

Mississagi River; a second and final unit is scheduled for service early in 1961. Operation of the plant is controlled from the George W. Rayner station, located 15 miles upstream. Construction progressed rapidly at the Otter Rapids development on the Abitibi River, where two 60,000-hp. units are expected to be installed in the autumn of 1961 and two others in 1963, with provision for four additional units at a later stage. Early in 1960, the Commission announced plans to proceed with construction of three generating stations on the Mattagami River. The first of these, Little Long Generating Station, will consist of two 84,000-hp. units, with provision made for the later addition of two similar units. Initial operation is tentatively scheduled for 1963. At the second, Harmon Generating Station, the initial installation of three 63,000-hp. units is planned for 1965, with provision for the later addition of three units. The third, Kipling Generating Station, will have three 63,000-hp. units in service in 1966, and provision for an ultimate addition of four more units. These three stations, in common with the Otter Rapids Generating Station, will be controlled from the Pinard Transformer Station to be built near the Abitibi River at a point some 23 miles upstream from Otter Rapids.

The Commission proposes to co-ordinate the development of these hydraulic resources with the construction of thermal-electric generating facilities in areas of concentrated load. The plan is to channel the output of a number of the hydraulic developments to a terminal station in the north and thence to load centres in southern parts of the province by means of extra-high-voltage transmission lines, using voltages more than double those at present employed by the Commission. With this purpose in mind, the Commission is conducting tests on an experimental high-voltage line in the vicinity of Coldwater, where conditions associated with the transmission of power at voltages from 400 to 600 kv. are being simulated.

The construction of thermal-electric stations in Ontario was energetically continued. At the Richard L. Hearn Generating Station in Toronto, the Commission installed two steam turbines of 200,000 kw. each. With the placing in service of the final 200,000-kw. unit in 1961, the ultimate installed capacity of 1,200,000 kw. will have been reached. Construction was well advanced on the Lakeview Generating Station near Toronto. One 300,000-kw. unit is scheduled for service in 1961, and three other similar units by 1964. The site of this station is planned to permit a total installation of 1,800,000 kw. At Fort William, construction continued on a steam turbine plant to consist of one 100,000-kw. unit, planned for operation in the latter part of 1961. The site will permit the installation of additional units, if required, to an ultimate capacity of 1,000,000 kw.

The Commission, in conjunction with Atomic Energy of Canada Limited and the Canadian General Electric Company Limited, had under construction, for completion in 1961, a 26,800-hp. Nuclear Power Demonstration Plant near Des Joachims Generating Station on the Ontario side of the Ottawa River. In addition, the Commission entered into an agreement with Atomic Energy of Canada Limited covering participation by both organizations in the development of a 268,000-hp. nuclear-electric generating station, to be located at Douglas Point on Lake Huron, between Kincardine and Port Elgin. Construction work on this project was started, the completion date being planned for 1964 or early in 1965. According to the terms of the agreement, when the Douglas Point station has been demonstrated to be a satisfactory source of power, it will be purchased by the Commission at a price which will permit the production of energy at costs that are competitive with the costs of energy from modern coal-fired stations of similar size.

Prairie Provinces.—In Manitoba, the Manitoba Hydro-Electric Board completed the initial phase of its Kelsey Generating Station on the Nelson River at Grand Rapids with the installation of five units, each rated at 42,000 hp. Provision has been made for the addition of a sixth unit when required. Power from the Kelsey Station will be supplied to the mining project of The International Nickel Company in the Moak, Mystery, and Thompson Lakes area of northern Manitoba. The Board commenced construction of a hydro-electric development on the Saskatchewan River at Grand Rapids, on the west