	**5**	**0**	**41**
Illinois	0	35	0	8	0	0	65
Indiana	0	0	0	0	0	0	0
Michigan	0	0	0	1	0	0	79
Ohio	0	23	30	0	16	0	72
Wisconsin	0	0	0	0	0	0	80
West North Central	**0**	**809**	**0**	**13**	**0**	**0**	**53**
Iowa	0	164	0	0	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	1,073	0	40	0	0	62
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**6**	**9**	**0**	**1**	**0**	**0**	**6**
Delaware	0	60	0	0	0	0	0
Florida	0	89	0	6	0	0	0
Georgia	0	430	0	2	0	0	124
Maryland	0	9	0	2	0	0	2
North Carolina	0	104	0	6	0	0	73
South Carolina	0	0	0	4	0	0	68
Virginia	0	9	0	2	0	0	77
West Virginia	9	0	0	50	0	0	39
East South Central	**0**	**8**	**0**	**0**	**0**	**0**	**239**
Alabama	0	9	0	0	0	0	0
Kentucky	0	0	0	0	0	0	239
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**7**	**0**	**1**	**0**	**0**	**24**
Arkansas	0	0	0	0	0	0	65
Louisiana	0	0	0	0	0	0	26
Oklahoma	0	0	0	0	0	0	0
Texas	0	9	0	1	0	0	0
Mountain	**3**	**19**	**0**	**4**	**0**	**0**	**26**
Arizona	0	0	0	1	0	0	0
Colorado	0	0	0	12	0	0	63
Idaho	0	0	0	33	0	0	32
Montana	3	23	0	4	0	0	78
Nevada	0	0	0	0	0	0	107
New Mexico	0	0	0	7	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**16**	**0**	**2**	**0**	**0**	**35**
California	0	0	0	3	0	0	47
Oregon	0	0	0	1	0	0	55
Washington	0	26	0	16	0	0	47
Pacific Noncontiguous	**5**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	37	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**1**	**6**	**19**	**0**	**2**	**0**	**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.

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 February 2019 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**10**	**6**	**0**	**1**	**1**
Connecticut	0	0	0	31	12	0	0	1
Maine	0	0	0	117	8	0	0	7
Massachusetts	0	0	0	11	7	0	2	3
New Hampshire	0	0	0	0	17	0	0	3
Rhode Island	0	0	0	48	13	0	0	13
Vermont	0	0	0	33	24	0	0	19
Middle Atlantic	**0**	**0**	**0**	**10**	**5**	**0**	**0**	**1**
New Jersey	0	0	0	12	8	0	0	1
New York	0	0	0	16	6	0	0	1
Pennsylvania	0	0	0	41	8	0	0	1
East North Central	**0**	**0**	**0**	**16**	**3**	**0**	**20**	**0**
Illinois	0	0	0	36	4	0	0	1
Indiana	0	0	0	25	5	0	0	1
Michigan	0	0	0	46	8	0	26	1
Ohio	0	0	0	33	5	0	0	0
Wisconsin	0	0	0	61	12	0	0	2
West North Central	**0**	**0**	**0**	**10**	**3**	**0**	**0**	**3**
Iowa	0	0	0	165	7	0	0	4
Kansas	0	0	0	155	3	0	0	3
Minnesota	0	0	0	11	6	0	0	7
Missouri	0	0	0	35	7	0	0	4
Nebraska	0	0	0	66	6	0	0	6
North Dakota	0	0	0	0	6	0	0	6
South Dakota	0	0	0	257	14	0	0	14
South Atlantic	**0**	**0**	**0**	**3**	**3**	**0**	**2**	**1**
Delaware	0	0	0	52	51	0	0	2
District of Columbia	0	0	0	114	114	0	0	114
Florida	0	0	0	11	6	0	3	4
Georgia	0	0	0	8	7	0	0	2
Maryland	0	0	0	13	14	0	0	1
North Carolina	0	0	0	4	3	0	0	4
South Carolina	0	0	0	13	15	0	0	5
Virginia	0	0	0	13	10	0	0	2
West Virginia	0	0	0	0	13	0	0	7
East South Central	**0**	**0**	**0**	**9**	**10**	**0**	**0**	**0**
Alabama	0	0	0	16	14	0	0	0
Kentucky	0	0	0	264	92	0	0	9
Mississippi	0	0	0	5	10	0	0	0
Tennessee	0	0	0	23	27	0	0	26
West South Central	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**1**
Arkansas	0	0	0	9	22	0	0	1
Louisiana	0	0	0	0	62	0	0	3
Oklahoma	0	0	0	0	3	0	0	2
Texas	0	0	0	3	2	0	0	1
Mountain	**0**	**3**	**0**	**3**	**2**	**0**	**0**	**2**
Arizona	0	0	0	4	6	0	0	2
Colorado	0	0	0	10	4	0	0	4
Idaho	0	13	0	16	11	0	0	14
Montana	0	0	0	67	13	0	0	3
Nevada	0	3	0	4	3	0	0	2
New Mexico	0	0	0	11	3	0	0	3
Utah	0	8	0	8	6	0	0	5
Wyoming	0	0	0	0	13	0	0	10
Pacific Contiguous	**0**	**1**	**0**	**2**	**3**	**0**	**0**	**2**
California	0	1	0	2	3	0	0	2
Oregon	0	9	0	15	10	0	0	3
Washington	0	0	0	63	12	0	0	4
Pacific Noncontiguous	**0**	**7**	**0**	**18**	**14**	**0**	**0**	**5**
Alaska	0	0	0	0	92	0	0	35
Hawaii	0	7	0	18	14	0	0	4
U.S. Total	**0**	**2**	**0**	**2**	**1**	**0**	**1**	**0**

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**28**	**0**	**13**	**0**	**0**	**0**
Connecticut	0	20	0	18	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	122	0	20	0	0	0
New Hampshire	0	1	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0
Middle Atlantic	**0**	**132**	**0**	**12**	**0**	**0**	**0**
New Jersey	0	0	0	33	0	0	0
New York	0	172	0	15	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	**49**	**3**	**0**	**7**	**0**	**0**	**0**
Illinois	82	400	0	19	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	3	0	9	0	0	0
Ohio	0	0	0	0	0	0	0
Wisconsin	0	0	0	15	0	0	0
West North Central	**0**	**4**	**0**	**0**	**0**	**0**	**0**
Iowa	0	0	0	0	0	0	0
Minnesota	0	4	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0
South Dakota	0	7,273	0	0	0	0	0
South Atlantic	**0**	**34**	**0**	**7**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	21	0	0	0	0	0
Maryland	0	490	0	4	0	0	0
North Carolina	0	246	0	71	0	0	0
South Carolina	0	298	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**22**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	22	0	0	0
West South Central	**0**	**0**	**0**	**19**	**0**	**0**	**522**
Arkansas	0	0	0	127	0	0	0
Louisiana	0	0	0	32	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	22	0	0	522
Mountain	**0**	**666**	**0**	**24**	**0**	**0**	**0**
Arizona	0	666	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	105	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**306**	**0**	**9**	**0**	**0**	**208**
California	0	49	0	10	0	0	208
Oregon	0	4,587	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**43**	**1**	**0**	**0**	**0**	**0**	**70**
Alaska	43	2	0	0	0	0	70
Hawaii	0	0	0	0	0	0	0
U.S. Total	**15**	**21**	**0**	**4**	**0**	**0**	**54**

