## Fundy power

## The tides are turning

Nova Scotia politicians have a notorious record for unquestioning support of large, expensive, modern-age industrial projects designed to bring prosperity to everyone overnight.

Fundy Tidal Power, with a potential production capacity of 13,000 non-polluting, non-inflating, renewable megawatts and the promise of between 3,000 and 4,000 construction jobs, has a great deal of political appeal. One prominent Nova Scotia politician, Annapolis Valley M.P.J. Patrick Nowlan, was so moved by the prospect that he described government inaction on developing the 36 foot-high Fundy tides as a "national scandal"

However, beneath the political clamouring for Fundy Development lie many unanswered questions. Some of these questions were brought up by representives of Minas Basin area clam-diggers and fishermen, who met recently with representatives from the Bedford Institute of Oceanography and Environment Canada. The clam-diggers and fishermen were particularly concerned that research into Fundy tidal power was disrupting their work.

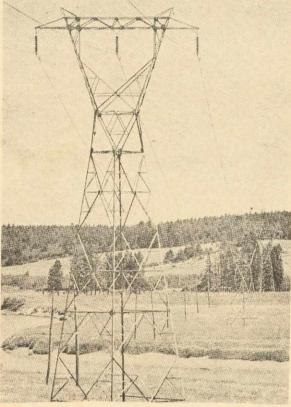
The Committee for Responsible Tidal Development, made up of citizens from the area, has also expressed concern over the question of Funday Development, particularly the effect of a large-scale project on local people and their way of life. A report by the Committee reads: "We have only to look at the Strait of Canso area in Nova Scotia, where heavy industry was supposed to solve economic problems. It has compounded the problems. People leave their traditional occupations and become industrial construction workers. Once the projects are completed they will be out of work and will have lost touch with their previous means of existence.'

In 1969, a study completed for the federalprovincial Atlantic Tidal Power Programming Board (ATPPB) found that Fundy Tidal Power was technically but not economically feasible, as compared with alternative energy sources. The economic snag, however, was removed five years later when the price of oil quintupled. In Nova Scotia today, oil-produced electricity costs 20 mils, while tidal energy is projected to cost between 8 and 29 mils.

In 1974, a new study was launched in two phases. Phase I, currently underway, consists of a series of technical and economic assessments aimed at determining the competitiveness of tidal power. Phase II will include more in-depth technical, environmental, economic and financial assessments of those projects selected from Phase I. The study has a 3.3 million dollar price tag on it, and is expected to be completed by February 1978.

## **Technical Problems**

Although technically feasible in a narrow sense. Fundy Tidal Power still presents



scientists with unanswered questions. Dr. Carl Amos, a sedimentologist at the Bedford Institute of Oceanography, believes that constructing a mammoth barrage in the Bay may kill the goose laying the golden egg by altering the movement of silt so that the headpond between the dam and the land becomes filled with mud, clogging the turbines and changing the necessary depth of water.

Another technical objection raised by scientists is that since the phenomenon of the tides is caused by the shape of the Bay, any alteration in its shape may change or destroy the movements of the tides themselves. Studies conducted by Dr. C.J.R. Garrett of the Dalhousie Department of Oceanography indicate that although a barrage might not destroy the tides, it could alter them by as much as 6 inches as far away as Boston.

preoccupied with labour problems at the expense of other tasks...", resulting in "a lack of direction and decisiveness, a tendency to focus on short-term problems to the detriment of long-term planning...''

"the top operational management level had become too preoccupied with labour problems at the expense of other tasks..."

In Halifax, CUPW Director Darrell Tingley insists that the union is not against automation as such, but the way in which it has been brought into service in Canada, and the use it has been put to. Automation could have extraordinary potential for improving the quality of employees' life and work, by allowing shorter work weeks, vacation and the like. But instead, it has been used as an excuse to extract more work from fewer employees. One of the first results of mechanization in 1972, he said in an interview, was the downgrading of many employees' classification to "Coder/sorter", with an accompanying cut in salaries. Despite Article 29, the New Brunswick and Newfoundland mechanization process continues even though grievances have not been settled. "The employer has not bargained in good faith", Tingley said.

Soultions?

