Fundy Tidal Power

wick and the government of Nova Scotia. Both the provincial governments have given an impetus to this report.

When I heard this debate was to take place today I did some checking, and I learned one or two things which might be of interest to the hon. member. In fact I might even suggest to him that his motion is a trifle premature although I realize that on other occasions he was probably six or seven years ahead of his time. Today, however, he may be just a couple of months ahead.

The three governments I have mentioned have agreed to a further study, with respect to which the federal government would pay 50 per cent of the cost and the two provincial governments 25 per cent each. They will be looking into two main areas, first, the marketability of power and, second, the engineering requirements. I can say that the cabinet has approved this project—a decision was taken last week. I do not know whether this information has been made public or not; usually the hon. member gets such information very early because of his special interest in the subject. In any event the study has been approved, so the motion he is putting forward may be just a little premature—maybe we shall be dealing with it in a couple of months' time.

I know, Madam Speaker, there are some hon. members from the classes of '72 and '74 who are more knowledgeable regarding the engineering aspects of this proposal than I can ever hope to be, so rather than use up all the time available to me I should like to give them an opportunity to speak.

Mr. Knowles (Winnipeg North Centre): Question!

Mr. Ross Milne (Peel-Dufferin-Simcoe): I am pleased to join this debate for the remaining few minutes and to put on record that I am very much in favour of any power project which is economical, which fits in with our environmental concerns, and which adds to our total inventory of available energy.

I think one of the fundamental things in any energy policy that Canada must have is a substantial switch in the supply of energy away from petroleum base to hydraulic, to coal, to nuclear, and if the project we are presently debating shows signs of being economical we should proceed to study it.

One of the concerns in the whole energy picture that I don't think we have talked about very much in this country, or in this thirtieth parliament where we are changing a lot of the base loads from petroleum input to electrical energy, is the role of the provincial electrical utilities. I think the time is coming when the projects that they will be building will be tied together through a national grid, and there will have to be some type of agreement among these utilities as to the timing of all these projects.

It does not seem to me to make great sense that one utility would have a very large project coming on stream at about the same time as a utility in a neighbouring province. In such a case both the utilities would have a surplus; they would go to some lengths to make use of this power, and then presumably both of them might very well end up in the position of being short of power. On the basis of what the hon. member is proposing we will require a good deal of investment on and research into a

much stronger grid across Canada, into which provincial utilities can tie.

I would hope research would indicate that we could go considerably above what is considered to be the design limit of 750,000 volts transmission at the present time. I am anxious that we do some research work on direct current transmission because in terms of the size of the country, and the length of the grid we need to deal with, these are very important considerations. However, in terms of the project we are talking about, I am most concerned that, however valid it may be from an economic point of view, and however it may be required for the supply of energy, someone should take a look at how we phase in all energy projects across Canada.

I just do not see that the Government of Canada has the economic resources to be building the Mackenzie Valley pipeline, to be pursuing the CANDU technology, the gasification of coal, and developing all of this all at the same time. Presumably we might end up with a good deal of the yield of that type of investment coming on stream at the same time.

One of the most important things we should be doing at this point is to stage matters so that each project or each level of technology in its own time would follow in its right order. I am encouraged from what little reading I have done on this project to believe that the economics of it are perhaps a lot closer to being viable than we once thought. I remember having read about this in some detail some three or four years ago, and at that time there was a question of whether it would ever be economically viable. But at that time we were not thinking of the price of oil on the world market approaching \$12 a barrel. My understanding is that if we have to deal with oil prices at that level this project does become economically feasible.

There is one other thing we should indicate. It works in very well with some of the thoughts I have on the energy situation, a situation where a good deal of the input comes from nuclear, from coal, from hydraulic. Nuclear has to have a 24-hour load factor full-time, and coal is the type of generation that can be varied, but we do need a national grid with some type of input that can be used for peak demand periods. It would seem that tidal power would fit into this concept very very well, because I do not think we could afford or want to have a nuclear capability meeting the peak because then you would have technical problems—with what to do when the seasonal load, or in fact even the daily load, doesn't meet the situation.

I want to associate myself also with the remarks of the previous speaker concerning the Canada Development Corporation. I just do not think that this is really the vehicle that we should be using. One of the things about the Canada Development Corporation surely is that we hope it will invest in such projects as companies that have a high degree of Canadian technology, or in areas where it is most important that Canadian ownership be maintained.

I hope we will move before too long to enable the public to invest in that corporation. Without a viable portfolio it will not attract investor confidence, and if we saddle the Canada Development Corporation with the cost of all kinds of studies and so on, I suggest that this would interfere with that very basic objective.