

comparable. As a rough guide, however, it may be assumed that the power equivalent of the flow at Q50 represents an approximate, if conservative, estimate of hydro generating capacity remaining to be installed in Canada.

Provincial and Territorial Distribution.—The provincial and territorial distribution of undeveloped water power resources and installed generating capacity, given in Table 2, reveals that substantial amounts of water power have been developed in all provinces except Prince Edward Island, where water power resources are meagre. As natural resource development proceeds, the fortunate incidence of water power in proximity to mineral, forest and other resources becomes increasingly apparent. There is little doubt that the existence of large amounts of potential hydro power on northern rivers will prove to be a factor of prime importance in the eventual realization of the natural wealth of Canada's Northland.

The water power resources of *Newfoundland*, determined on the basis of the limited available streamflow data, are estimated to be of very considerable magnitude. On the Island, although the length of the rivers is generally not great, topography and run-off are favourable for hydro-electric power development. Of the substantial capacity installed, a very large portion serves the pulp and paper industry. In Labrador, the Churchill River and its tributaries, now under development, constitute one of the largest potential sources of water power in Canada.

In *Prince Edward Island* there are no large streams and water power plants are limited in size to those used to operate small mills. The water power resources of *Nova Scotia* and *New Brunswick*, although small in comparison with those of other provinces, are a valuable source of energy and make a substantial contribution to the economies of the two provinces. Numerous rivers in both provinces provide moderate-sized power sites either within economic transmission distance of the principal cities and towns or advantageously situated for use in development of the timber and mineral resources. These provinces are also favoured with abundant indigenous coal supplies.

Quebec is the richest of all the provinces in water power resources, possessing more than 40 p.c. of the total recorded for Canada. Quebec also leads in developed water power, its present installation of 10,746,000 kw. representing about 47 p.c. of the national total. The largest single hydro-electric installation in Canada is the Quebec Hydro-Electric Commission's 1,574,260-kw. Beauharnois development on the St. Lawrence River; also notable are the Commission's Bersimis I development on the Bersimis River having an installed capacity of 912,000 kw., and the Aluminum Company of Canada Limited's 742,500-kw. Chute des Passes plant on the Peribonca River. A major power project which represents a significant advance in the development of Quebec's hydro-electric resources is under construction. This project, involving the harnessing of the headwaters of the Manicouagan and Outardes Rivers, will permit the eventual installation of some 5,800,000 kw. on the two rivers. Power production in the province is facilitated by the regulation of streamflow by the provincial Department of Natural Resources through the storage dams which it owns and operates. In 1965, some of the responsibility for regulation was transferred to the Quebec Hydro-Electric Commission.

Almost all of the sizable water power potential in *Ontario* within easy reach of demand centres has been developed and planners are looking to the more remote sites as new sources of supply. Improvements in long-distance transmission techniques have brought many of these sites within the economic orbit of demand centres. Several sites are being developed and a number of others are under investigation. Most of the hydro-electric power produced in the province comes from the generators of The Hydro-Electric Power Commission of Ontario, Canada's largest power producing and distributing organization. Ontario's largest hydro-electric generating station is located on the Niagara River at Queenston, where the Sir Adam Beck-Niagara Generating Stations Nos. 1 and 2 and the