

# WATER and dynamo

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On Tuesday, December 12, the provincial government announced its tentative plans for a \$170 million dollar hydro-electric development in Northern Saskatchewan. This development entails the building of two dams plus a major control structure on the Churchill River, and possible modifications to an existing dam at Island Falls.

The development suggested involves the construction of the Iskawatam dam at a point just east of the junction of the Churchill and Reindeer Rivers. Associated with this dam is a control structure at Frog Portage which would prevent excess water from flowing down the Sturgeon-Weir River into the Saskatchewan-Nelson River system. Additionally, the plans for this structure include the provision that water may later be purposefully diverted into this system.

Pita dam is the second dam in the series, built at the downstream end of Pita Lake. The two dams have a combined capacity to produce 335 Megawatts of electricity. As well, proposed expenditures to improve the Island Falls dam which now provides power to the Hudson's Bay smelter at Flin Flon are also being considered. If this project is approved, another 70 Mw. of power would be the result. At the present moment, the Island Falls dam is owned by the Churchill River Power Project but the company's licence expires in 1981, and the government has the option of cancelling the licence and taking over the management of the dam. Compensation will be paid if this eventually should occur. Taking over the management becomes a fairly important decision.

At the moment the Churchill River Power Project (and through it Hudson's Bay Mining and Smelting) controls the flow of water down the Churchill by regulation of the dam and by regulation of a control structure located at the south end of Reindeer Lake. Whoever controls the structure at the bottom of Reindeer Lake controls the input available for the two proposed dams. This brings an element of haste into the consideration of the project, as the government must decide by 1978 whether to renew or cancel. This, in turn depends on whether or not these

dams are going to be built.

Parallel developments in Manitoba have been causing a large amount of public outcry. The Manitoba government has also proposed construction of a dam on the Churchill River in order to divert part of the Churchill into the Nelson River system. Manitoba Hydro has applied for a licence to build this dam, costing \$75 million, which would raise the level of Southern Indian Lake 10 feet, allowing it to spill into the Rat and Burntwood Rivers where it will eventually join with the Nelson River.

Oddly enough, in 1969 a like proposal which suggested raising the water level 30 feet instead of 10 feet was overwhelmingly defeated. Now, three years later Manitoba Hydro has reappeared with a modified flooding proposal and the Manitoba government has decided to accept the proposal without even allowing public hearings to be held.

This modified plan is an ecological disaster, according to environmentalists and many concerned groups in Manitoba. Besides the damage it would cause in terms of aesthetic destruction, which is usually brushed aside in the consideration of projects of this sort, this plan would destroy vast acres of trees and beaches. Ten feet of flooding would inundate 80,000 acres of shoreland; including all the beaches, and will leave a fringe of dead trees, eroding clay banks and decaying vegetation all around the lake, completely destroying its recreational value for some time. As well, it would involve the disruption of the lives of 700 native people who live in the area by the destruction of their commercial fishing industry. These people are completely self-sufficient at the moment, being one of the only groups of this nature left in the prairies, and the scheme becomes even more damaging when this is considered.

More damage will occur on the Rat and Burntwood Rivers. These small rivers will be increased in size to compare with the lower Churchill River. This increased flow will cause enormous amounts of erosion. As the banks erode, trees and debris will be carried down the rivers, probably to be deposited in a vast debris dump in Split Lake. It's not hard to imagine what the end result

will be and it won't be pretty. Any recreational value the area might have had would be removed.

Other schemes have been proposed to accomplish the same result in power output. One such scheme would leave the lake levels within the natural range and divert the river flow via a pumping station at South Bay. The cost of this plan was estimated at \$100 million including the discounted costs of future pumping.

Due to the large scale damage incurred by the flooding of Southern Indian Lake, many groups in Manitoba have begun to oppose the Manitoba Hydro proposals. Among these are the Canadian Council of Churches, the Natural History Society, a group of professors from the University of Manitoba, and the University of Manitoba Student's Union, who have donated \$1,000 dollars to a fund which will enlist aid within the community.

Why are these projects being considered? In both provinces the answer is the same; the government power agencies have decided (based on certain trends) that they must increase their power capacity to meet expected demands. Manitoba's electrical requirements are increasing at about 10 per cent per year and based on these estimates, their dams are being considered. The SPC has also stated that their studies indicate a need for increased power sources but they refuse to make known how they have arrived at this conclusion.

Many people have questioned the veracity of the SPC power projections, basing their queries on the fact that Saskatchewan has basically a declining population. They wonder where the extra 500Mw. power will be used when the present capacity of SPC is only 1400 Mw. In addition to the dams previously mentioned the SPC has proposed another dam at Elizabeth Falls near Black Lake on the Fond-du-lac. The power is needed to supply a uranium mine being developed near Wollaston Lake by Gulf Minerals, although mention is made of supplying local residents with power as well. The question is how much power is needed by the people, and how much by the mine? Is the government using the people's needs as a screen to cover up concessions to Gulf Minerals?