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

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

Commercial Sector by Census Division and State, February 2019 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**103**	**8**	**0**	**0**	**10**
Connecticut	0	0	0	354	354	0	0	18
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	103	24	0	0	18
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	**0**	**0**	**0**	**28**	**6**	**0**	**4**	**6**
New Jersey	0	0	0	29	11	0	0	8
New York	0	0	0	149	8	0	10	11
Pennsylvania	0	0	0	123	5	0	0	2
East North Central	**0**	**0**	**0**	**123**	**14**	**0**	**0**	**6**
Illinois	0	0	0	196	188	0	0	19
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	0	0	0	0	6
Ohio	0	0	0	199	32	0	0	2
Wisconsin	0	0	0	253	49	0	0	20
West North Central	**0**	**0**	**0**	**0**	**18**	**0**	**115**	**6**
Iowa	0	0	0	0	12	0	0	2
Kansas	0	0	0	0	153	0	0	153
Minnesota	0	0	0	0	46	0	115	15
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0	7,273
South Atlantic	**0**	**0**	**0**	**31**	**7**	**0**	**0**	**4**
Delaware	0	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	122	20	0	0	14
Georgia	0	0	0	200	200	0	0	106
Maryland	0	0	0	103	30	0	0	4
North Carolina	0	0	0	34	30	0	0	23
South Carolina	0	0	0	0	0	0	0	3
Virginia	0	0	0	0	2	0	0	1
East South Central	**0**	**0**	**0**	**161**	**161**	**0**	**0**	**22**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	161	161	0	0	22
West South Central	**0**	**0**	**0**	**0**	**24**	**0**	**0**	**17**
Arkansas	0	0	0	0	0	0	0	108
Louisiana	0	0	0	0	0	0	0	32
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	25	0	0	20
Mountain	**0**	**0**	**0**	**38**	**5**	**0**	**0**	**10**
Arizona	0	0	0	137	137	0	0	5
Colorado	0	0	0	90	115	0	0	95
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	45	3	0	0	3
New Mexico	0	0	0	0	328	0	0	102
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**28**	**5**	**0**	**0**	**7**
California	0	0	0	28	5	0	0	7
Oregon	0	0	0	0	18	0	0	8
Washington	0	0	0	0	43	0	0	14
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16**
Alaska	0	0	0	0	0	0	0	37
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**15**	**3**	**0**	**2**	**3**

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

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**28**	**0**	**13**	**0**	**0**	**0**
Connecticut	0	20	0	18	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	122	0	20	0	0	0
New Hampshire	0	1	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0
Middle Atlantic	**0**	**132**	**0**	**12**	**0**	**0**	**0**
New Jersey	0	0	0	33	0	0	0
New York	0	172	0	15	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	**49**	**3**	**0**	**7**	**0**	**0**	**0**
Illinois	82	400	0	19	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	3	0	9	0	0	0
Ohio	0	0	0	0	0	0	0
Wisconsin	0	0	0	15	0	0	0
West North Central	**0**	**4**	**0**	**0**	**0**	**0**	**0**
Iowa	0	0	0	0	0	0	0
Minnesota	0	4	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0
South Dakota	0	7,273	0	0	0	0	0
South Atlantic	**0**	**34**	**0**	**7**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	21	0	0	0	0	0
Maryland	0	490	0	4	0	0	0
North Carolina	0	246	0	71	0	0	0
South Carolina	0	298	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**22**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	22	0	0	0
West South Central	**0**	**0**	**0**	**19**	**0**	**0**	**522**
Arkansas	0	0	0	127	0	0	0
Louisiana	0	0	0	32	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	22	0	0	522
Mountain	**0**	**666**	**0**	**24**	**0**	**0**	**0**
Arizona	0	666	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	105	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**306**	**0**	**9**	**0**	**0**	**208**
California	0	49	0	10	0	0	208
Oregon	0	4,587	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**43**	**1**	**0**	**0**	**0**	**0**	**70**
Alaska	43	2	0	0	0	0	70
Hawaii	0	0	0	0	0	0	0
U.S. Total	**15**	**21**	**0**	**4**	**0**	**0**	**54**

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

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

Commercial Sector by Census Division and State, Year-to-Date through February 2019 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**103**	**8**	**0**	**0**	**10**
Connecticut	0	0	0	354	354	0	0	18
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	103	24	0	0	18
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	**0**	**0**	**0**	**28**	**6**	**0**	**4**	**6**
New Jersey	0	0	0	29	11	0	0	8
New York	0	0	0	149	8	0	10	11
Pennsylvania	0	0	0	123	5	0	0	2
East North Central	**0**	**0**	**0**	**123**	**14**	**0**	**0**	**6**
Illinois	0	0	0	196	188	0	0	19
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	0	0	0	0	6
Ohio	0	0	0	199	32	0	0	2
Wisconsin	0	0	0	253	49	0	0	20
West North Central	**0**	**0**	**0**	**0**	**18**	**0**	**115**	**6**
Iowa	0	0	0	0	12	0	0	2
Kansas	0	0	0	0	153	0	0	153
Minnesota	0	0	0	0	46	0	115	15
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0	7,273
South Atlantic	**0**	**0**	**0**	**31**	**7**	**0**	**0**	**4**
Delaware	0	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	122	20	0	0	14
Georgia	0	0	0	200	200	0	0	106
Maryland	0	0	0	103	30	0	0	4
North Carolina	0	0	0	34	30	0	0	23
South Carolina	0	0	0	0	0	0	0	3
Virginia	0	0	0	0	2	0	0	1
East South Central	**0**	**0**	**0**	**161**	**161**	**0**	**0**	**22**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	161	161	0	0	22
West South Central	**0**	**0**	**0**	**0**	**24**	**0**	**0**	**17**
Arkansas	0	0	0	0	0	0	0	108
Louisiana	0	0	0	0	0	0	0	32
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	25	0	0	20
Mountain	**0**	**0**	**0**	**38**	**5**	**0**	**0**	**10**
Arizona	0	0	0	137	137	0	0	5
Colorado	0	0	0	90	115	0	0	95
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	45	3	0	0	3
New Mexico	0	0	0	0	328	0	0	102
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**28**	**5**	**0**	**0**	**7**
California	0	0	0	28	5	0	0	7
Oregon	0	0	0	0	18	0	0	8
Washington	0	0	0	0	43	0	0	14
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16**
Alaska	0	0	0	0	0	0	0	37
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**15**	**3**	**0**	**2**	**3**

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**100**	**73**	**0**	**10**	**0**	**0**	**74**
Connecticut	0	0	0	13	0	0	0
Maine	100	82	0	33	0	0	74
Massachusetts	0	0	0	8	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	0	0	35	0	0	0
Middle Atlantic	**29**	**6**	**51**	**7**	**13**	**0**	**35**
New Jersey	0	0	0	9	0	0	0
New York	0	1	0	6	0	0	35
Pennsylvania	29	39	77	11	19	0	0
East North Central	**6**	**19**	**0**	**5**	**6**	**0**	**53**
Illinois	6	0	0	13	0	0	0
Indiana	0	1	0	6	9	0	0
Michigan	47	12,414	0	16	0	0	192
Ohio	0	0	0	9	0	0	0
Wisconsin	18	481	0	19	0	0	55
West North Central	**3**	**0**	**0**	**7**	**0**	**0**	**0**
Iowa	2	0	0	11	0	0	0
Kansas	0	0	0	18	0	0	0
Minnesota	15	0	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	7	0	0	0	0	0	0
North Dakota	50	0	0	0	0	0	0
South Atlantic	**16**	**20**	**59**	**6**	**0**	**0**	**34**
Delaware	0	0	0	0	0	0	0
Florida	48	30	0	14	0	0	0
Georgia	61	46	59	27	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	4	54	0	21	0	0	390
South Carolina	0	0	0	10	0	0	0
Virginia	14	62	0	9	0	0	0
West Virginia	0	0	0	0	0	0	34
East South Central	**7**	**31**	**0**	**9**	**0**	**0**	**0**
Alabama	52	76	0	17	0	0	0
Kentucky	0	0	0	10	0	0	0
Mississippi	0	0	0	25	0	0	0
Tennessee	0	0	0	4	0	0	0
West South Central	**0**	**3**	**22**	**2**	**6**	**0**	**0**
Arkansas	0	0	0	20	0	0	0
Louisiana	0	0	0	2	7	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	5	29	2	6	0	0
Mountain	**19**	**0**	**0**	**6**	**0**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	102	0	0	32	0	0	0
Montana	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	20	0	0	11	0	0	0
Pacific Contiguous	**0**	**55**	**0**	**3**	**2**	**0**	**0**
California	0	0	0	3	2	0	0
Oregon	0	0	0	40	0	0	0
Washington	0	191	0	35	0	0	0
Pacific Noncontiguous	**0**	**2**	**0**	**0**	**0**	**0**	**108**
Alaska	0	10	0	0	0	0	0
Hawaii	0	0	0	0	0	0	108
U.S. Total	**3**	**6**	**27**	**1**	**4**	**0**	**23**

