trouble but the solution we obtain for Nova Scotia and Prince Edward Island should help all the provinces as well as Canada? It is time for us to forget our regionalism in the light of such a problem. We as a province enjoyed having access to the cheap oil producing countries, therefore we did not get subsidies on pipelines or on oil and gas production in the west. We do not have gas piped to us on the trans-Canada pipeline and we do not have oil pipelines. In fact, we do not have any oil. Unfortunately we are at present in need of some attention from both the federal and provincial governments across Canada and priority should be given to us by other provinces at this time for our future plans.

Nova Scotia depends on oil-fired electricity generation for 65 per cent of its needs, with an additional 23 per cent being supplied by coal-fired generation. The rest is in water. In the search for a form of power to reduce the province's dependence on oil the Nova Scotia Power Corporation is looking very closely at the coal situation. As has been mentioned today, the use of coal might well offer an offset to oil costs since most thermal plants could be modified to switch from oil to coal. Before this happens, however, the coal—which is currently hitched to the cost of oil—would have to be made attractive in price. Again, coal generated power is not the long term solution—even though Nova Scotia holds good coals reserves—as pollution and environmental problems become magnified. At present, however, an accrued benefit is that incomes are circulating throughout the province. As well, the province has stated that any further expansion will be coal generated.

What are the alternatives? Perhaps tidal power development and the possible importation of power from Quebec and Labrador, but both projects would take many years to materialize.

At this time I should like to refer to an article, "Energy by Fundy Tides," by R. H. Clark, which appeared in the *Canadian Geographical Journal* of Novemeber, 1972. Clark stated that the one and only area in Canada and in fact in North America where it is feasible to harness tide waters for energy purposes is in the Bay of Fundy. The world's most powerful tides are experienced in the inlets and estuaries of the Bay of Fundy. We also have the highest tides in the world, achieving up to 53 foot tides. Many locations have been indicated as ideal in the Bay of Fundy. Studies of tidal power have been going on since 1915. In 1967 the Atlantic Tidal Power Programming Board was established to deal with the study. It cost $2.5 million when it was finished in 1969. It reiterated former studies, that is, a tidal power development is technically but not economically feasible.

Because of the quadrupling in oil prices brought about by the formation of the Organization of Petroleum Exporting Countries (OPEC), however, the federal government, along with New Brunswick and Nova Scotia, instituted the Bay of Fundy Tidal Power Review Board on February 29, 1972. This board was charged with reviewing the detailed findings of the report done by the Atlantic Tidal Power Programming Board. The preliminary investigations of the Tidal Power Review Board were made public in November, 1974, in which it was noted that tidal power's economic position had significantly improved, vis-à-vis oil-fired electrical generation, since 1969. I wonder what the position would be today if updated.

The latest study, as recommended by the Bay of Fundy Tidal Power Board, was announced in November, 1974. To be known as the Bay of Fundy Tidal Power Study, it is to cost some $3 million and will again be sponsored by the federal government, New Brunswick and Nova Scotia—with the federal government putting up half the funds for the investigation. Nova Scotia, which is more affected by oil price increases than New Brunswick and is thus vitally interested in tidal power development, has been concerned for quick advancement of the study. Its purpose is to make a more in-depth study of certain areas. In my view the Annapolis Basin or Digby, which are not being studied at this time, would probably be prime locations because there are no mud deposits as there are up higher. Mud seems to be one of the problems in establishing tidal power.

In the case of tidal power, if construction commenced in 1980—after completion of the current study ended—it would still take ten years to 1990 before first power was produced—and this is assuming all schedules were met and no technical drawbacks were encountered.

The first, and to date only, operating industrial scale tidal power project in the world is a double flow turbine plant located at Rance near St. Malo in France. It cost $80 million to build approximately ten years ago. Great Britain is now looking at that project and France is also looking at it.

I should like to read from a very interesting article entitled "Fringe Energy" which appeared in *The Economist* of March 27. Under the subheading "Water" the article states:

> On the Rance estuary in France, the first major effort to harness tides to generate electricity is seven years old and has proven a greater success than expected. It is said to generate electricity more efficiently than other hydro electric sites and has worked at virtually full capacity since 1973 without failure. There is now talk of a second French tidal plant, but a decision is still far off.

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> Britain is still flirting with the idea of tapping Channel tides for electricity, but drawn-out discussions on the Severn estuary tidal barrage are continuing. The chief drawbacks to tidal projects are the costs. The Severn project could eventually cost much more than the estimated $3 billion.

I bring this point up because one of the assets of tidal is that it is not exhaustible, unless the tides go out and do not come back.

Mr. Gillespie: That would be lunar power.

Miss Campbell: I do not profess to be a scientist. I merely want to compare the $3 billion estimated cost with the $10 billion the federal government plans to invest in the exploration and the development of unknown areas. That is how much we shall spend in the next ten years in our search for oil and gas.

Perhaps Nova Scotia, Prince Edward Island and other provinces should bring this matter up at some provincial conference. The $10 billion figure does not take into account the subsidized cost of oil and the need for subsidized oil in future. Actually by mid-summer this year the subsidy for the Atlantic provinces will amount to about $1 billion.