

Juelich, West Germany. IBM Switzerland was third. The measure of each laboratory's success was the number of times its results were published in the prestigious American journal, *Physical Review Letters*. The journal has a strict refereeing system which accepts for publication only the very best international work.

● (1650)

The report notes that over the 10 year period from 1970 to 1980, the success of U.S. laboratories in basic physics declined, while that of foreign laboratories like those of AECL increased. The report also expressed concern that U.S. industry is "just not playing the game" in its support of science.

The budget papers of the Minister of Finance suggest that the cut in government support funds to AECL should be made up from other sources, but he has not come up with any. Presumably, he is thinking of Canadian industry, although it is not usually noted for doing better in R and D than its U.S. counterpart. No body, whether it be Government, business or agency of Government, has come forward to take up the slack as Atomic Energy of Canada's research and development allotment of funds decreases. Therefore, it almost looks as if it is the gradual winding down of one of the greatest long-term success stories of high tech in this country and this happens at a time when the Minister of Finance comes in with a Budget which he says stresses research and development in Canada. However, his Budget is winding down one of the best we have in the country.

Many businesses and organizations inside and outside Canada which have done business with Atomic Energy of Canada Limited over the years know that its research capacity is not debatable fact. Federal funds for research and development by Atomic Energy of Canada are cut in half by the recent federal Budget of the Minister of Finance. This cut could cripple Canada's nuclear industry and cause significant damage to many sectors of our economy, because this industry does a lot of work with private enterprise inside Canada and internationally. Prospects for foreign sales of the Candu power reactor in an already tough market will suffer if Canada's commitment to the system now falters.

The statement by the Minister of Finance that federal support for nuclear research and development would be cut in half over the next five years is causing grave concern among members of the society of AECL professional employees at the Chalk River nuclear laboratories of Atomic Energy of Canada, and, indeed, it is of grave concern to the Crown Corporation in general.

The AECL laboratories were established 40 years ago to exploit peaceful—and I emphasize the word peaceful—uses of atomic energy. Its most visible product, Candu, has been acknowledged by the present Prime Minister as the most successful nuclear power system in the world. It is a leader in reliability of operation and low electricity costs. However, any high-tech activity must have continuing development to stay competitive. It must have continuing research. Tomorrow's buyers of power reactors will be interested in only technologi-

cally advanced models. They will not be interested in those of yesteryear.

Research and development, associated with the upkeep and maintenance of current Canadus, can be the responsibility of existing users—that is the great theory—but users' interests do not guarantee adequate funding for future development. If the ongoing development of Candu and other nuclear technology is curtailed, the future energy needs of Canadians, and the commercial prospects of a key Canadian industry, will indeed be jeopardized. These cuts come at a time when foreign competitors are increasing their commitment to, and investment in, nuclear technology.

In his budget speech, the Minister of Finance said that Candu technology is now well established. There is a quote, Mr. Speaker, in the May 31 edition of the *Ottawa Citizen*. James Donnelly, the President of the Crown Corporation, told the House of Commons National Resources Committee yesterday that he does not share the Government's view that the Candu reactors' program is established to the point it no longer needs a large infusion of research money. In fact, he said, Canada is only at the threshold of nuclear science. The Liberal energy critic, the Hon. Member for Cape Breton-The Sydneys (Mr. MacLellan), said that the Tories are hanging AECL out to dry by cutting support to power reactor development.

No product, certainly not a high-technology product like a reactor can stop developing and still remain competitive. That argument is ridiculous. The United States, France and Germany, our competitors in the reactor market, all maintain strong government funded research laboratories. Their products will continue to develop while ours, without AECL's research and development, will not. The result will be the death of Canada's nuclear industry. That means a total of about 30,000 lost jobs and there are up to 55,000 indirect jobs involved.

AECL is like a service industry to many private industries, Mr. Speaker, and works with them on a continuing basis year by year. Research at Chalk River is not only a matter of reactor product development, as some people know. The laboratory is a national resource with an international reputation in many areas of pure and applied science. In fact, together with the White Shell Laboratory in Manitoba, it constitutes a unique blend of pure and applied skills which are not matched anywhere else in the country, nor, indeed, in most of the western world. This means that in solving many technical problems, the laboratory can draw on scientific depth to whatever level is necessary, and it can do so rapidly and at one site.

One consequence has been the effective response to requests from the nuclear industry to diagnose the recent problem with the Pickering pressure tubes, for example. Chalk River's contributions to a wide spectrum of science on an ongoing basis has been very important. Chalk River is doing world class science of which our country should be proud. It is also keeping an important national industry competitive. If the cuts by the Minister of Finance are proceeded with, the best of the