Some solutions to various specific Post Office problems have been suggested -

The primary criticism voiced against Fundy Power is that it is probably valueless as a source of energy for the Maritimes. This is because the tides are able to produce power for less than half the day. (Studies indicate that, at this time, energy-storage is too costly.) Therefore, the power would be of value only as surplus energy in a very large energy pool such as that on the United States' Eastern Seaboard.

The critics of Fundy Power question the wisdom of investing capital in the development of tidal power for export, while Nova Scotia faces the highest energy costs in Canada (principally because of dependence on imported oil). The critics add that the same dollars might be more wisely spent on developing energy schemes which will lessen our own energy problems at

Larry Bogan, Professor at Acadia University, argues that future demand for Fundy tidal power is based on a projected 400% increase in energy needs in the New England area by the year 2000. He suggests that this figure may be optimistic, and hints that U.S. demand for power, given the trend towards conservation, may have tapered off by the year 2000. In this case, the ATTPPB and the Maritimes would be left high and dry with a 3.6 billion-dollar white elephant.

But the sale of tidal power to the U.S. has its defenders. Among them is British financier Baron Edmund de Rothschild, who is quoted as having said: "You know in Canada you have a chance to help the United States of America. Their energy problem is something that does need some understanding. This is where I believe you in the Maritimes can benefit not only America but yourselves. It is by the export of power.'

Rothschild, a long-time supporter of tidal power, derives his interest in tidal power partly as a result of the technical and economic success of a small tidal power plant in La Rance, France. The Baron is also a long-time supporter of giant power development schemes. His famed banking family was one of the principal investors in what was the largest single hydro development in the Western World —the Churchill Falls Hydro-Electric development project in Labrador. It was built at an estimated cost to the Newfoundland taxpayer of \$960 million. The power generated there is sold at 2.5 mils, (or approximately \$12 million per year). Newfoundland sells it to Quebec, which in turn sells much of it to New York. The contract was signed in 1969, and will run for 65 years; at present rates, that hydro power is worth more than \$500 million yearly. It is open to speculation whom the Baron is referring to when he says "you in the Maritimes" can benefit from Fundy tidal development.

-make the entire service a Crown Corporation; -stop expensive, hidden Post Office subsidies of commercial business and make the "user pay";

-ban the illegal operation of courier services which are capturing the lucrative part of postal services and which are growing at the phenomenal rate of 20-25% annually;

-stop the contracting out of work.

However valuable these sorts of solutions might be for the efficient working of the Post Office, one central problem remains: The history of automation in the the Post Office does not seem to have served the interests of the great majority of Canadians. In a recent tour of a Toronto plant, all the gigantic Letter Sorting Machines (LSMs) - each capable of sorting 30,000 letters and hour — were idle, despite a backlog of 2.5 million pieces of mail. It was explained that these machines were used chiefly to handle major commercial mailings in standard-sized letters.

The Post Office has undertaken a massive programme of automation of its services, with apparently little consultation of the people working for it and less regard, it seems, for their present working conditions. In a period of massive unemployment, the Post Office is tied to contracts for buying expensive machinery which is designed to eliminate jobs. Yet it has also tied itself to a collective agreement which ensures that technological change will not cause injustice or adverse effects to its 22,000 employees working across the country. The coming months will tell how the Post Office chooses to deal with this contradiction.

continued from page 6

Jean-Jacques Blais, the present Postmaster General, is fifth since 1970 and thirteenth since 1962. According to some, Postmasters General, often on their way up to greater positions in the government, tend to avoid controversy and thus accept the status quo. -Since 1960, well over 25 studies have been commissioned to look at post office problems and management practices. "All have made recommendations - most have been ignored." (FP 5 Feb 77).

The most recent study to be shelved was a confidential survey done by a management consulting firm, Hays Associates, in which some of the preceding facts were revealed (FP 5 Feb 77). It was submitted to the Joint Post Office and Treasury Board Secretariat study group in October 1975, and a year and a half later, any implementation of its recommendations has yet

to see the light of day.

At the time the Hays report was submitted, the Deputy Minister was John Mackay (now moved to the Department of Public Works). Before joining the Post Office, he was Canadian President of International Telegraph and Telecommunications (ITT). It was shortly after Mackay's arrival as Deputy Postmaster General in August 1970 that the first contracts were signed with ITT for new automation machinery costing 70 million dollars.

The Hays report makes several observations about the P.O.'s labour problems. Among them, ...there was a general feeling that the top operational management level had become too