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

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

Industrial Sector by Census Division and State, February 2019 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**57**	**7**	**0**	**0**	**7**
Connecticut	0	0	0	962	962	0	0	13
Maine	0	0	0	0	7	0	0	9
Massachusetts	0	0	0	0	318	0	0	8
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	35
Middle Atlantic	**0**	**0**	**0**	**88**	**6**	**0**	**0**	**5**
New Jersey	0	0	0	130	130	0	0	5
New York	0	0	0	0	13	0	0	6
Pennsylvania	0	0	0	120	7	0	0	8
East North Central	**0**	**0**	**0**	**0**	**6**	**0**	**6**	**3**
Illinois	0	0	0	0	0	0	0	5
Indiana	0	0	0	0	17	0	0	5
Michigan	0	0	0	0	7	0	0	8
Ohio	0	0	0	0	20	0	0	8
Wisconsin	0	0	0	0	9	0	144	10
West North Central	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**
Iowa	0	0	0	0	0	0	0	3
Kansas	0	0	0	0	0	0	0	17
Minnesota	0	0	0	0	0	0	0	5
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	7
North Dakota	0	0	0	0	67	0	0	30
South Atlantic	**0**	**0**	**0**	**140**	**2**	**0**	**0**	**2**
Delaware	0	0	0	0	40	0	0	0
Florida	0	0	0	201	5	0	0	5
Georgia	0	0	0	0	4	0	0	6
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	5	0	0	4
South Carolina	0	0	0	196	2	0	0	2
Virginia	0	0	0	0	0	0	0	3
West Virginia	0	0	0	0	0	0	0	19
East South Central	**0**	**0**	**0**	**160**	**3**	**0**	**81**	**3**
Alabama	0	0	0	0	4	0	0	5
Kentucky	0	0	0	0	15	0	0	10
Mississippi	0	0	0	0	4	0	0	7
Tennessee	0	0	0	160	5	0	81	2
West South Central	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**1**
Arkansas	0	0	0	0	4	0	0	5
Louisiana	0	0	0	0	5	0	3	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	9	0	6	2
Mountain	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	1	0	0	12
Montana	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	8
Pacific Contiguous	**0**	**0**	**0**	**51**	**6**	**0**	**3**	**3**
California	0	0	0	51	9	0	3	3
Oregon	0	0	0	0	11	0	0	12
Washington	0	0	0	0	8	0	0	8
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**119**	**0**	**0**	**10**
Alaska	0	0	0	0	119	0	0	4
Hawaii	0	0	0	0	0	0	0	15
U.S. Total	**0**	**0**	**0**	**38**	**2**	**0**	**1**	**1**

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

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**100**	**73**	**0**	**10**	**0**	**0**	**74**
Connecticut	0	0	0	13	0	0	0
Maine	100	82	0	33	0	0	74
Massachusetts	0	0	0	8	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	0	0	35	0	0	0
Middle Atlantic	**29**	**6**	**51**	**7**	**13**	**0**	**35**
New Jersey	0	0	0	9	0	0	0
New York	0	1	0	6	0	0	35
Pennsylvania	29	39	77	11	19	0	0
East North Central	**6**	**19**	**0**	**5**	**6**	**0**	**53**
Illinois	6	0	0	13	0	0	0
Indiana	0	1	0	6	9	0	0
Michigan	47	12,414	0	16	0	0	192
Ohio	0	0	0	9	0	0	0
Wisconsin	18	481	0	19	0	0	55
West North Central	**3**	**0**	**0**	**7**	**0**	**0**	**0**
Iowa	2	0	0	11	0	0	0
Kansas	0	0	0	18	0	0	0
Minnesota	15	0	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	7	0	0	0	0	0	0
North Dakota	50	0	0	0	0	0	0
South Atlantic	**16**	**20**	**59**	**6**	**0**	**0**	**34**
Delaware	0	0	0	0	0	0	0
Florida	48	30	0	14	0	0	0
Georgia	61	46	59	27	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	4	54	0	21	0	0	390
South Carolina	0	0	0	10	0	0	0
Virginia	14	62	0	9	0	0	0
West Virginia	0	0	0	0	0	0	34
East South Central	**7**	**31**	**0**	**9**	**0**	**0**	**0**
Alabama	52	76	0	17	0	0	0
Kentucky	0	0	0	10	0	0	0
Mississippi	0	0	0	25	0	0	0
Tennessee	0	0	0	4	0	0	0
West South Central	**0**	**3**	**22**	**2**	**6**	**0**	**0**
Arkansas	0	0	0	20	0	0	0
Louisiana	0	0	0	2	7	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	5	29	2	6	0	0
Mountain	**19**	**0**	**0**	**6**	**0**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	102	0	0	32	0	0	0
Montana	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	20	0	0	11	0	0	0
Pacific Contiguous	**0**	**55**	**0**	**3**	**2**	**0**	**0**
California	0	0	0	3	2	0	0
Oregon	0	0	0	40	0	0	0
Washington	0	191	0	35	0	0	0
Pacific Noncontiguous	**0**	**2**	**0**	**0**	**0**	**0**	**108**
Alaska	0	10	0	0	0	0	0
Hawaii	0	0	0	0	0	0	108
U.S. Total	**3**	**6**	**27**	**1**	**4**	**0**	**23**

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

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

Industrial Sector by Census Division and State, Year-to-Date through February 2019 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**57**	**7**	**0**	**0**	**7**
Connecticut	0	0	0	962	962	0	0	13
Maine	0	0	0	0	7	0	0	9
Massachusetts	0	0	0	0	318	0	0	8
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	35
Middle Atlantic	**0**	**0**	**0**	**88**	**6**	**0**	**0**	**5**
New Jersey	0	0	0	130	130	0	0	5
New York	0	0	0	0	13	0	0	6
Pennsylvania	0	0	0	120	7	0	0	8
East North Central	**0**	**0**	**0**	**0**	**6**	**0**	**6**	**3**
Illinois	0	0	0	0	0	0	0	5
Indiana	0	0	0	0	17	0	0	5
Michigan	0	0	0	0	7	0	0	8
Ohio	0	0	0	0	20	0	0	8
Wisconsin	0	0	0	0	9	0	144	10
West North Central	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**
Iowa	0	0	0	0	0	0	0	3
Kansas	0	0	0	0	0	0	0	17
Minnesota	0	0	0	0	0	0	0	5
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	7
North Dakota	0	0	0	0	67	0	0	30
South Atlantic	**0**	**0**	**0**	**140**	**2**	**0**	**0**	**2**
Delaware	0	0	0	0	40	0	0	0
Florida	0	0	0	201	5	0	0	5
Georgia	0	0	0	0	4	0	0	6
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	5	0	0	4
South Carolina	0	0	0	196	2	0	0	2
Virginia	0	0	0	0	0	0	0	3
West Virginia	0	0	0	0	0	0	0	19
East South Central	**0**	**0**	**0**	**160**	**3**	**0**	**81**	**3**
Alabama	0	0	0	0	4	0	0	5
Kentucky	0	0	0	0	15	0	0	10
Mississippi	0	0	0	0	4	0	0	7
Tennessee	0	0	0	160	5	0	81	2
West South Central	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**1**
Arkansas	0	0	0	0	4	0	0	5
Louisiana	0	0	0	0	5	0	3	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	9	0	6	2
Mountain	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	1	0	0	12
Montana	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	8
Pacific Contiguous	**0**	**0**	**0**	**51**	**6**	**0**	**3**	**3**
California	0	0	0	51	9	0	3	3
Oregon	0	0	0	0	11	0	0	12
Washington	0	0	0	0	8	0	0	8
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**119**	**0**	**0**	**10**
Alaska	0	0	0	0	119	0	0	4
Hawaii	0	0	0	0	0	0	0	15
U.S. Total	**0**	**0**	**0**	**38**	**2**	**0**	**1**	**1**

