

WATER-POWERS

There are small water-powers available on the Assiniboine, Little Saskatchewan and other small rivers for at least seven months of the year.

The water-powers of the Nelson and Hayes rivers are too far from the present settlements for transmission of electric energy, but the construction of the Hudson Bay Railway from Pas to Port Nelson will probably bring about the settlement of the Nelson river valley. Estimates have been made regarding twenty-five water-powers on the Nelson river aggregating a minimum of 2,930,800 H.-P for twenty-four hours daily and twenty water-powers on the Hayes river aggregating 28,460 H.-P. While the estimates are only for seven months it is believed that the minimum for the year would be very little less than this for the Nelson river.

As Manitoba is even farther from the sources of coal supply than Ontario the abundance of water-power is of very great importance.

On the main Saskatchewan river in the province of Saskatchewan it is estimated that about 24,000 H.-P daily for twenty-four hours would be available for seven months of the year, on the South Saskatchewan 1,700 H.-P and on the North Saskatchewan 10,000 H.-P. At the Rocky rapid of the North Saskatchewan in Alberta above Edmonton it is estimated that 28,000 H.-P could be developed by controlling the discharge of waters.

In southern Alberta it is estimated that 60,000 H.-P can be obtained from the Bow river, within fifty miles of Calgary, by controlling the discharge of waters. The Calgary Power Company has already developed 19,500 H.-P at the Horseshoe fall of the Bow river and 12,000 H.-P at the Kananaskis fall. There are also small water-powers available on the Elbow river, McLeod river, Belly river and other small rivers in southern Alberta.

The information regarding water-powers in Manitoba, Saskatchewan and Alberta north of the Nelson and Saskatchewan river systems is not complete, but there are known to be many important water-powers, and the aggregate is immense.

British Columbia is splendidly endowed with water-powers, and, although the province has immense quantities of coal, rapid progress is being made in hydro-electric development. At many points to which the cost of transporting coal over mountain roads is excessive hydro-electric power can be cheaply transmitted, and even in districts close to coal mines the competition of hydro-electric power will regulate the price of coal.

Mr. G. R. G. Conway, Consulting Engineer of the British Columbia Electric Railway, says, in his monograph on the water-powers of British Columbia: "Within reasonable distance of the cities of Vancouver and Victoria there are possibilities of the economic development of water-powers aggregating 750,000 H.-P. These water-powers are all situated within an area of 20,000 square miles. Outside of this area a rough estimate of the water-power possibilities of the province would bring this figure up to 3,000,000 H.-P."