

Magpie River near Magpie Village. The province's total reported installed capacity was increased by a further 60,000 hp. as a result of re-rating of existing equipment at the Aluminum Company of Canada Limited Shipshaw plant on the Saguenay River.

Construction of the Commission's Carillon development on the Ottawa River continued on schedule. Ultimate installed capacity at this site will be 840,000 hp. in 14 units of 60,000 hp. each. The first of these units is scheduled to be installed late in 1962 and the remaining units during the 1963-65 period. At the Commission's Rapid II development on the Ottawa River, plans have been completed for the addition of a 16,000-hp. unit, raising the capacity of the plant to its ultimate total of 64,000 hp. in four units.

First details of a major power plan for the Manicouagan region were announced by the Commission in 1960. This plan, which will involve the harnessing of the headwaters of the Manicouagan and Outardes Rivers, is expected to realize some 3,650,000 hp. at three sites on the Manicouagan River and an additional 1,440,000 hp. at two sites on the Outardes River. In addition, regulation from upstream reservoirs will permit the installation of up to 625,000 hp. of new capacity at existing plants on the two rivers. Construction was initiated in 1961 at one site on the Manicouagan River while work was scheduled to begin in 1962 at a second site. An important engineering feature in the over-all plan will be a buttressed, multi-arch, concrete dam 4,000 feet long and 650 feet high, one of the highest and most massive of its kind in the world. This structure will create a reservoir containing 115,000,000 acre-feet of water and covering 800 sq. miles.

The Shawinigan Water and Power Company commenced clearing operations at its Rapide des Coeurs site on the St. Maurice River where a power plant with an ultimate installed capacity of 210,000 hp. will be constructed. The first stage will be completed in 1965 with an initial installation of four 42,000-hp. units. The Company has also commenced construction of a 300,000-kw. thermal-electric generating station near Sorel on the south shore of the St. Lawrence River. This plant, scheduled to go into operation in 1964, will consist of two 150,000-kw. steam turbines.

Ontario.—During 1961, Ontario's thermal-electric capacity was increased by 500,000 kw. and its hydro-electric capacity by a net total of 144,950 hp. after allowing for the dismantling of a 1,550-hp. hydro-electric plant. Thus, for the second year, the amount of new hydro-electric capacity added in the province was exceeded by the amount of new thermal-electric capacity, a trend which will occur again in 1962.

The Hydro-Electric Power Commission of Ontario was the only power utility in the province to add new electrical capacity or to carry on construction of new generating facilities. The Commission was engaged in the construction or planning of five hydro-electric developments. One of these was the Red Rock Falls development on the Mississagi River where the second and final unit was added, raising the total capacity to 53,000 hp. At the Otter Rapids plant on the Abitibi River, two 60,000-hp. units were placed in service and construction was continued for the installation of two similar units in 1963. Provision has been made for the later installation of four additional units. The three remaining developments are located on the Mattagami River. At one of these, Little Long Generating Station, construction was well under way with two 84,000-hp. units scheduled for service in 1963. Headworks, complete with headgates, will be constructed for the eventual installation of two additional units. Construction of the two other developments, the Harmon and Kipling Generating Stations, had not started by the end of 1961. The three Mattagami River developments, in common with the Otter Rapids Generating Station, will be controlled from the Pinard Transformer Station which is being constructed some 23 miles upstream from Otter Rapids. The Commission proposes to co-ordinate the development of its northern hydraulic resources with the construction of thermal-electric generating facilities in areas of concentrated load. The output of a number of the hydraulic developments will be directed to a terminal station in the north and, from there, 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.