



Associated Electric Cooperative, Inc.  
Power Plant Name: Holden  
Electric Generation and Emissions in 2010

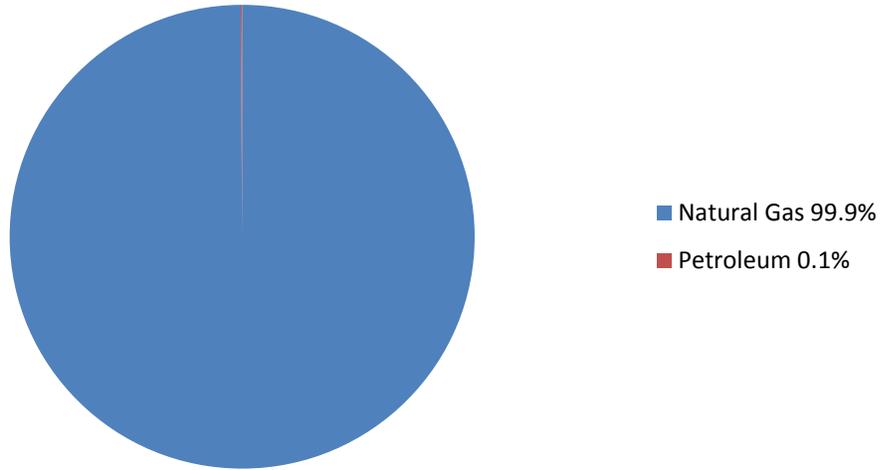
Generation Tables

	Fuel Consumption, MMBTUs	Percent of Total		Net Electric Power Generated, MWh	Percent of Total	
<b>Non-renewable sources</b>						
Coal						
Natural Gas	663,931	99.9%	99.9%	53,010	99.9%	99.9%
Petroleum	612	0.1%	0.1%	47	0.1%	0.1%
Nuclear						
Other						
<b>Non-renewable total</b>	<b>664,543</b>	<b>100.0%</b>	<b>100.0%</b>	<b>53,057</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Renewable sources</b>						
Biomass						
Hydroelectric						
Landfill Gas						
Solar						
Waste Fuels						
Wind						
Wood						
<b>Renewable total</b>						
<b>Grand total</b>	<b>664,543</b>		<b>100.0%</b>	<b>53,057</b>		<b>100.0%</b>

Fuel Type	Physical Units	Number of Units
Natural Gas	MCf	658,760
Distillate Fuel Oil	Barrels	105



### Net Generation by Fuel Type, 2010 for Holden





Missouri  
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Power Plant Nameplate information for Holden

<b>Plant Name</b>	<b>County Location</b>	<b>Generator</b>	<b>Generator Type</b>	<b>Generator Status</b>	<b>Nameplate Capacity (MW)</b>
<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 2010: Holden

	<b>CO2 Equivalent (TONS)</b>	<b>Carbon Dioxide (CO2) (TONS)</b>	<b>Methane (CH4) (TONS)</b>	<b>Nitrogen Dioxide (NO2) (TONS)</b>
Holden	308,308	155,410	2,936	294

	<b>Sulfur Dioxide (SO2) (TONS)</b>	<b>Annual Nitrogen Oxide (NOx) (TONS)</b>	<b>Summer Nitrogen Oxide (NOx) (TONS)</b>
Holden	0	0.0000	0.0000

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

<b>Plant</b>	<b>Control Equipment</b>	<b>Sorbent Type</b>
	No FGD Controls Installed	

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

<b>Plant</b>	<b>Control Equipment</b>
	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>