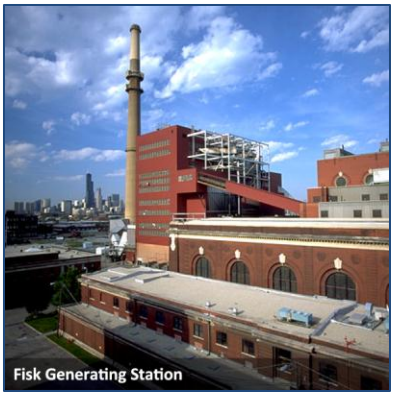
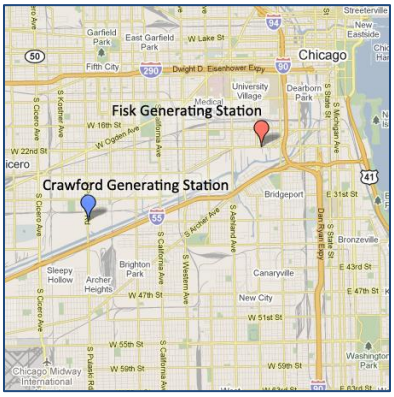
Midwest Generation Fisk and Crawford Power Plants

The Fisk and Crawford electric generating stations are located in Pilsen and Little Village, two largely Hispanic neighborhoods on the south side of Chicago. Midwest Generation (a subsidiary of Edison International) purchased the facilities from Commonwealth Edison in 1999.





Fisk Generating Station

The Fisk power plant is the oldest central station generating facility in the United States. It has operated continuously since 1903. Fisk Unit 19 started operating in 1959 and has a nameplate capacity of 325 MW. Reported 2010 emissions for Fisk Unit 19 are 4,199 tpy SO2 and 1,056 tpy NOx. The unit has an electrostatic precipitator, low-NOx burners and a tangential firing system, but no sulfur oxide controls. Between 1992 and 2002, various physical changes or changes in the method of operation were made at the Fisk generating station. These include:

Unit 19 1992 Project ($4.0 million)

- Installed economizer headers
- Replaced heat exchanger high pressure feedwater heater
- Installed new instrument and control microprocessor based boiler controls

Unit 19 1996 Project ($31.7 million)

- Replaced economizer header
- Replaced reheat boiler tubes and reheat pendant tubes
- Replaced complete panel section of waterwall boiler and replaced tube panels on superheat and reheat sections
- Installed new miscellaneous instrument and control panels to reduce equivalent forced outage rates
- Replaced burner tilt linkage and added structure support

Unit 19 2002 Project ($2.5 million)

- Replaced secondary superheater tubes and outlet header

Crawford Generating Station

The Crawford power plant began operations in 1924.

Unit 7 began operating in 1958, with a nameplate capacity of 219 MW. Reported 2010 emissions for Crawford Unit 7 were 2,683 tons per year of SO2 and 622 tpy of NOx. Unit 7 has an electrostatic precipitator to control particulate matter emissions, low-NOx burners and a tangential firing system (which acts like over-fire air to optimize NOx reduction), but no controls for sulfur oxides.

Unit 8 was built in 1961. It has a nameplate capacity of 325 MW. Reported 2010 emissions for Crawford Unit 8 were 3,804 tpy of SO2 and 953 tpy of NOx. The unit has an electrostatic precipitator, low-NOx burners and a tangential firing system, but no controls for sulfur oxides.

Between 1997 and 2003, various physical changes or changes in the method of operation were made at the Crawford generating station. These changes include:

Unit 7 1999 Project ($1.8 million)

- Replaced boiler corner tube panels and superheat furnace on secondary superheater boiler tubes
- Replaced boiler tube panels on reheat furnace and upper tubes

Unit 7 2003 Project ($5.7 million)

- Replaced upper two bundles of the low temperature superheater in the superheat and reheat furnaces
- Replaced selected lower coolant tubes in the superheat and reheat furnaces

Unit 8 1997 Project ($1.3 million)

- Replaced waterwall tubes

US EPA CAA Enforcement Action

EPA issued a notice of violation and finding of violation to Midwest Generation in July 2007. The NOV/FOV alleged violations of opacity and PM limits, permit conditions, prevention of significant deterioration of air quality and the federally-approved Illinois state implementation plan. The Department of Justice filed a complaint against Midwest Generation in August 2009 on behalf of EPA. Illinois is a co-plaintiff and several public interest and environmental groups have intervened. The federal court has twice dismissed all but one of the PSD claims. EPA is evaluating its options to appeal the nine dismissed claims. EPA and Midwest Generation are currently in discovery regarding the opacity claims.

Mercury Emissions

In 2008, Fisk and Crawford installed activated carbon injection technology, which significantly reduced mercury emissions.

Thermal Discharges

Thermal discharges from Fisk and Crawford enter the Chicago Area Waterway System. Midwest Generation opposes proposed rules (which have been pending before the Illinois Pollution Control Board since 2007) that would establish water quality/temperature standards to protect aquatic life in this waterway. In January 2010, US EPA submitted comments to Illinois EPA raising questions about the adequacy of the proposed temperature standards.