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

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

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

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

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

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

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**1**	**3**	**1**	**1**
Connecticut	1	1	3	5	1
Maine	1	1	2	0	1
Massachusetts	1	1	6	0	1
New Hampshire	1	1	3	0	1
Rhode Island	0	0	0	0	0
Vermont	4	6	7	0	3
Middle Atlantic	**0**	**0**	**0**	**0**	**0**
New Jersey	0	0	2	0	0
New York	0	0	1	0	0
Pennsylvania	0	0	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	1	1	1	0	1
Indiana	2	3	2	0	1
Michigan	1	2	3	0	1
Ohio	1	1	1	0	1
Wisconsin	1	3	5	0	2
West North Central	**1**	**2**	**3**	**0**	**1**
Iowa	2	7	5	0	3
Kansas	2	1	7	0	2
Minnesota	2	4	7	0	2
Missouri	2	2	6	0	1
Nebraska	2	7	9	0	4
North Dakota	1	4	8	0	3
South Dakota	2	9	12	0	4
South Atlantic	**1**	**0**	**2**	**0**	**0**
Delaware	2	2	6	0	2
District of Columbia	0	0	0	0	0
Florida	1	1	5	0	1
Georgia	2	1	4	0	1
Maryland	0	1	2	0	0
North Carolina	1	1	3	0	1
South Carolina	2	1	3	0	1
Virginia	1	0	4	0	1
West Virginia	0	1	0	0	0
East South Central	**1**	**2**	**2**	**0**	**1**
Alabama	2	1	2	0	1
Kentucky	2	4	3	0	2
Mississippi	2	2	5	0	2
Tennessee	1	3	4	0	2
West South Central	**1**	**1**	**1**	**0**	**1**
Arkansas	2	1	4	0	2
Louisiana	2	1	1	0	1
Oklahoma	2	1	4	0	1
Texas	1	1	2	0	1
Mountain	**0**	**2**	**2**	**0**	**1**
Arizona	1	2	3	0	1
Colorado	1	4	6	0	2
Idaho	1	4	5	0	2
Montana	2	7	5	0	3
Nevada	1	2	1	0	1
New Mexico	2	6	7	0	3
Utah	2	4	3	0	2
Wyoming	2	7	4	0	3
Pacific Contiguous	**0**	**1**	**3**	**0**	**1**
California	0	1	2	0	1
Oregon	1	4	8	0	2
Washington	1	4	6	0	2
Pacific Noncontiguous	**1**	**5**	**4**	**0**	**2**
Alaska	2	9	16	0	5
Hawaii	0	0	0	0	0
U.S. Total	**0**	**0**	**1**	**0**	**0**

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

Table A.7.A. Relative Standard Error for Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, Census Division, and State, February 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**2**	**1**	**1**	**3**	**1**
Connecticut	6	1	1	9	3
Maine	1	1	3	0	1
Massachusetts	1	1	3	0	1
New Hampshire	1	1	2	0	1
Rhode Island	0	0	0	0	0
Vermont	5	7	7	0	4
Middle Atlantic	**0**	**0**	**0**	**1**	**0**
New Jersey	1	1	2	0	0
New York	0	0	1	1	0
Pennsylvania	1	1	0	0	0
East North Central	**1**	**1**	**1**	**0**	**1**
Illinois	1	1	1	0	1
Indiana	2	4	2	0	2
Michigan	1	2	4	0	1
Ohio	1	1	1	0	1
Wisconsin	1	3	7	0	2
West North Central	**1**	**2**	**4**	**0**	**1**
Iowa	2	6	8	0	3
Kansas	3	3	6	0	2
Minnesota	2	4	9	0	3
Missouri	3	4	7	0	2
Nebraska	3	7	15	0	4
North Dakota	2	4	9	0	4
South Dakota	3	8	16	0	4
South Atlantic	**1**	**1**	**2**	**0**	**1**
Delaware	3	4	11	0	2
District of Columbia	0	0	0	0	0
Florida	1	1	6	0	1
Georgia	3	2	5	0	2
Maryland	1	1	2	0	0
North Carolina	2	2	4	0	1
South Carolina	3	2	4	0	2
Virginia	1	1	5	0	1
West Virginia	1	2	0	0	1
East South Central	**2**	**2**	**2**	**0**	**1**
Alabama	3	2	3	0	2
Kentucky	4	5	3	0	2
Mississippi	4	4	6	0	3
Tennessee	2	4	5	0	2
West South Central	**2**	**1**	**2**	**0**	**1**
Arkansas	3	3	5	0	2
Louisiana	3	2	2	0	1
Oklahoma	3	3	6	0	2
Texas	2	1	2	0	1
Mountain	**1**	**2**	**3**	**0**	**1**
Arizona	2	3	5	0	1
Colorado	4	5	8	0	3
Idaho	2	4	8	0	2
Montana	3	6	8	0	3
Nevada	1	3	2	0	1
New Mexico	6	8	12	0	5
Utah	4	6	4	0	3
Wyoming	3	7	6	0	3
Pacific Contiguous	**0**	**1**	**2**	**0**	**1**
California	1	1	2	0	0
Oregon	1	3	11	0	2
Washington	1	3	9	0	2
Pacific Noncontiguous	**1**	**3**	**3**	**0**	**2**
Alaska	3	7	17	0	4
Hawaii	0	0	0	0	0
U.S. Total	**0**	**0**	**1**	**1**	**0**

