



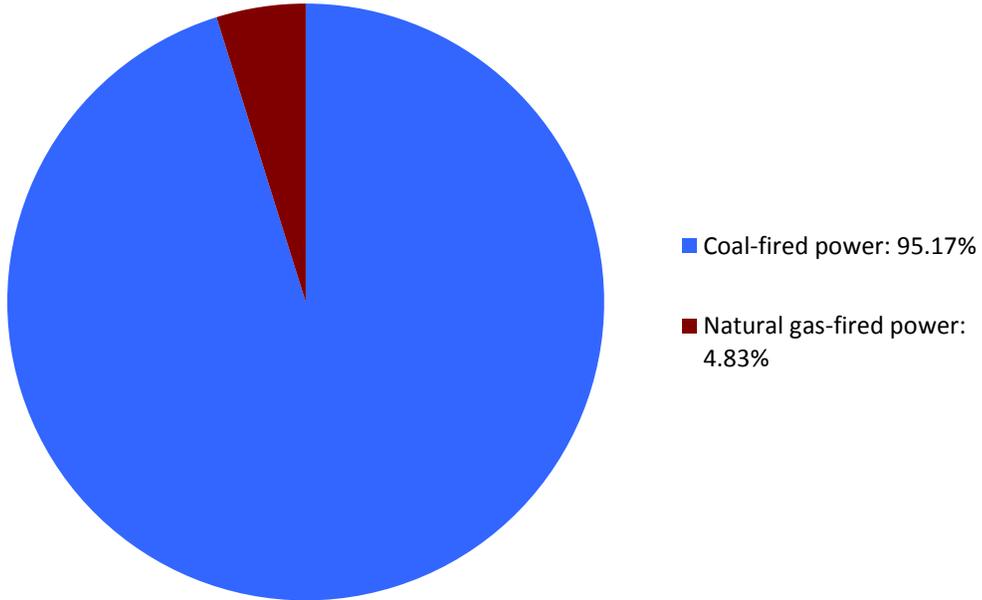
Power Plant: Hawthorn
Plant Owner: Kansas City Power & Light Company
Power generated in 2009 from non-renewable and renewable sources

	Fuel Consumption, MMBTUs	Percent of Total		Net Electric Power Generated in 2009 (MWh)	Percent of Total	
Non-renewable sources						
Coal-fired power	40,906,028	95.61%		3,973,097	95.17%	
Natural gas-fired power	1,879,258	4.39%		201,839	4.83%	
Oil-fired power						
Nuclear power						
Other non-renewable power						
Non-renewable total	42,785,286	100.00%	100.00%	4,174,936	100.00%	100.00%
Renewable sources						
Hydroelectric Power						
Wind						
Waste and biomass						
Solar						
Geothermal						
Landfill Gas						
Renewable total	0	0.00%	0.00%	0	0.00%	0.00%
Grand total all sources	42,785,286		100.00%	4,174,936		100.00%

Fuel Type	Physical Units	Number of Units
Sub-Bituminous Coal	Short Tons	2,442,255
Natural Gas	Mcf	1,879,258



Net Generation by Fuel Type, 2009 for Hawthorn





Hawthorn
Emissions from Electricity Generated in 2009

Plant	Carbon Dioxide(CO2) (Tons)	Carbon Monoxide(CO) (Tons)	Ammonia (NH3) (Tons)	Nitrogen Oxides (NOx) (Tons)	Sulfur Dioxides (SO2) (Tons)
Hawthorn	4,563,538.12	2,779.61	4.01	1,589.80	2,016.53

Plant	Volatile Organic Compounds (VOC) (Tons)	Course Particulate Matter (PM10) (Tons)	Fine Particulate Matter (PM2.5) (Tons)	Mercury (Hg) (LBS)
Hawthorn	7.64	360.66	94.31	153.44

'NV' = Emissions value not available.



Pollution controls installed on Hawthorn

SO2 Controls			
Plant	Control Equipment	Sorbent Type	Operational Efficiency
Hawthorn	Spray dryer type	Lime and alkaline fly ash	94.00%

NOX Controls				
Plant	Device Type	Description	Capture Efficiency	Control Efficiency
Hawthorn	CATALYTIC REDUCTION	SELECTIVE CATALYTIC REDUCTION	100.00%	80.00%
Hawthorn	LOW NOX BURNERS	LOW NOX BURNER	100.00%	60.00%
Hawthorn	CATALYTIC REDUCTION	SELECTIVE CATALYTIC BURNER	100.00%	90.00%

Data Sources

- Emissions Data: Missouri Department of Natural Resources, Air Pollution Control Program, Missouri Emissions Inventory System (MOEIS)
<http://www.dnr.mo.gov/env/apcp/moeis/emissionsreporting.htm>
- CO2 Emissions calculated by Missouri Department of Natural Resources, Division of Energy, from EIA Fuel Consumption Data
- Fuel Consumption and Generation Data: United States Energy Information Administration, Form 923, United States Department of Energy
http://www.eia.gov/cneaf/electricity/page/eia906_920.html