

At the Beauharnois plant on the St. Lawrence River, dredging operations in the intake canal were continued and an interconnection with the system of the Gatineau Power Company was also completed by a 110 kv. line from Cedars to Lachute. In the more northern region, a 146 mile 161 kv. line between St. Felicien and the Chibougamau mining district was nearing completion.

The Shawinigan Water and Power Company has preliminary work under way for installation during 1955 of an additional unit of 44,500 h.p. at Rapide Blanc, one of 65,000 h.p. at La Trenché, and one of 49,000 h.p. at the La Tuque generating station. During 1954 the Company extended its transmission system by 75 miles of 60 kv. line and had under construction 80 miles of 220 kv. line.

The Gatineau Power Company has under installation for 1955 operation a new unit of 47,000 h.p. at Pagan Falls which will operate at 60 cycles, representing the anticipated eventual change from 25 cycle operation in the Gatineau River plants.

The Northern Quebec Power Company Limited is installing an additional unit of 35,000 h.p. at their Quinze plant on the upper Ottawa River for operation late in 1955.

The Gulf Power Company's plant on the Ste. Marguerite River of two units each of 12,000 h.p. was completed in May 1954 and power at 44 kv. is being delivered to Seven Islands and to Clarke City.

The Quebec Rural Electrification Bureau completed the construction of its hydro-electric plant on the Petites Bergeronnes River at Lac des Sables comprising two units, each of 600 h.p. The City of Megantic placed in service in May the first unit of 2,250 h.p. in its Gayhurst plant on the Chaudière River and operation of the second unit and completion of the development is expected in December.

Ontario.—The Hydro-Electric Power Commission of Ontario continued the rapid expansion of generating capacity during 1954 on several major projects.

In the Sir Adam Beck-Niagara Generating Station No. 2 on the Niagara River, seven units of 105,000 h.p. each were brought into operation and completion of the 12 unit plant of 1,260,000 h.p. was scheduled for 1955. One of the large hydraulic tunnels was placed in service in June and the second in October, the major part of the huge project being completed during 1954. Supplementary to the capacity of the main powerhouse, construction was undertaken on a pumped storage reservoir, comprised of a rock-fill dyke with impervious clay core, to provide 15,000 acre-feet of storage at a location adjacent to the intake canal. Six reversible pump-turbine units each of 40,000 h.p. are to be installed for initial operation in 1956.

The Commission began construction of the control dam which forms part of the Niagara River remedial works. These are designed to control water levels and enhance the beauty of Niagara Falls and are being carried out jointly by Canada and the United States. In final form, the control dam, with an over-all length of 1,550 ft., will comprise 13 individually operated bascule-type gates mounted on concrete piers. The dam is located on the Canadian side of the river a short distance upstream from the head of the Cascades. Two gates, comprising the first stage of construction, were scheduled for operation in April 1955.

At the Pine Portage generating station on the Nipigon River, two additional units, each of 45,000 h.p., were placed in service, bringing the total installation to 172,000 h.p.

At Manitou Falls on the English River preliminary construction was begun on a development initially of 55,500 h.p. in three units for operation in 1956 and with provision for a fourth unit of 18,500 h.p. Progress was made in the clearing of flood lands and in the construction of cofferdams.

As the participating Canadian agency in the development of the International Rapids on the St. Lawrence River the Commission began preliminary construction in the power house area, comprising two cofferdams and two access tunnels under the present navigation canal. The project involves a main dam and powerhouse between Barnhart Island and the Canadian shore, and two control dams, one on the United States channel of Barnhart