

virtually completed as well as the laying of about 40 miles of double railway track. Channel excavation in the vicinity of Chimney Island and Galop Island was under way and excavation for the canal at Iroquois Point started. The Canadian portion of the powerhouse will contain 16 units totalling 1,200,000 h.p. capacity; the first units will be in operation in 1958 and the project completed in 1960.

Progress was made by the Commission on the construction of new hydro-electric plants in northwestern Ontario to meet growing demand for power by mining and pulp and paper companies. On the English River at Manitou Falls, the installation of four 18,500-h.p. units was completed in 1956, with provision for a fifth unit in 1958. On the Winnipeg River at Whitedog Falls, construction was begun in 1955 for the development of 81,000 h.p. scheduled for completion in 1958. At Caribou Falls, located on the English River near its junction with the Winnipeg River, construction began in 1956 on three units totalling 102,000 h.p. to be completed in 1958. A 19,000-h.p. unit will be added to the Alexander Falls plant on the Nipigon River and one of 25,000 h.p. at Cameron Falls. To increase the output of stations on the English River, and incidentally those on the Winnipeg River in Manitoba, the Commission is completing a scheme of diverting water from the Albany River at Lake St. Joseph via the Root River into Lac Seul. This work is being planned in close liaison with the Manitoba Hydro-Electric Board.

In addition to hydro-electric development, the Commission, with the co-operation of Atomic Energy of Canada Limited and Canadian General Electric Company Limited, is proceeding with the construction of a 20,000-kw. nuclear-power experimental plant for operation in 1959 at a site near its Des Joachims generating station on the Ottawa River. At its Richard L. Hearn steam plant in Toronto, the addition of a 200,000-kw. unit has been authorized for operation in 1958 with three similar units to be added in 1959, 1960 and 1961, respectively, to raise the total capacity to 1,200,000 kw.

Extensions to the Commission's transmission facilities in 1955 and 1956 included 58 circuit miles at 230 kv., 516 circuit miles at 115 kv., 204 circuit miles at 13-44 kv., and 1,954 circuit miles of rural distribution line.

Apart from activities of the Commission, the Ontario-Minnesota Pulp and Paper Company Limited modernized its Rainy River plant by dismantling one unit and increasing the capacity of each of the remaining eight units to 2,000 h.p. by runner replacement. This resulted in a capacity increase of 650 h.p. The Great Lakes Power Company is installing in its Upper Falls plant on the Montreal River for operation in 1957 a new unit comprising a 30,000-h.p. turbine driving a 25,000-kv. generator. The dam for this development was raised by 33 feet and the resulting increase in head increased the combined capacity of the two existing units from 23,400 h.p. to 25,300 h.p. Construction of a new plant on the Montreal River at Centre Falls is expected to be under way in 1957 with one 28,000-h.p. unit scheduled for completion in 1958. The Gananogue Electric Light and Water Supply Company is installing in its Jones Falls plant on the Rideau River an additional 1,500-h.p. unit to be completed in 1957.

**Prairie Provinces.**—In *Manitoba* during 1955, the Manitoba Hydro-Electric Board installed the last four units of 10,000 h.p. each in its McArthur Falls plant on the Winnipeg River bringing to completion the development of the resources of that river. On the Saskatchewan River near Lake Winnipeg, preliminary surveys and ground tests for the Grand Rapids project were completed in 1955 for the development of up to 460,000 h.p. at peak load. However, further investigations at this site have been tentatively discontinued in favour of the proposed Grand Rapids development on the Nelson River where construction is expected to begin in 1957 on four or five 37,500-h.p. units, with provision for additional units when required. Sherritt Gordon Mines, Limited is constructing, for operation in 1957, a second unit of 7,000 h.p. on the Laurie River.

In addition to hydro-electric activities, the Manitoba Hydro-Electric Board continued with the construction of a steam generating station at Brandon where four 30,000-kw. generators will be installed, two for operation in 1957 and two in 1958. The Board also plans to construct a steam plant at East Selkirk with an initial installation of two 66,000-kw. units; completion is scheduled for late 1959.