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

Table A.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 February 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**1**	**1**	**1**	**1**
Connecticut	5	1	1	4	2
Maine	1	1	2	0	1
Massachusetts	1	1	3	0	1
New Hampshire	1	1	2	0	1
Rhode Island	0	0	0	0	0
Vermont	4	6	5	0	3
Middle Atlantic	**0**	**0**	**0**	**0**	**0**
New Jersey	1	0	2	0	0
New York	0	0	1	0	0
Pennsylvania	0	1	0	0	0
East North Central	**1**	**1**	**1**	**0**	**0**
Illinois	1	1	1	0	1
Indiana	2	3	2	0	1
Michigan	1	1	4	0	1
Ohio	1	1	1	0	1
Wisconsin	1	3	7	0	2
West North Central	**1**	**2**	**4**	**0**	**1**
Iowa	2	5	7	0	3
Kansas	3	2	6	0	2
Minnesota	2	3	8	0	2
Missouri	2	3	6	0	2
Nebraska	2	6	13	0	4
North Dakota	2	3	8	0	3
South Dakota	3	7	14	0	3
South Atlantic	**1**	**1**	**1**	**0**	**0**
Delaware	2	3	7	0	2
District of Columbia	0	0	0	0	0
Florida	1	1	5	0	1
Georgia	2	2	4	0	1
Maryland	1	1	2	0	0
North Carolina	1	1	3	0	1
South Carolina	2	2	3	0	1
Virginia	1	1	4	0	1
West Virginia	1	1	0	0	0
East South Central	**1**	**2**	**2**	**0**	**1**
Alabama	2	2	3	0	1
Kentucky	3	4	3	0	2
Mississippi	3	3	5	0	2
Tennessee	2	4	5	0	2
West South Central	**1**	**1**	**2**	**0**	**1**
Arkansas	2	3	4	0	2
Louisiana	2	2	2	0	1
Oklahoma	2	2	5	0	2
Texas	1	1	2	0	1
Mountain	**1**	**2**	**2**	**0**	**1**
Arizona	1	2	4	0	1
Colorado	3	4	7	0	2
Idaho	1	4	7	0	2
Montana	2	5	8	0	3
Nevada	1	2	2	0	1
New Mexico	4	7	10	0	4
Utah	3	5	4	0	2
Wyoming	3	6	5	0	3
Pacific Contiguous	**0**	**1**	**2**	**0**	**0**
California	0	1	2	0	0
Oregon	1	3	10	0	2
Washington	1	3	8	0	2
Pacific Noncontiguous	**1**	**3**	**3**	**0**	**1**
Alaska	2	6	17	0	4
Hawaii	0	0	0	0	0
U.S. Total	**0**	**0**	**1**	**0**	**0**

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

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

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

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

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

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

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**0**	**2**	**1**	**1**
Connecticut	5	1	2	4	2
Maine	1	1	2	0	1
Massachusetts	1	1	4	0	1
New Hampshire	1	1	2	0	1
Rhode Island	0	0	0	0	0
Vermont	3	5	5	0	3
Middle Atlantic	**0**	**0**	**0**	**0**	**0**
New Jersey	0	0	1	0	0
New York	0	0	1	0	0
Pennsylvania	0	0	0	0	0
East North Central	**0**	**0**	**1**	**0**	**0**
Illinois	1	1	1	0	0
Indiana	1	3	2	0	1
Michigan	1	1	3	0	1
Ohio	1	1	1	0	0
Wisconsin	1	3	5	0	2
West North Central	**1**	**2**	**3**	**0**	**1**
Iowa	2	5	5	0	2
Kansas	2	2	5	0	2
Minnesota	2	3	6	0	2
Missouri	2	3	5	0	1
Nebraska	2	6	10	0	3
North Dakota	2	3	6	0	3
South Dakota	2	7	11	0	3
South Atlantic	**1**	**0**	**1**	**0**	**0**
Delaware	2	2	3	0	1
District of Columbia	0	0	0	0	0
Florida	1	1	5	0	1
Georgia	1	1	3	0	1
Maryland	0	0	1	0	0
North Carolina	1	1	3	0	1
South Carolina	1	2	3	0	1
Virginia	1	1	3	0	1
West Virginia	0	1	0	0	0
East South Central	**1**	**2**	**2**	**0**	**1**
Alabama	1	2	2	0	1
Kentucky	2	3	2	0	2
Mississippi	2	2	4	0	2
Tennessee	2	3	4	0	1
West South Central	**1**	**1**	**1**	**0**	**1**
Arkansas	2	2	3	0	2
Louisiana	2	1	1	0	1
Oklahoma	2	2	4	0	1
Texas	1	1	2	0	1
Mountain	**1**	**1**	**2**	**0**	**1**
Arizona	1	2	4	0	1
Colorado	2	4	6	0	2
Idaho	1	3	5	0	2
Montana	2	5	5	0	2
Nevada	1	2	1	0	1
New Mexico	3	6	8	0	3
Utah	3	4	3	0	2
Wyoming	2	6	4	0	2
Pacific Contiguous	**0**	**1**	**2**	**0**	**1**
California	0	1	1	0	0
Oregon	1	3	7	0	2
Washington	1	3	6	0	2
Pacific Noncontiguous	**1**	**4**	**4**	**0**	**2**
Alaska	3	7	16	0	4
Hawaii	0	0	0	0	0
U.S. Total	**0**	**0**	**1**	**0**	**0**

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

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2019

Year	Month	Event Date and Time	Restoration Date and Time	Duration	Utility/Power Pool	NERC Region	Area Affected	Type of Disturbance	Loss (megawatts)	Number of Customers Affected
2019	1	01/06/2019 1:00 AM	01/06/2019 12:00 PM	11 Hours, 0 Minutes	Puget Sound Energy	WECC	Washington: King County, Thurston County, Pierce County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	230000
2019	1	01/06/2019 3:00 AM	01/09/2019 7:00 AM	76 Hours, 0 Minutes	Peak Reliability	WECC	Washington:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	230	230000
2019	1	01/06/2019 5:56 PM	01/06/2019 9:52 PM	3 Hours, 56 Minutes	Sacramento Municipal Util Dist	WECC	California: Sacramento County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	300	90382
2019	1	01/10/2019 12:19 PM	01/10/2019 12:48 PM	0 Hours, 29 Minutes	Western Area Power Administration - Upper Great Plains Region	WECC	Montana: Valley County;	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-System Operations	11	2
2019	1	01/12/2019 11:30 AM	. .	. Hours, . Minutes	Southwest Power Pool, Inc.	SERC	Missouri: Nebraska:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	116600
2019	1	01/12/2019 11:30 AM	01/13/2019 10:00 PM	34 Hours, 30 Minutes	Kansas City Power & Light Co	SPP RE	Missouri: Jackson County; Kansas: Johnson County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	112530
2019	1	01/13/2019 5:30 AM	01/15/2019 5:00 PM	59 Hours, 30 Minutes	Duke Energy Carolinas	SERC	North Carolina: South Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	133200	Unknown
2019	1	01/16/2019 5:26 PM	01/17/2019 12:19 PM	18 Hours, 53 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	190	126700
2019	1	01/18/2019 9:54 PM	01/19/2019 12:19 AM	2 Hours, 25 Minutes	Nebraska Public Power District	MRO	Nebraska:	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Transmission Interruption	8	Unknown
2019	1	01/23/2019 7:26 AM	01/23/2019 5:05 PM	9 Hours, 39 Minutes	Western Area Power Administration	WECC	Colorado: Larimer County;	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-System Operations	0	0
2019	1	01/29/2019 6:34 PM	01/29/2019 6:36 PM	0 Hours, 2 Minutes	Entergy Transmission Control Center - North	SERC	Louisiana: Washington Parish;	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Transmission Interruption	Unknown	Unknown
2019	1	01/30/2019 4:23 AM	02/02/2019 9:00 AM	76 Hours, 37 Minutes	Prairie Power, Inc.	SERC	Illinois: Scott County;	Fuel supply emergencies that could impact electric power system adequacy or reliability.-Fuel Supply Deficiency	Unknown	Unknown
2019	1	01/30/2019 7:00 AM	01/30/2019 8:08 AM	1 Hours, 8 Minutes	Prairie Power, Inc.	SERC	Illinois: Pike County;	Fuel supply emergencies that could impact electric power system adequacy or reliability.-Severe Weather	Unknown	Unknown
2019	1	01/30/2019 9:30 AM	01/31/2019 6:00 PM	32 Hours, 30 Minutes	Detroit Edison Co	RF	Michigan:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the Bulk Electric System.-Severe Weather	Unknown	Unknown
2019	2	02/05/2019 6:17 PM	02/05/2019 8:26 PM	2 Hours, 9 Minutes	Pacific Gas & Electric Co	WECC	California	Electrical System Separation (Islanding) where part or parts of power grid remain(s) operational in an otherwise blocked out area or within the partial failure of an integrated electrical system.-Severe Weather	42	33200
2019	2	02/07/2019 7:39 AM	02/07/2019 7:40 AM	0 Hours, 1 Minutes	Entergy Transmission Control Center - North	SERC	Arkansas	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Severe Weather/Transmission Interruption	3	3370
2019	2	02/07/2019 8:55 AM	02/09/2019 4:30 PM	55 Hours, 35 Minutes	Consumers Energy Co	RF	Michigan	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	233000
2019	2	02/08/2019 6:30 PM	. .	. Hours, . Minutes	Puget Sound Energy	WECC	Washington	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	50940
2019	2	02/13/2019 2:48 AM	02/15/2019 12:28 AM	45 Hours, 40 Minutes	Pacific Gas & Electric Co	WECC	California	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	182	121000
2019	2	02/23/2019 2:05 PM	. .	. Hours, . Minutes	American Electric Power - (RFC Reliability Region)	SERC	Virginia	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Severe Weather/Transmission Interruption	Unknown	Unknown
2019	2	02/24/2019 11:21 AM	02/26/2019 5:29 PM	54 Hours, 8 Minutes	American Electric Power - (RFC Reliability Region)	RF	Ohio, Virginia, West Virginia	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	118781
2019	2	02/24/2019 12:31 PM	02/24/2019 2:57 PM	2 Hours, 26 Minutes	Ohio Edison Co	RF	Ohio	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	157274

