

POWER PRODUCTION IN NORTHERN ONTARIO

Mines Are Large Users—Rivers and Log-floating— Legislation May be Needed

Steam power has been almost wholly displaced by hydraulic power delivered either by the electric current or in the form of compressed air, for the operation of Cobalt mines and works. Most of the mines formerly using steam retain their plants for use in case of emergency, but the regular employment of steam is now confined to small and isolated properties.

An amalgamation between the companies producing power on the Montreal River has been effected, the Cobalt Power Company and the Cobalt Hydraulic Power Company uniting to form the Northern Ontario Light and Power Company, Limited. This arrangement enables the plant at Hound chute to confine its supply to electrical energy only, while the Taylor compressed air system installed at Ragged chute fills the contracts for compressed air.

Mines Power, Limited, whose development on the Matabitchewan was first in point of time to put electric power into Cobalt, has changed its name to the British Canadian Power Company, Limited.

Insufficient for Year Round Delivery.

On both the Montreal and Matabitchewan Rivers, though the shortage of water was not so marked during the winter of 1911-12 as it was in the previous year, experience has shown the present means of conserving the freshet flows to be insufficient for the steady delivery all the year round of the maximum quantity of power.

The watersheds of the Matabitchewan and the Montreal have both their peculiarities. The former is not extensive, being restricted on the north by that of the Montreal, and being still further narrowed by the tendency of the river to approach the Montreal as it nears its mouth, the actual entrance of the two rivers into Lake Temiskaming being only a few yards apart.

For this reason, strict economy must be practised in the use of water, and the company has found it necessary, in addition to the reservoirs already in existence, to erect dams at the outlet of Bear, Cross and Macdonald Lakes. When these are completed, practically all the natural storage grounds on the stream will be under control.

The Montreal is a longer and larger river than the Matabitchewan, but the area which it drains is lessened by the doubling, tortuous course which it pursues, especially in its southern branches.

It receives a portion of the overflow of Lake Temagami through the northern outlet of that lake, the main discharge of which is to the south by the Temagami River, a feeder of the Sturgeon.

Being thus situated on the height of land, the waters of this large and important lake, if conserved, are capable of considerably augmenting the water power of either or both the streams into which it empties. It is also evident that by adjusting the height of the dams at the northern and southern outlets, a larger or smaller proportion of the total discharge from the lake could at will be diverted into either system.

Hydraulic Development on Both Streams.

There are important hydraulic developments on both streams, on the former for power used mainly in the mines of Cobalt, and on the latter for the operation of pulp and paper mills at the town of Sturgeon Falls, reports Mr. T. W. Gibson, Deputy Minister of Mines, in the 21st annual report of Ontario's Bureau of Mines.

This situation is indicative of the classes of questions to which the rapidly increasing use of water power derived from the rivers of Northern Ontario is giving rise. But there is yet another, and very important, element in the situation.

For many years, these rivers have been used by lumbermen to float their logs to market, and their right to employ them for such purposes has been repeatedly confirmed by the legislature of the province.

Indeed, notwithstanding the extension of railways into the northern forests, and the increasing use which is made of them to transport logs, pulp-wood and other forest products to the place of consumption or manufacture, it is not easy to see how the great lumbering industry of Ontario could be carried on without the free use of these waterways.

Each for Different Purpose.

There is nothing incompatible between the employment of flowing water for the carriage of sawlogs and its utilization for the development of power. But it is quite apparent that the presence of two distinct interests, each requiring the use of water, but for a different purpose, is likely to be productive of friction.

When the spring thaws and rains melt the snow and ice, and let loose the floods, the lumberman seizes the opportunity to get his "drive" to market. His logs in the water, he lifts the "stop-logs" from the dams and gives rein to the torrent that it may hurry his logs to their destination. Every consideration must yield to this—the logs must come down, for to be "hung up" means in most cases that another year will elapse before the logs will reach the saws, and also a loss in interest and the sinking of water-logged timber. The main body past, the rear-guard of his army "sweeps" the "tail of the drive," in other words, gathers up those logs which have stranded in shallow places, or have been caught by the rocks or other obstructions.

This demands a fresh draught on the dammed-up lake in order to carry the "tail" down stream, and the freshest season may well be past, or nearly so, before the lumbermen's use of the river is over for the time.

Co-operation Will Accomplish Much.

It is obvious that the owner of a water power on such a stream will find it difficult to obtain a maximum of power. The water is hurried away, which might have turned his turbines during the dry season, and his chances of equalizing the flow to the best advantage are correspondingly reduced. The situation is one which suitable legislation may be required to meet.

Much may be accomplished by co-operation between water power owners and lumbermen, by improved log-slides requiring a minimum of water to operate them, by deepening river channels, and removing obstructions, etc., but it may also be necessary to provide some means of adjusting the relations between the lumbermen and water power owners, so far as the use of the water is concerned, and also between the various users of power on the same stream, whose interests may conceivably come at times into conflict.

WANT CONTROL OF LAKE OF WOODS COMPANY

Dominion Trust Company Has Asked for Options on Common and Preferred

Another attempt is being made to secure control of the Lake of the Woods Milling Company. The general impression in Montreal is that no change of control in that direction is possible without the consent of the present controlling interests. A circular has been issued to Lake of the Woods shareholders by the Dominion Trust Company, Limited, asking for options on both the common and preferred shares of the company. In the circular \$1 is offered for the option which is to date from on or before January 24th to January 30th.

Want to Get Shares.

Mr. A. S. Birchall, manager of the Dominion Trust Company, declined to discuss the offer made through his company, more than to say that some of his clients, regarding Lake of the Woods Company as a strong industrial, desired to acquire a substantial block of the shares.

It is thought probable in some quarters that should the Dominion Trust Company obtain control of the Lake of the Woods Company, an amalgamation with the St. Lawrence Milling Company might follow. The capitalization of the company is as follows:

	Authorized.	Issued.
Common stock	\$2,500,000	\$2,100,000
Preferred stock	1,500,000	1,500,000
Bonds, 6 per cent.	1,000,000	900,000

In addition to the \$900,000 bonds outstanding, \$100,000 have been redeemed. The Lake of the Woods Milling Company guarantees the Keewatin Flour Mills Company's bonds, maturing 1916, for \$750,000, and interest of 6 per cent.

Profits for the Year.

The profits for the year ended August 31st, 1912, of the Lake of the Woods Milling Company were \$457,011. Seven per cent. is being paid on the preferred stock and 8 per cent. on the common. The company owns and operates 80 elevators at various points in Western Canada. The daily capacity of its mills is 10,500 barrels.

The company has power to issue \$400,000 new stock to complete its authorized \$2,500,000 capital. The directors of the Lake of the Woods Milling Company are: Messrs. Frank S. Meighen (president), William W. Hutchinson (vice-president), Robert Reford, Tancrede Bienvenu, R. M. Ballantyne, Abner Kingman, J. K. L. Ross (Montreal), George V. Hastings (Winnipeg), and Hon. Robert MacKay.

The common stock went as high as 153 in 1910, 152 in 1911, and 145 last year, the lowest being 125.