

The availability of large amounts of low-cost hydro-electric energy has been an essential factor in the development of Canadian industry. Power from hydro-electric plants ranging in capacity from a few hundred horsepower to more than a million horsepower is carried via transmission line networks to urban centres and rural districts. The ability to transmit power over relatively long distances has facilitated the decentralization of industry and has enabled manufacturers to carry on operations in many of the smaller centres of population.

Table 3 indicates the respective amounts of water power developed by utilities and by industrial establishments. For the purposes of this tabulation, utilities are defined as companies, municipalities or individuals who sell most of the power they develop. In some cases, they include also certain subsidiary companies whose main purpose is to develop and sell power to a parent company for industrial uses. The total of 21,972,661 hp. of turbine capacity installed in plants operated by utilities on Jan. 1, 1964 represented 78 p.c. of Canada's total installed capacity.

Industries are defined as companies or individuals who develop power mainly for their own use. The total installed capacity of plants operated by industrial establishments on Jan. 1, 1964 was 6,220,901 hp. In addition to the power generated in their own plants, industries purchase a considerable amount from utilities.

The total hydraulic installation at the beginning of 1964 (28,193,562 hp.) is the total of all existing installations of water wheels and hydraulic turbines in Canada.

3.—Installed Water Power Capacity, by Province, as at Jan. 1, 1964

Province or Territory	Turbine Installation		Total hp.
	Utilities ¹	Industries ²	
	hp.	hp.	
Newfoundland.....	518,305	113,720	632,025
Prince Edward Island.....	240	1,420	1,660
Nova Scotia.....	189,345	15,193	204,538
New Brunswick.....	283,408	26,318	309,726
Quebec.....	9,519,678	3,657,167	13,176,845
Ontario.....	7,804,110	443,402	8,247,512
Manitoba.....	973,000	15,900	988,900
Saskatchewan.....	309,500	16,635	326,135
Alberta.....	413,390	1,065	414,455
British Columbia.....	1,920,945	1,910,381	3,831,326
Yukon and Northwest Territories.....	40,740	19,700	60,440
Canada.....	21,972,661	6,220,901	28,193,562
Percentage of total installation.....	78	22	100

¹ Includes only hydro-electric installations that develop power mainly for sale.
power installations developed by industries mainly for their own use.

² Includes only water

Section 2.—Power Generating Capability and Load Requirements*

Power generating *capability*, as covered in this Section, is the measurement of the available generating resources of all hydro and thermal facilities at the time of the one-hour firm peak load for each reporting company, and is not equal to the *capacity* of such generating facilities. For example, a hydro plant may have a capacity of 100,000 kw. but if, at the time of peak load, the water available for generation is only 80 p.c. of the plant capacity requirements, then its capability is 80,000 kw.

* Prepared by the Energy Statistics Section, Industry Division, Dominion Bureau of Statistics.