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2019

Year	Month	Event Date and Time	Restoration Date and Time	Duration	Utility/Power Pool	NERC Region	Area Affected	Type of Disturbance	Loss (megawatts)	Number of Customers Affected
2019	2	02/24/2019 2:33 PM	02/24/2019 6:03 PM	3 Hours, 30 Minutes	Monongahela Power Co	RF	Pennsylvania	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	94048
2019	2	02/24/2019 6:00 PM	02/25/2019 10:00 PM	28 Hours, 0 Minutes	Duquesne Light Co	RF	Pennsylvania	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	132000
2019	2	02/24/2019 6:47 PM	02/25/2019 1:55 PM	19 Hours, 8 Minutes	West Penn Power Company	RF	Pennsylvania	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	137216
2019	2	02/24/2019 8:02 PM	02/25/2019 2:30 PM	18 Hours, 28 Minutes	Consumers Energy Co	RF	Michigan	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	115000
2019	2	02/25/2019 7:45 AM	02/25/2019 6:40 PM	10 Hours, 55 Minutes	ISO New England	NPCC	Massachusetts	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Transmission Interruption	0	0
2019	2	02/25/2019 1:35 PM	02/26/2019 2:50 AM	13 Hours, 15 Minutes	ISO New England	NPCC	Connecticut, Massachusetts, New Hampshire, Maine, Vermont, Rhode Island	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	72332
2019	2	02/27/2019 11:25 AM	02/27/2019 5:39 PM	6 Hours, 14 Minutes	MidAmerican Energy Co	MRO	Iowa	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Transmission Interruption	0	0

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

Table B.2 Major Disturbances and Unusual Occurrences, 2018

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

Table B.2 Major Disturbances and Unusual Occurrences, 2018

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

Table B.2 Major Disturbances and Unusual Occurrences, 2018

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

Table B.2 Major Disturbances and Unusual Occurrences, 2018

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

Table B.2 Major Disturbances and Unusual Occurrences, 2018

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

Table B.2 Major Disturbances and Unusual Occurrences, 2018

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

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

Appendix C

Technical notes

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

Data quality

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

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

Reliability of data

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

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

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

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

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

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

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

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

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

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

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

Data revision procedure

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

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

Data sources for Electric Power Monthly

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

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

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

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

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

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

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

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

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

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

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

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

P Indicates a preliminary value.

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

Form EIA-826

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form EIA-860

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

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

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

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

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

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

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

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

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

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

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

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

Form EIA-860M

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

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

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

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

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

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

Form EIA-861

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

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

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

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

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

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

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

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

Form EIA-923

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

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

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

Instrument and design history:

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

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

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

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

Generation, consumption, and stocks

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Issues within historical data series:

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

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

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

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

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

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

Average Capacity Factors

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

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

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

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

NERC classification

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

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

The new NERC Regional Council names are as follows:

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

Business classification

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

Agriculture, Forestry, and Fishing

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

Mining

211 Oil and gas extraction
2121 Coal mining
2122 Metal mining

2123 Mining and quarrying of nonmetallic minerals except fuels

Construction

23

Manufacturing

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

Transportation and Public Utilities

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

Wholesale Trade

421 to 422

Retail Trade

441 to 454

Finance, Insurance, and Real Estate

521 to 533

Services

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

Public Administration

92

Multiple Survey Programs- Small Scale PV Solar Estimation of Generation

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

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

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

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

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

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

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

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

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

e_i is the error term

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

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

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

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

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

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

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

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

Appendix 1- MSAs

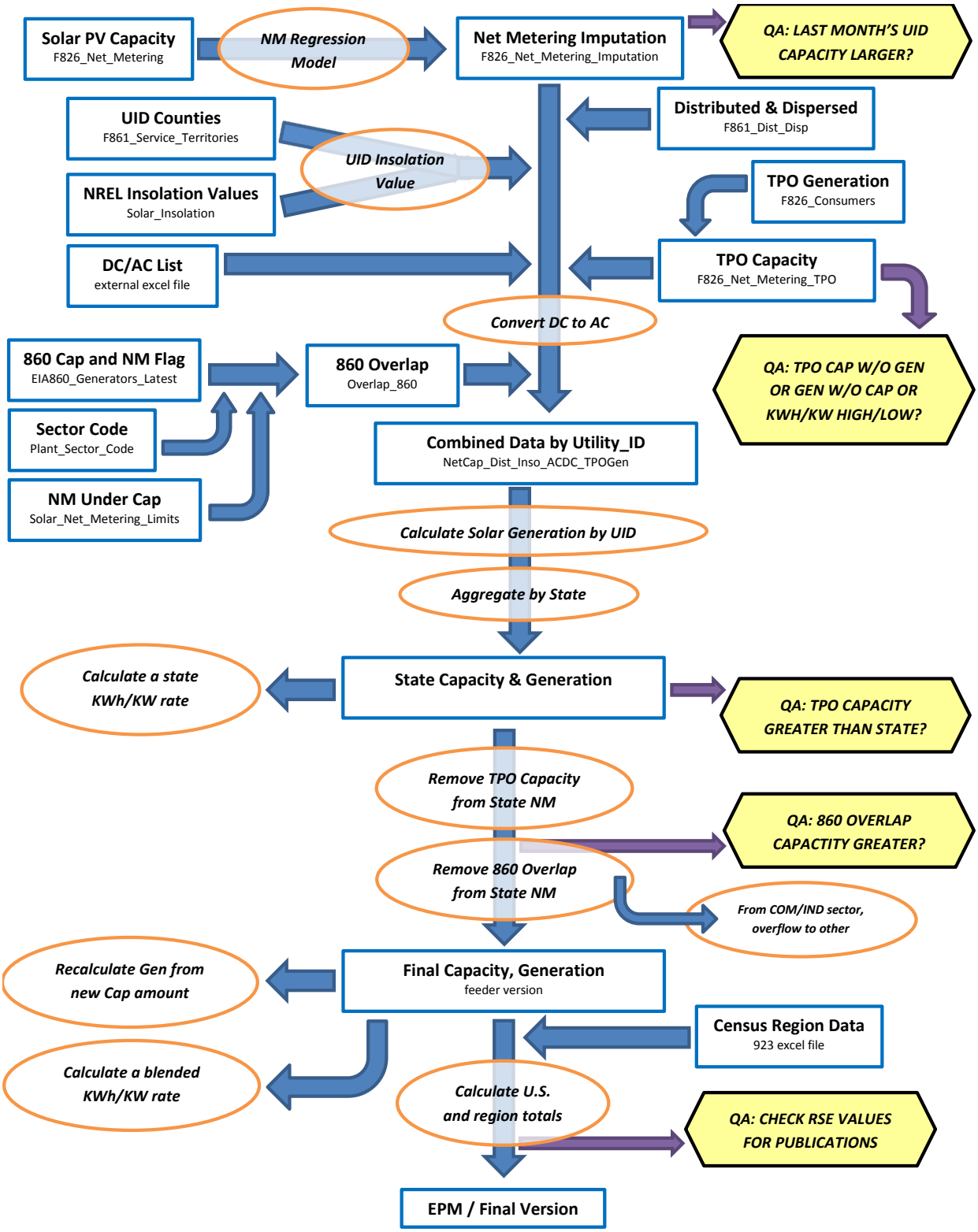
TMY3 (1991-2005) Weather Stations by MSA

