

Supply—Trade and Commerce

the United States would provide the power for their radar stations in the distant early warning line by the use of atomic energy reactors.

I am wondering whether there is any possibility of Canada taking part in the installation of these atomic energy power plants; if not in connection with either that warning line or the mid-continent warning line, is there some way in which Canada could make use of atomic energy power plants of this kind in the development of other parts of northern Canada? This seems to be a field in which the nation might derive great benefit. We have the provision in this agreement that Canada can get the necessary information from the United States and I am hoping that there can be some provision made for a development such as I have mentioned.

Then, another question has to do with the use of atomic energy for the production of power in parts of the country where there is a shortage of hydroelectric power. I will not go into the details of that because, as the minister knows, we have considered it on other occasions. Is there any possibility that this source of power could be made available to such areas as Nova Scotia, Saskatchewan and other parts of the country which do not have hydroelectric power in any quantity? I know that this demonstration power station is to be erected on the Ottawa river by Ontario hydro, in co-operation with Atomic Energy of Canada Limited and I think with Canadian General Electric. Presumably that will result in the production of power in Ontario which, as we know, is becoming short of electrical power. But I wish the minister would explain whether the government has any plans in mind which would lead to the use of atomic energy for the production of power in other parts of Canada such as Nova Scotia, Saskatchewan and northern Canada to which I referred a moment ago.

Mr. Howe (Port Arthur): In connection with the use of atomic power for the mid-Canada line and the distant early warning line, we are watching the development of energy for that purpose very carefully. The hon. member will understand that there are a number of different approaches to the development of power from atomic energy. As he has said, we have one reactor under way on the Ottawa river. I suppose the United States have at least ten different approaches. There are different sizes of power plants, some of which are very much larger than anything we are doing. Of course the project he has been speaking about would be smaller than the one we are doing.

The only one that is operating and in actual use is the one applied to the submarine. No one likes to close his mind to other possibilities until we can test out the relative merits of the various approaches being made. When the hon. member asks me if we are planning power developments for the north, or power developments for here, there and everywhere, my reply would be that what we are trying to do at the moment is to find out the economies that can be achieved from various types of development. We have our own approach, which we think is very important because, after all, you learn only by doing. We are watching similar developments in the United States, and from that we hope to come to a conclusion as to the type of plant that is suitable for each particular purpose. When we do we will certainly make the information available here.

We hope the federal government's part in the development of atomic energy can be limited to development work. In other words, if the thing is developed commercially we would hope that commercial interests would take over and carry on, as they do in hydroelectric development. We are trying to reach that point, but at the moment anything we are doing in connection with power is part of a general exploration of the possibility of the development of power from that source.

Mr. Green: If the Americans are able to instal plants in connection with the D.E.W. line, would Canada be in a position to take advantage of the information the Americans gained and, if she saw fit, use the same type of power plants for other purposes in Canada?

Mr. Howe (Port Arthur): Yes, absolutely. That is within the range of the exchange of information.

Mr. Green: Another point arises out of this agreement between Canada and the United States. I refer to the possibility of Canada processing her uranium to a greater extent within the country than has been done in the past. Article II C of the agreement, which is headed "Source Materials", says:

Geology, exploration techniques, chemistry and technology of extracting uranium and thorium from their ores and concentrates, the chemistry, production technology, and techniques of purification and fabrication of uranium and thorium compounds and metals, including design, construction and operation of plants, except as provided in paragraph A.

In other words under this agreement all that information is now available to Canada. And there is also the provision in paragraphs