

world in total installed capacity, being exceeded only by the United States; in installation per thousand population, Canada is exceeded only by Norway. Canada is in approximately sixth place in potential power resources but those resources are, on the whole, more readily available to prospective markets than is the case in other countries that outrank Canada, an exception being the United States. In particular might be mentioned the enormous potential resources of the great river systems of Africa and Asia.

Subsection 1.—Available and Developed Water Powers in Canada

Table 1 gives a summary of the water-power resources of Canada and their development as at Dec. 31, 1951.

1.—Available and Developed Water Power, by Provinces, as at Dec. 31, 1951

Province or Territory	Available 24-Hour Power at 80 p.c. Efficiency		Turbine Installation h.p.
	At Ordinary Minimum Flow	At Ordinary Six-Months Flow	
	h.p.	h.p.	h.p.
Newfoundland.....	1,135,000	2,585,000	279,160
Prince Edward Island.....	500	3,000	2,299
Nova Scotia.....	25,500	156,000	150,960
New Brunswick.....	123,000	334,000	132,911
Quebec.....	10,898,000	20,219,000	6,755,351
Ontario.....	5,407,000	7,261,000	3,718,505
Manitoba.....	3,333,000	5,562,000	596,400
Saskatchewan.....	550,000	1,120,000	111,835
Alberta.....	508,000	1,258,000	207,825
British Columbia.....	7,023,000	10,998,000	1,358,808
Yukon and Northwest Territories.....	382,500	814,000	28,450
Canada	29,385,500	50,310,000	13,342,504

The figures given in the first and second columns of the above table represent 24-hour power and are based upon rapids, falls and power sites of which the actual drop, or the head of possible concentration, has been measured or at least carefully estimated. Under a 1951 revision following a review of stream-flow records, the estimates of potential power, particularly in the Province of Quebec, were appreciably increased, principally as a result of the use of higher run-off factors in computing or estimating available flows. The increase was also influenced by changed flow conditions on controlled rivers and to higher heads at new developments. However, tabulations of potential power in Canada are still not complete as many unrecorded rapids and falls of undetermined power capacity exist on rivers and streams throughout the country, particularly in the less-explored northern districts. Apart from cases where definite studies have been carried out and the results recorded, no consideration has been given to the power concentrations that are feasible on rivers and streams of gradual gradient, where economic heads possibly may be created by the construction of dams. Thus the figures in Table 1 of available power, under the two conditions of stream flow, represent only the *minimum* water-power possibilities of Canada.