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

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

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

Appendix 2 – Flow diagram of data sources and analysis



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

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

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

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

Census Division and State	Coal (Million Btu per Ton)	Petroleum Liquids (Million Btu per Barrel)	Petroleum Coke (Million Btu per Ton)	Natural Gas (Million Btu per Thousand Cubic Feet)
New England	24.60	6.26	--	1.03
Connecticut	--	5.80	--	1.03
Maine	24.60	6.25	--	1.06
Massachusetts	--	6.30	--	1.03
New Hampshire	--	5.80	--	1.04
Rhode Island	--	--	--	1.03
Vermont	--	--	--	--
Middle Atlantic	22.07	6.07	--	1.04
New Jersey	25.80	5.77	--	1.04
New York	26.17	6.07	--	1.03
Pennsylvania	21.83	6.07	--	1.04
East North Central	20.31	5.81	27.68	1.05
Illinois	17.88	5.81	--	1.00
Indiana	22.09	5.75	--	1.05
Michigan	18.29	5.80	--	1.05
Ohio	24.87	5.83	--	1.06
Wisconsin	17.93	5.85	27.68	1.04
West North Central	16.58	5.78	--	1.29
Iowa	17.75	5.74	--	1.82
Kansas	17.02	5.68	--	1.01
Minnesota	17.95	5.72	--	1.08
Missouri	17.76	5.77	--	1.02
Nebraska	17.02	5.80	--	1.05
North Dakota	13.00	5.89	--	1.00
South Dakota	16.60	--	--	--
South Atlantic	23.55	5.84	28.87	1.03
Delaware	26.07	5.93	--	1.04
District of Columbia	--	--	--	--
Florida	23.67	5.85	28.87	1.02
Georgia	19.57	5.89	--	1.02
Maryland	24.78	5.80	--	1.04
North Carolina	24.88	5.78	--	1.03
South Carolina	24.59	5.79	--	1.02
Virginia	22.67	6.05	--	1.05
West Virginia	25.01	5.79	--	1.09
East South Central	21.01	5.81	--	1.02
Alabama	18.70	5.50	--	1.02
Kentucky	22.14	5.83	--	1.04
Mississippi	16.68	5.80	--	1.02
Tennessee	23.86	5.78	--	1.01
West South Central	16.24	5.86	28.92	1.02
Arkansas	17.38	5.90	--	1.02
Louisiana	17.23	--	28.92	1.03
Oklahoma	17.11	5.80	--	1.03
Texas	15.75	5.83	--	1.02
Mountain	18.54	5.76	--	1.05
Arizona	19.23	5.73	--	1.04
Colorado	18.62	--	--	1.11
Idaho	--	--	--	1.00
Montana	16.80	5.92	--	1.05
Nevada	19.95	5.83	--	1.04
New Mexico	18.21	5.66	--	1.02
Utah	21.04	5.85	--	1.04
Wyoming	17.62	5.79	--	1.05
Pacific Contiguous	17.77	6.00	--	1.04
California	22.97	--	--	1.03
Oregon	17.10	--	--	1.05
Washington	17.07	6.00	--	1.09
Pacific Noncontiguous	13.94	6.19	--	1.00
Alaska	13.94	5.60	--	1.00
Hawaii	--	6.20	--	--
U.S. Total	19.07	6.10	28.90	1.04

'Coal' includes anthracite, bituminous, subbituminous, lignite, waste coal, synthetic coal, and coal-derived synthesis gas.
'Petroleum Liquids' include distillate fuel oil, residual fuel oil, jet fuel, kerosene, propane, and waste oil.
'Petroleum Coke' includes petroleum coke and synthesis gas derived from petroleum coke.
'Natural Gas' includes a small amount of supplemental gaseous fuels.
Notes: See Glossary for definitions. Values are preliminary. Data represents weighted values.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table C.2. Comparison of Preliminary Monthly Data Versus Final Monthly Data at the U.S. Level, 2015 through 2017

	Mean Absolute Value of Percent Change Total (All Sectors)		
Item	**2015**	**2016**	**2017**
Net Generation			
Coal	0.33%	0.09%	0.17%
Petroleum Liquids	1.00%	3.08%	3.76%
Petroleum Coke	1.60%	1.46%	5.79%
Natural Gas	0.18%	0.30%	1.93%
Other Gases	3.90%	3.76%	11.64%
Hydroelectric	1.08%	0.76%	2.47%
Nuclear	0.01%	0.05%	0.00%
Other	0.80%	0.76%	2.50%
Total	**0.23%**	**0.08%**	**0.63%**
Consumption of Fossil Fuels for Electricity Generation			
Coal	0.24%	0.11%	0.13%
Petroleum Liquids	2.28%	5.81%	4.01%
Petroleum Coke	1.50%	0.87%	4.95%
Natural Gas	0.32%	2.26%	1.08%
Fuel Stocks for Electric Power Sector			
Coal	0.40%	0.72%	0.18%
Petroleum Liquids	2.92%	3.19%	1.97%
Petroleum Coke	0.04%	0.27%	14.42%
Retail Sales			
Residential	0.30%	0.26%	0.31%
Commercial	0.18%	0.55%	0.28%
Industrial	2.92%	4.31%	4.00%
Transportation	0.37%	0.06%	0.12%
Total	**0.93%**	**1.40%**	**1.12%**
Revenue			
Residential	0.15%	0.28%	0.26%
Commercial	0.62%	1.21%	0.28%
Industrial	3.15%	4.54%	3.52%
Transportation	1.09%	1.53%	0.21%
Total	**0.83%**	**1.34%**	**0.57%**
Average Retail Price			
Residential	0.15%	0.05%	0.21%
Commercial	0.44%	0.65%	0.20%
Industrial	0.31%	0.24%	0.51%
Transportation	0.83%	1.57%	0.20%
Total	**0.11%**	**0.10%**	**0.53%**
Receipt of Fossil Fuels			
Coal	1.70%	1.92%	1.30%
Petroleum Liquids	1.86%	1.16%	3.18%
Petroleum Coke	2.47%	0.01%	0.00%
Natural Gas	0.25%	0.21%	19.49%
Cost of Fossil Fuels			
Coal	0.04%	0.12%	0.83%
Petroleum Liquids	0.25%	0.26%	0.34%
Petroleum Coke	1.42%	0.12%	0.00%
Natural Gas	0.14%	0.12%	0.47%

Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, and synthetic coal. Coal stocks exclude waste coal.
Petroleum Liquids include distillate fuel oil, residual fuel oil, jet fuel, kerosene, and waste oil.
Natural gas includes a small amount of supplemental gaseous fuels that cannot be identified separately. Excludes blast furnace gas and other gases.
Hydroelectric includes conventional hydroelectric and hydroelectric pumped storage facilities.
Other generation includes geothermal, wood, waste, wind, and solar, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.
Fuel Stocks are end-of-month values.
See technical notes (http://www.eia.gov/cneaf/electricity/epm/appenc.pdf) for additional information on the Commercial, Industrial and Transportation sectors.
Cost of Fossil Fuels represent weighted values.
Notes: Mean absolute value of percent change is the unweighted average of the absolute percent cahnges.
Sources: U.S. Energy Information Administration, Form EIA-923 'Power Plant Operations Report'; Form EIA-423, 'Monthly Cost and Quality of Fuels for Electric Plants Report'; Form EIA-826, 'Monthly Electric Sales and Revenue With State Distributions Report'; Form EIA-906, 'Power Plant Report;' Form EIA-920 'Combined Heat and Power Plant Report'; and Federal Energy Regulatory Commission, FERC Form 423, 'Monthly Report of Cost and Quality of Fuels for Electric Plants.'

