

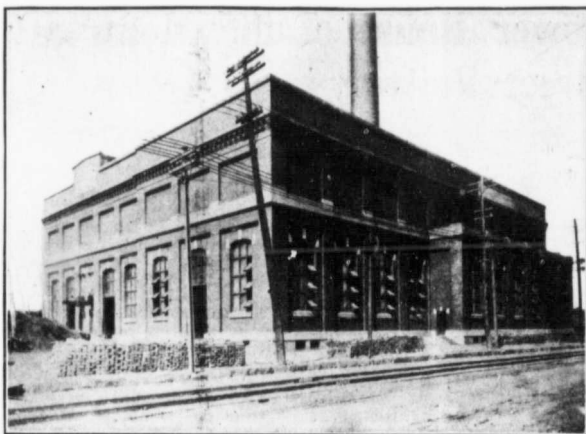


FIG. 2.—Hochelaga Power House taken from Notre Dame St.

ing floor. At present ten boilers are installed. The economizers are located directly over each row of boilers, with the main smoke flues behind each row of economizers.

The scrapers of the economizers are driven by two engines located on the economizer floor.

The concrete coal bunker, of 1,500 tons capacity, is directly over the firing floor.

The chimney is located at the east end of the boiler room.

COAL HANDLING APPARATUS.

A switch extending along the west side of the station contains a 100-ton track scale, and all the cars are weighed before and after being unloaded. The cars discharge into a hopper beneath the track. After passing through a steam-driven crusher, the coal is carried by a motor-driven bucket conveyor to the top of the boiler house structure and there automatically discharged to any part of the coal bunker, as may be desired. The conveyor has a capacity of 40 tons per hour. At the present time it is not intended to utilize the full capacity of the coal bunker for coal storage. Additional storage space is provided on the ground directly west of the power station. It is expected that arrangements can later be made so that coal may be conveyed from the coal pockets of the Dominion Coal Co. (situated on the wharf directly south of the power station) by means of an overhead or underground conveyor.

ASH HANDLING PLANT.

Small side dump cars, operating on tracks in the boiler room basement underneath the ash hoppers convey the contents of these hoppers to the west end of the building, where they discharge into a hopper directly over the coal conveyor, which hoists the ashes to the ash bunker adjacent to the coal bunker. The ashes are discharged by gravity from the bunker directly into electric cars on the coal switch.

BOILERS.

The boilers are of the Babcock and Wilcox water tube type, and are fitted with bent tube superheaters designed for 150 degrees superheat. They are

constructed for 150 pounds pressure. Each of the ten boilers installed is rated at 535 h.p. and has 5,346 square

feet of heating surface and a normal evaporation of 16,000 pounds of water per hour. The superheated steam is delivered to the engines from three steam drums, one over each of the batteries next to the engine room. The boilers on the opposite side of the boiler room feed into these drums. From a separate connection on the boilers the auxiliaries are supplied with saturated steam.

Each boiler is fitted with Babcock and Wilcox chain grate mechanical stokers. Two stoker engines are located in the boiler room basement, each capable of operating all the stokers. Coal is fed to the furnaces through down spouts extending from the overhead bunkers.

ENGINES.

Each generator is driven by a direct connected vertical cross-compound, side crank, McIntosh and Seymour engine, operating at 100 r.p.m. The cylinders are four-ported and provided with valves of the flat gridiron type and are fitted at each end with automatic combination relief valves and drip cocks. The main valves, both admission and exhaust, are driven by a fixed eccentric, and the cut-off valves are controlled by the centrifugal governor on the main shaft of the

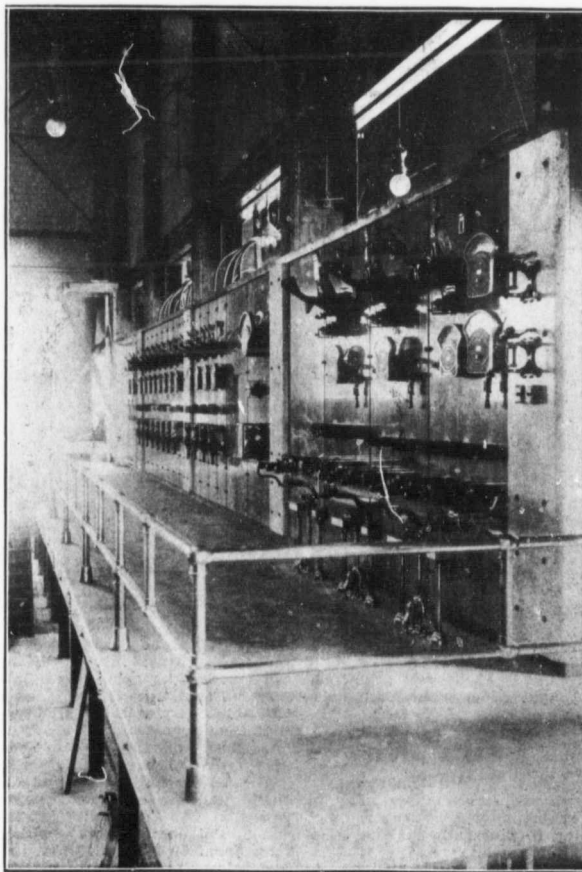


FIG. 3.—The Switchboard.