



KCP&L Greater Missouri Operations Company
Power Plant Name: Sibley
Electric Generation and Emissions in 2011

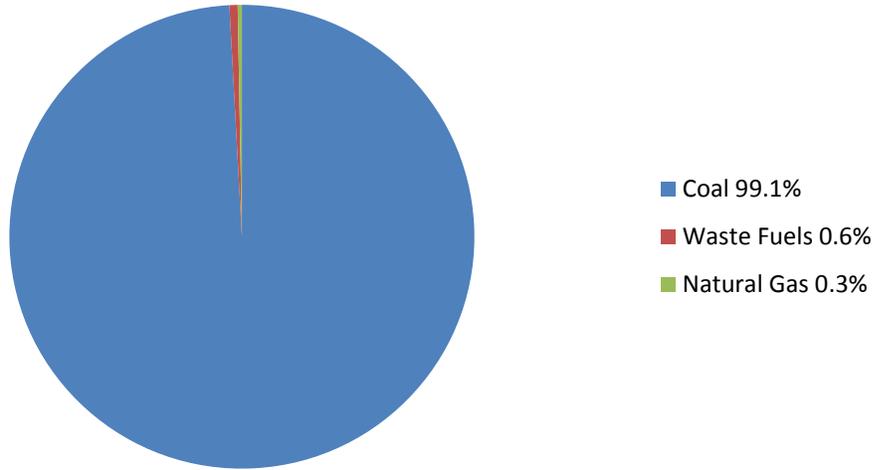
Generation Tables

	Fuel Consumption, MMBTUs	Percent of Total		Net Electric Power Generated, MWh	Percent of Total	
Non-renewable sources						
Coal	25,172,752	99.7%	99.1%	2,361,063	99.7%	99.1%
Natural Gas	73,653	0.3%	0.3%	6,859	0.3%	0.3%
Petroleum						
Nuclear						
Other						
Non-renewable total	25,246,405	100.0%	99.4%	2,367,923	100.0%	99.4%
Renewable sources						
Biomass						
Hydroelectric						
Landfill Gas						
Solar						
Waste Fuels	143,347	100.0%	0.6%	13,575	100.0%	0.6%
Wind						
Wood						
Renewable total	143,347	100.0%	0.6%	13,575	100.0%	0.6%
Grand total	25,389,752		100.0%	2,381,498		100.0%

Fuel Type	Physical Units	Number of Units
Anthracite Coal and Bituminous Coal	Short Tons	151,599
Sub-bituminous Coal	Short Tons	1,232,015
Gaseous Propane	MCf	29,460
Tire-derived Fuels	Short Tons	4,943



Net Generation by Fuel Type, 2011 for Sibley





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Power Plant Nameplate information for Sibley

Plant Name	County Location	Generator	Generator Type	Generator Status	Nameplate Capacity (MW)
<i>Sibley</i>		<i>All Operating Generators</i>			<i>2,096.0</i>
Sibley	Jackson	1	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)	Operating - in service	220.0
Sibley	Jackson	2	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)	Operating - in service	200.0
Sibley	Jackson	3	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)	Operating - in service	1,676.0



Emissions from Electricity Generated in 2011: Sibley

	CO2 Equivalent (TONS)	Carbon Dioxide (CO2) (TONS)	Methane (CH4) (TONS)	Nitrogen Dioxide (NO2) (TONS)
Sibley	92,748,177	10,798,594	1,241,153	180,275

	Sulfur Dioxide (SO2) (TONS)	Annual Nitrogen Oxide (NOx) (TONS)	Summer Nitrogen Oxide (NOx) (TONS)
Sibley	30,389	0.0144	0.0140

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

Plant	Control Equipment	Sorbent Type
	No FGD Controls Installed	

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

Plant	Control Equipment
Sibley	Electrostatic precipitator, cold side, without flue gas conditioning



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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>