Table C.3. Comparison of Preliminary Annual Data Versus Final Annual Data at the U.S. Level, 2015 through 2017

	2015			2016			2017		
Item	Preliminary Annual Data	Final Annual Data	Percent Change	Preliminary Annual Data	Final Annual Data	Percent Change	Preliminary Annual Data	Final Annual Data	Percent Change
Net Generation (Thousand MWh)									
Coal	1,356,057	1,352,398	-0.27%	1,240,108	1,239,149	-0.08%	1,207,901	1,205,835	-0.17%
Petroleum Liquids	17,456	17,372	-0.48%	12,675	13,008	2.63%	12,583	12,414	-1.34%
Petroleum Coke	10,987	10,877	-1.00%	11,232	11,197	-0.31%	8,508	8,976	5.50%
Natural Gas	1,335,068	1,333,482	-0.12%	1,380,295	1,378,307	-0.14%	1,272,864	1,296,415	1.85%
Other Gases	12,963	13,117	1.18%	13,000	12,807	-1.48%	14,159	12,469	-11.94%
Hydroelectric	246,075	243,989	-0.85%	259,143	261,126	0.77%	293,550	293,839	0.10%
Nuclear	797,178	797,178	0.00%	805,327	805,694	0.05%	804,950	804,950	0.00%
Other	311,597	309,189	-0.77%	357,299	355,387	-0.54%	400,289	399,371	-0.23%
Total	**4,087,381**	**4,077,601**	**-0.24%**	**4,079,079**	**4,076,675**	**-0.06%**	**4,014,804**	**4,034,268**	**0.48%**
Consumption of Fossil Fuels for Electricity Generation									
Coal (1,000 tons)	740,855	739,594	-0.17%	678,005	677,371	-0.09%	663,479	663,911	0.07%
Petroleum Liquids (1,000 barrels)	29,545	28,925	-2.10%	21,225	22,405	5.56%	21,935	21,696	-1.09%
Petroleum Coke (1,000 tons)	4,088	4,044	-1.07%	4,275	4,253	-0.52%	3,349	3,490	4.21%
Natural Gas (1,000 Mcf)	10,048,346	10,016,576	-0.32%	10,400,189	10,170,110	-2.21%	9,440,777	9,507,760	0.71%
Fuel Stocks for Electric Power Sector									
Coal (1,000 tons)	197,128	195,548	-0.80%	163,946	162,009	-1.18%	137,155	137,687	0.39%
Petroleum Liquids (1,000 barrels)	32,223	32,884	2.05%	30,880	31,839	3.11%	28,723	29,294	1.99%
Petroleum Coke (1,000 tons)	1,342	1,340	-0.15%	872	845	-3.10%	1,113	864	-22.42%
Retail Sales (Million kWh)									
Residential	1,399,884	1,404,096	0.30%	1,407,394	1,411,058	0.26%	1,378,819	1,378,648	-0.01%
Commercial	1,358,419	1,360,752	0.17%	1,359,617	1,367,191	0.56%	1,349,208	1,352,888	0.27%
Industrial	958,563	986,508	2.92%	936,269	976,715	4.32%	946,443	984,298	4.00%
Transportation	7,659	7,637	-0.29%	7,499	7,497	-0.03%	7,524	7,523	-0.02%
Total	**3,724,525**	**3,758,992**	**0.93%**	**3,710,779**	**3,762,462**	**1.39%**	**3,681,995**	**3,723,356**	**1.12%**
Revenue (Million Dollars)									
Residential	177,367	177,624	0.14%	176,585	177,077	0.28%	177,860	177,661	-0.11%
Commercial	143,893	144,781	0.62%	140,937	142,643	1.21%	144,108	144,242	0.09%
Industrial	66,088	68,166	3.14%	63,201	66,068	4.54%	65,394	67,691	3.51%
Transportation	779	771	-1.12%	711	722	1.53%	727	728	0.15%
Total	**388,127**	**391,341**	**0.83%**	**381,435**	**386,509**	**1.33%**	**388,089**	**390,322**	**0.58%**
Average Retail Price (Cents/kWh)									
Residential	12.67	12.65	-0.16%	12.55	12.55	0.02%	12.90	12.89	-0.10%
Commercial	10.59	10.64	0.44%	10.37	10.43	0.65%	10.68	10.66	-0.18%
Industrial	6.89	6.91	0.22%	6.75	6.76	0.21%	6.91	6.88	-0.47%
Transportation	10.17	10.09	-0.83%	9.48	9.63	1.55%	9.67	9.68	0.17%
Total	**10.42**	**10.41**	**-0.10%**	**10.28**	**10.27**	**-0.06%**	**10.54**	**10.48**	**-0.54%**
Receipt of Fossil Fuels									
Coal (1,000 tons)	769,866	782,929	1.70%	638,564	650,770	1.91%	634,118	642,364	1.30%
Petroleum Liquids (1,000 barrels)	24,512	24,320	-0.78%	16,610	16,807	1.18%	15,619	16,127	3.25%
Petroleum Coke (1,000 tons)	4,779	4,897	2.46%	4,166	4,166	0.01%	3,309	3,309	0.00%
Natural Gas (1,000 Mcf)	9,843,170	9,842,581	-0.01%	10,258,688	10,271,180	0.12%	8,050,520	9,628,733	19.60%
Cost of Fossil Fuels (Dollars per Million Btu)									
Coal (1,000 tons)	2.22	2.22	-0.03%	2.12	2.11	-0.15%	2.08	2.06	-0.87%
Petroleum Liquids (1,000 barrels)	11.48	11.49	0.10%	9.36	9.39	0.28%	11.82	11.86	0.36%
Petroleum Coke (1,000 tons)	1.87	1.84	-1.37%	1.65	1.65	0.15%	2.13	2.13	0.00%
Natural Gas (1,000 Mcf)	3.22	3.23	0.18%	2.88	2.87	-0.06%	3.39	3.37	-0.55%

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

Table C.4. Unit of Measure Equivalents for Electricity

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

Source: U.S. Energy Information Administration

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Geothermal: Pertaining to heat within the Earth.

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

Gigawatt (GW): One billion watts.

Gigawatthour (GWh): One billion watthours.

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

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

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

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

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

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

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

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

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

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

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

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

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

Kilowatt (kW): One thousand watts.

Kilowatthour (kWh): One thousand watthours.

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

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

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

Mcf: One thousand cubic feet.

Megawatt (MW): One million watts of electricity.

Megawatthour (MWh): One million watthours.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Petroleum coke: See Coke (petroleum).

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

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

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

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

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

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

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

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

Receipts: Purchases of fuel.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Terrawatt: One trillion watts.

Terrawatthour: One trillion kilowatthours.

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

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

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

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

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

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

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

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

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

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

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