



Associated Electric Cooperative, Inc.
Power Plant Name: Holden
Electric Generation and Emissions in 2011

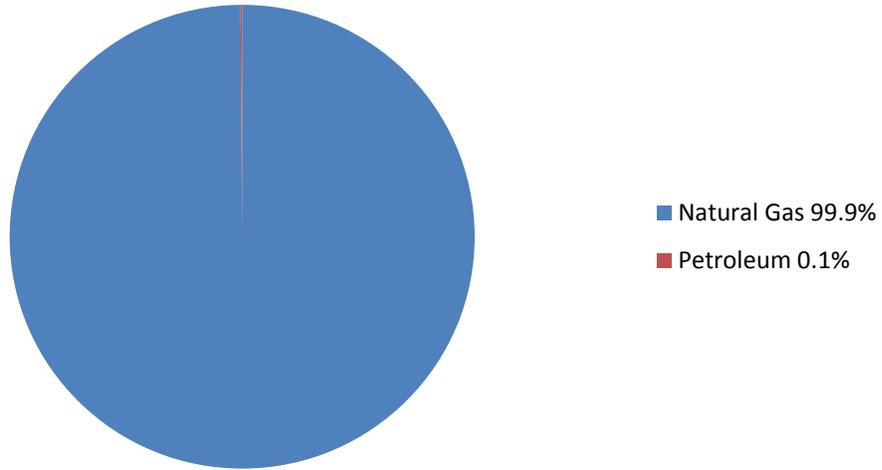
Generation Tables

	Fuel Consumption, MMBTUs	Percent of Total		Net Electric Power Generated, MWh	Percent of Total	
Non-renewable sources						
Coal						
Natural Gas	481,008	99.9%	99.9%	40,871	99.9%	99.9%
Petroleum	547	0.1%	0.1%	44	0.1%	0.1%
Nuclear						
Other						
Non-renewable total	481,555	100.0%	100.0%	40,915	100.0%	100.0%
Renewable sources						
Biomass						
Hydroelectric						
Landfill Gas						
Solar						
Waste Fuels						
Wind						
Wood						
Renewable total						
Grand total	481,555		100.0%	40,915		100.0%

Fuel Type	Physical Units	Number of Units
Natural Gas	MCf	467,900
Distillate Fuel Oil	Barrels	94



Net Generation by Fuel Type, 2011 for Holden





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Power Plant Nameplate information for Holden

Plant Name	County Location	Generator	Generator Type	Generator Status	Nameplate Capacity (MW)
<i>Holden</i>		<i>All Operating Generators</i>			<i>1,096.8</i>
Holden	Johnson	11	Combustion (Gas) Turbine (includes jet engine design)	Standby / Backup	365.6
Holden	Johnson	12	Combustion (Gas) Turbine (includes jet engine design)	Standby / Backup	365.6
Holden	Johnson	13	Combustion (Gas) Turbine (includes jet engine design)	Standby / Backup	365.6



Emissions from Electricity Generated in 2011: Holden

	CO2 Equivalent (TONS)	Carbon Dioxide (CO2) (TONS)	Methane (CH4) (TONS)	Nitrogen Dioxide (NO2) (TONS)
Holden	223,512	112,626	2,128	214

	Sulfur Dioxide (SO2) (TONS)	Annual Nitrogen Oxide (NOx) (TONS)	Summer Nitrogen Oxide (NOx) (TONS)
Holden	0	0.0000	0.0000

Identified Flue Gas Desulfurization (FGD) controls installed on Holden power plant

Plant	Control Equipment	Sorbent Type
	No FGD Controls Installed	

Identified Flue Gas Particulate (FGP) controls installed on Holden power plant

Plant	Control Equipment
	No FGP Controls Installed



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Notes:

Generation, emissions and pollution control data include power plants owned by the utility and located in Missouri.

Emissions data calculated by Missouri Department of Natural Resources, Division of Energy, from EIA Fuel Consumption Data

Fuel Consumption and Generation Data from United States Energy Information Administration, Form 923, United States Department of Energy
<http://www.eia.gov/electricity/data/eia923>

Pollution control data (FGD and FGP equipment) from United States Energy Information Administration, Form 860, United States Department of Energy
<http://www.eia.gov/electricity/data/eia860/index.html>

Emissions factors for fuel-based generation from United States Environmental Protection Agency "Emission Factors for Greenhouse Gas Inventories", November 7, 2011,
<http://www.epa.gov/climateleadership/documents/emission-factors.pdf>