

In total this five-fold expansion programme provided Ontario with an additional 596,000 horsepower in 1950, and will provide an additional 276,000 in 1951 - 160,000 in 1952 - and possibly another 80,000 in the years immediately following.

Spectacular though the Ontario and Quebec progress has been we should not be unmindful of developments in other provinces. Within the last five years they have added some 700,000 horsepower to our national total. The bulk of this increase - 420,000 horsepower - stemmed from operations in British Columbia. There such developments as the 620,000 horsepower Bridge River project and the 168,000 horsepower John Hart project have now been brought into partial service. Within the last five years British Columbia has increased power production by nearly 50 per cent - giving a provincial total of 1,300,000 horsepower. In Manitoba there has been a 40 per cent increase - giving a provincial total of 600,000 horsepower. Notwithstanding the lack of water sites in Alberta and Saskatchewan - with resultant use of steam and diesel plants - their hydro production has increased 78 and 23 per cent respectively. Across the Northwest Territories and northward to the Yukon, plant capacity has been almost doubled.

As one contemplates this vast expansion there appears every prospect that future developments will be called forth on a comparable scale. 1951 should see the installation of nearly one million horsepower - a rival year to 1943 when the immense Shipshaw development was brought into production. Sparked by the 600,000 horsepower Niagara development, the proposed 400,000 horsepower system of the Aluminum Company on the Peribonka, and the 330,000 horsepower of Beauharnois, the years 1952 to 1954 will provide an additional 1½ million horsepower. Large though this amount is, it does not include such projects as the Aluminum Company development for British Columbia which in itself would require some 1,600,000 horsepower.

In the light of these remarks it is desirable to point out that notwithstanding a most impressive expansion in power production - and an equally impressive and growing demand for power - we are far short of a full utilization of our national resources. By 1955 we will have developed about one-quarter of the economically available turbine capacity - that is, approximately 15 million horsepower out of 55 million. This presently unexploited margin of 40 million horsepower indicates that inexpensive water power which has been such an important factor in shaping our past industrial growth will be equally (if not more) important in years to come.

The large scale exploitation of the water resources of Quebec have placed that province in the forefront - having over one-half of Canada's installed turbine horsepower. In spite of this however, the potential resources of Quebec are far from exhaustion. The prospects are that Quebec will have cheap electric power capable of economic development for many years to come. On the Lachine and Soulanges section of the St. Lawrence River alone some 2,250,000 horsepower awaits development. Moreover, if need be, these sources could be exploited immediately in a manner similar to that used for the Beauharnois development.

In Ontario however the situation is different. Indications are that once present undertakings are completed there will remain but two major sources capable of economic development. The construction of one of these - the Sir Adam Beck Station No. 2 at Niagara Falls - has recently been made