• (12:40 p.m.)

The success of the heavy water reactor which we have developed and sold around the world depends, to a large extent, on making this plant a successful operation. It also seems to me that the federal government has been playing around with the type of grants it has been providing, such as ARDA grants, grants matched by production, and grants provided as subsidies to cover the cost of the product. I believe the answer is direct participation by the federal government in the development and management of this plant.

If the federal government makes its contribution in a direct manner then I am sure the new government in Nova Scotia will be as willing, as I presume the previous government was, to enter into partnership with the federal government to make the plant a success. This plant has the potential to end many employment problems in the Cape Breton area, and to solve some of the problems that Ontario and other parts of Canada may experience in the operation of reactors that are demanding heavy water now, not in three or four years from now, and which can only be produced by plants having the capacity of the Deuterium plant in Glace Bay.

Mr. G. W. Aiken (Parry Sound-Muskoka): Mr. Speaker, the assistance provided by the federal government to the government of Nova Scotia under this bill was negotiated by the previous provincial government of the Hon. G. I. Smith, and was announced in this House by the Prime Minister (Mr. Trudeau) on April 10 last. At that time I had an opportunity to make a few remarks on the general problem, and now I am pleased to note that the new Nova Scotia government has confirmed the correctness of the previous decision to proceed to bring the plant into production of heavy water.

There is no doubt about the fact that power sources in Canada are gradually diminishing. They are certainly falling behind projected requirements. New sources of water power are becoming scarcer. The use of coal in the production of power is also diminishing to a considerable extent, and so we must turn to nuclear energy to provide electric power for Canada's future needs. To keep our nuclear power plants operating, it is necessary that heavy water be produced in Canada. The decision to proceed with the establishment of heavy water nuclear plants in Canada was made many years ago because it seemed that Canada had the best source of uranium, and to that time had done the most extensive work undertaken in connection with the peaceful use of atomic power.

I was a member of a special committee of this House, I believe it was in 1960, which examined research in Canada, when the government's decision was discussed by a great many eminent scientists. At the end of very extensive hearings, the decision was confirmed that Canada should continue to develop heavy water nuclear power plants. In the light of this history, the only possibility left is to proceed with this plant at Glace Bay, providing the engineering is successful. I presume that the engineering problems have now been mastered, or that at least the engineers see the possibility of being successful in bringing the plant into production. The sooner that happens the better it will be not only for the people of Cape Breton-East Richmond but also for the whole of Canada.

Mr. Speaker: Is the House ready for the question?

Mr. O'Connell: Mr. Speaker, I wish to thank the hon. members who have spoken in this debate for the support which they are giving to the bill. I would say no more, except that I do feel it is important to correct an impression which may have been left unintentionally by the hon. member for Timiskaming (Mr. Peters) as to the role and responsibility of Atomic Energy of Canada Ltd. I think it is my responsibility to try to set the record straight.

Atomic Energy of Canada Ltd. is in no way responsible for and had no role to play at all in the design of the Deuterium of Canada Limited plant.

Mr. Peters: That is the problem.

Mr. O'Connell: Heavy water is a product that can be made commercially. There is no radiation, nor atomic aspects connected with it. It is only confusing to compare it with the role that Atomic Energy of Canada might play in advising on the design of atomic reactors, as was the case in Ontario.

This is not an atomic reactor; it is a heavy water plant. Canadian General Electric is producing it as a product, like any other product. It is just water that is 10 per cent heavier than usual. Therefore, it is not correct to associate Atomic Energy of Canada with the problems that have been experienced. It had nothing to do with the difficulties being faced there. Atomic Energy of Canada only underwrote the sales of heavy water. It had to enter into a contract for that, but the responsibility for production of heavy water was the responsibility of the private company that began the operation, and it became the responsibility of the province when it assumed that responsibility from the private company.

The only other point on which I wish to comment was that raised by the hon. member for Parry Sound-Muskoka (Mr. Aiken) in connection with the engineering. We want to make it clear in this bill that the grant does not begin to flow to the province until Atomic Energy of Canada Limited, which is acting as the agent of the Government of Canada, is satisfied that there is a remedial program and that the new operator who has been selected for the plant has the powers and responsibilities, and in fact has such a program. Then, this grant will flow in terms of the phases of that program as they go into operation.

• (12:50 p.m.)

The grant is therefore subject to the engineering being satisfactory, in the sense that it would be reviewed by Atomic Energy of Canada Limited, but Atomic Energy of Canada would not take responsibility for the engineering or the work itself. That is the responsibility of the owners. The task of the federal government agency, Atomic Energy of Canada Limited, is to be satisfied by reviewing the plans that there is a major chance of