# Preservation Chicago Unveils the 2014 Chicago 7 Most Threatened...

# **Crawford and Fisk Power Stations**

3501 S. Pulaski Road. and 1111 W. Cermak Road



#### **OVERVIEW:**

The two enormous Fisk and Crawford electrical-generating coal-fired stations or power plants date from 1903 and 1926 and were originally considered engineering wonders of the modern world. Both plants are by noted architects and both achieved the previously impossible task of employing technology to create the world's largest electrical generators, based entirely upon the steam engine turbine. These systems redeveloped and refined the mammoth production of electricity to a growing city and region at a magnitude not seen at that time. The success of these two facilities were copied and replicated around the world. Yet this all began in Chicago.

#### **HISTORY:**

The Fisk Plant, designed by architects Shepley, Rutan and Coolidge, the successor firm to H.H. Richardson and the architects of the Chicago Cultural Center, (originally the Chicago Public Library-a designated Chicago Landmark) in 1903, and built by Commonwealth Edison and industrialist, Samuel Insull, president of the corporation, pushed the limits on what was possible during the early growth years of electricity and its use. Previously, the industry had relied on conventional reciprocating steam engines, which had reached their peak in development for power generation, providing a few hundred horsepower. However, in Switzerland, three new 3,000 kilowatt capacity steam turbine engines were being built

#### Crawford and Fisk Power Stations

Address: 3501 S. Pulaski Rd., 1111 W. Cermak Rd.

Neighborhoods: South Lawndale, Pilsen

Architect: Various

Date: 1903, 1926

Photo credits: All photos © Ward Miller

## **Chicago 7: Crawford and Fisk Power Stations**



and Insull traveled to Europe to investigate the feasibility of installing a similar turbine in the Edison system in Chicago. Edison vice president, Louis Ferguson and Fisk Station designer, Frederick Sargent later retraced Insull's findings in Europe and developed a 5,000 kilowatt system for Fisk. Under Insull's demands, General Electric was charged with developing and completing the task of building the turbines, amid much criticism as to if this could be done. Originally constructed to hold 14 total, 5,000kw units, for a capacity of 70,000kw, the turbogenerating technology advanced so that the first four units were soon replaced with 12,000kw units. The Fisk Station, among many firsts, was also the home of the world's largest transformer at the time, built by Westinghouse, it was installed in 1958, weighing 375,000-lbs. Fisk has also been responsible for many years for providing direct current-DC to the Chicago Transit Authorities substations and rapid transit service. Later additions to the Fisk Power House complex were designed by Daniel H. Burnham & Company and Shaw, Naess and Murphy. Several structures are "orange-rated" in the Chicago Historic Resources Survey. Fisk is situated on the South Branch of the Chicago River.

The Crawford Station, designed by architects Graham, Anderson, Probst and White, the successor firm to Daniel H. Burnham & Company, responsible for many large scale structures of their time, including Chicago's Union Station, Soldier Field, The Field Museum, The Merchandise Mart (once the world's largest building) to name several was a further improvement on the technologies of Fisk Plant, but on a much larger scale. It's 72-acre campus provided storage for over 300,000 tons of coal delivered by railcars on four different train lines and taking advantage of the Illinois Sanitary and Ship Canal for shipping and cooling water, providing over 750,000 kilowatts of capacity, a previously unheard capacity. Engineering magazine in July of 1925, noted that "Probably no power station ever built has commanded greater interest during the period of its construction that has Crawford Avenue Station in Chicago" and makes many references to the world power conference in London, England and the interest in Chicago's new power plant.

Both Fisk and Crawford combine a variety of fine quality and utilitarian structures, literally, a small city of buildings, constructed to provide electricity to the City of Chicago and the region for more than 110 years for Fisk and more than 85 years for Crawford.

## **Chicago 7: Crawford and Fisk Power Stations**



Both power plants employ the use of red-brick and stonework masonry and Modern Gothic forms and renaissance-revival detailing, an eclectic mix of historic styles, resulting in what has been termed—"Industrial Gothic." Turbine Hall at the Crawford Plant, fronting Pulaski Road is a stately massive red-brick building, resembling the front façade of church or religious structure with large flanking towers, stepping upward and a mammoth three-story-arched window opening, divided with slender brick piers--being the focal point of the complex and being considered both an Engineering and Architectural Landmark.

#### THREAT:

Both structures are now closed-down, yet a portion of the power grid is still used to transmit electricity from the site. While public meetings have been convened, with support of preservation of the buildings applauded by the communities, the talks have ceased and further discussions have not been public.

Preservation Chicago is not opposed to a redevelopment plan for the two sites, but would like to see a re-use of the historic structures incorporate some of the existing equipment to tell a story of Chicago's place on the world stage in the history of electricity and the production process. These two sites, situated on the Chicago River and on the Chicago and Sanitary and Ship Canal could both provide access to the waterways, recreation and park facilities on these sites and adjacent nearby spaces. We feel that these two facilities could be an interactive facility for the people of the region and visitors, attracting many tourists to these sites if developed properly.