

## TORONTO POWERHOUSE

Although the power generating potential of Niagara Falls had long been recognized, the development of electrical power stations along the Niagara River began in earnest in the early 1900's. A group of Canadian investors, William Mackenzie, Sir Henry M. Pellatt and Frederick Nicholls, founded the Electrical Development Company and made an agreement with the Niagara Parks Commission on January 29, 1903 to generate a maximum of 125,000 horsepower of electricity. The Electric Development Company Powerhouse was built 6/10ths of a mile above the Horseshoe Falls, midway between the Ontario Power Company screenhouse at Dufferin Islands and the Canadian Niagara Powerhouse. The Italian Renaissance-style building was constructed of Indiana limestone and measured 462' by 91'. The plant was situated on an area which was reclaimed from the Tempest and Whitehorse rapids, some of the most turbulent water in the Upper Niagara River, ranging in depth from 8 to 24 feet. Water was diverted from the river at Tempest Point and gathered from the rapids by a wing dam with a length of 785' and a maximum height of 27'. The total capacity of the plant was 137,500 hp, produced by eleven generators of 12,500 hp each, one being a spare.

The cornerstone of the plant was laid in 1906, and the plant first produced electricity on November 21 of that year. Half of the total project was completed by 1907, but further development was delayed until 1911. In March, 1908, the plant was leased by the Toronto Power Company and became known as the Toronto Powerhouse. Construction of the plant was finally completed in 1913. In November, 1922, the plant was purchased by the provincially-owned Hydro Electric Power Commission of Ontario, present day Ontario Hydro. The Toronto Powerhouse produced 25Hz (25cycles/minute) electricity, which is now used for a very limited number of applications. Thus, because the water could be used more efficiently by the Sir Adam Beck Generating Stations at Queenston, Ontario Hydro ceased operations at the Toronto Powerhouse in 1974. For a while in 1982, it was operated by the Sir Sanford Fleming Foundation as a museum, called the Engineerium, which celebrated the development of hydraulic water power. At the request of this foundation, the building once again reverted to the name of the Electric Development Company Powerhouse.

