

CHAPTER XVI.—POWER GENERATION AND UTILIZATION

CONSPECTUS

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NOTE.—The interpretation of the symbols used in the tables throughout the Year Book will be found facing p. 1 of this volume.

Section 1.—Water-Power Resources*

Canada, a land of many lakes and rivers, has been abundantly endowed by nature with great water-power resources which are well distributed across the country. In most sections, adequate precipitation and favourable topography result in numerous rivers on which falls and rapids frequently occur and offer excellent opportunities for the development of hydraulic power; with the exception of the prairies of the middle west, water-power resources of importance are found in virtually every part of the country. In British Columbia, where precipitation is high, the rivers flowing down the Pacific slope of the Rocky Mountains offer many fine power sites. Alberta, although a Prairie Province, also has mountain streams from the Rockies as well as great reserves of undeveloped power on its large northern rivers. The great Canadian Shield of Precambrian rock, which forms an arc around Hudson Bay, covers part of the Northwest Territories and northern Saskatchewan as well as a large part of Manitoba, Ontario and Quebec; it is a rough, forest-covered, well-watered area characterized by innumerable lakes and fast-flowing rivers with many falls and rapids. The power of the Great Lakes-St. Lawrence River System forms part of the great resources of Ontario and Quebec upon which their status as the principal manufacturing provinces of Canada is built and which compensates in large degree for the lack of indigenous coal. In the Maritimes, the precipitation is moderately heavy and the rivers, while not large, afford numerous possibilities for power developments of moderate size. The water powers of the Province of Newfoundland, while of considerable extent, have not as yet been accurately evaluated owing to lack of stream-flow data.

* Revised under the direction of H. L. Keenleyside, Deputy Minister, Department of Mines and Resources, by Norman Marr, Controller, Dominion Water and Power Bureau.