



**Empire District Electric Company
Power Plant Name: Asbury
Electric Generation and Emissions in 2011**

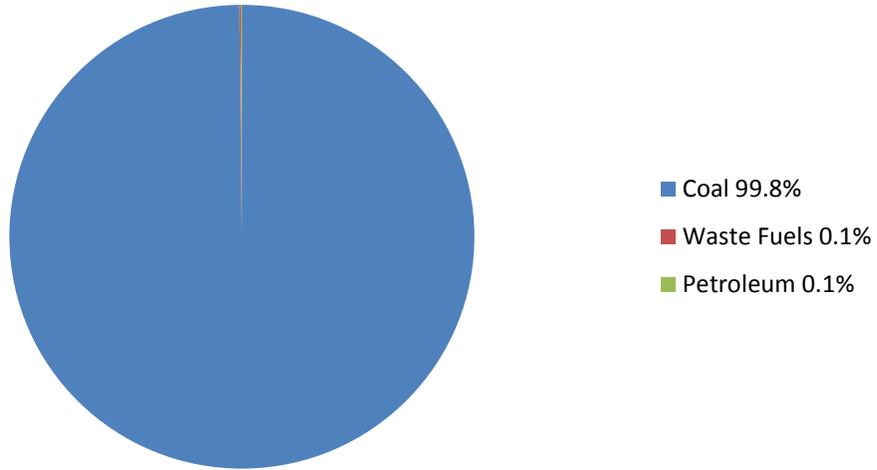
Generation Tables

	Fuel Consumption, MMBTUs	Percent of Total		Net Electric Power Generated, MWh	Percent of Total	
Non-renewable sources						
Coal	13,081,770	99.9%	99.8%	1,169,417	99.9%	99.8%
Natural Gas						
Petroleum	10,265	0.1%	0.1%	893	0.1%	0.1%
Nuclear						
Other						
Non-renewable total	13,092,035	100.0%	99.9%	1,170,311	100.0%	99.9%
Renewable sources						
Biomass						
Hydroelectric						
Landfill Gas						
Solar						
Waste Fuels	11,900	100.0%	0.1%	1,083	100.0%	0.1%
Wind						
Wood						
Renewable total	11,900	100.0%	0.1%	1,083	100.0%	0.1%
Grand total	13,103,935		100.0%	1,171,394		100.0%

Fuel Type	Physical Units	Number of Units
Anthracite Coal and Bituminous Coal	Short Tons	93,020
Sub-bituminous Coal	Short Tons	633,768
Distillate Fuel Oil	Barrels	1,753
Tire-derived Fuels	Short Tons	425



Net Generation by Fuel Type, 2011 for Asbury





Missouri
Department of
Natural Resources

Power Plant Nameplate information for Asbury

Plant Name	County Location	Generator	Generator Type	Generator Status	Nameplate Capacity (MW)
Asbury		<i>All Operating Generators</i>			926.0
Asbury	Jasper	1	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)	Operating - in service	851.2
Asbury	Jasper	2	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)	Operating - in service	74.8



Emissions from Electricity Generated in 2011: Asbury

	CO2 Equivalent (TONS)	Carbon Dioxide (CO2) (TONS)	Methane (CH4) (TONS)	Nitrogen Dioxide (NO2) (TONS)
Asbury	47,620,406	5,571,718	636,302	92,537

	Sulfur Dioxide (SO2) (TONS)	Annual Nitrogen Oxide (NOx) (TONS)	Summer Nitrogen Oxide (NOx) (TONS)
Asbury	21,930	0.0019	0.0016

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

Plant	Control Equipment	Sorbent Type
Asbury	Circulating Dry Scrubber	Lime

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

Plant	Control Equipment
Asbury	Baghouse, pulse
Asbury	Electrostatic precipitator, cold side, without flue gas conditioning



Missouri
Department of
Natural Resources

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>