

nology to developing countries, and the use of those technologies in those countries in the proliferation of nuclear arms, is a very important and significant question with which most Canadians are trying to deal. They are trying particularly to deal with that today and with the spectre of the greater and greater risk of nuclear war, more Canadians are taking an active role in protesting the escalation of nuclear armaments throughout the world. I think this concern is reflected in this motion put forward by the Hon. Member for Skeena (Mr. Fulton).

Liberal Members have tried to deflect the debate into a question of jobs. It certainly was not the intention of this motion to advocate the curtailment of 36,000 jobs in the nuclear energy field. Those are important jobs for those workers. It is important that this House and the public in general have a look at what those jobs are doing to the workers in the industry and what they are doing to the morality of Canada as an exporter of nuclear technology.

● (1750)

In regard to the question of health and safety, we all know that there is no safe limit of radiation. Any amount of radiation is dangerous if it happens to strike the right organ in the body or the chromosomes that could lead to the proliferation of cells, including the creation of cancer cells. Despite the knowledge that no level of radiation is safe and despite the hazard it presents to miners, we continue to expose our miners and workers in the nuclear energy field to higher and higher levels. Many questions remain about the scientific basis for the levels that we set for safety. The Atomic Energy Control Board, the federal Government's nuclear watchdog, says a worker exposed to the limit runs a risk of dying of cancer caused by radiation seven to eight times the average risk for workers in safe industries and two and one half times the highest accidental death rate found in mining and quarrying. Even these figures are now considered to be conservative. Much of the evidence for risk comes from the study of the survivors of the Hiroshima and Nagasaki bombings. In the past three years new evidence indicates that survivors were exposed to less radiation than previously believed. I quote from a report in the *Globe and Mail* issue of July 29, 1983 entitled, "Radiation Risks Higher Than Estimates". It reads:

"Ever since the early post-war years, scientists have been meticulously recording the development of cancer and other diseases among the 80,000 survivors of Hiroshima and Nagasaki and have been relating the cancers observed to the doses that the victims received. The original estimates of those doses are now recognized to be too low, which means that the cancers observed among them were caused by lower doses than originally thought."

Even that brief statement, Mr. Speaker, warrants some consideration and the call for a royal commission into the health and safety aspects of the nuclear industry. The AECB has recently proposed an increase in acceptable radiation levels for women of 500 per cent and the placing of the onus on female employees to notify their employer of a pregnancy in order to have a lower dosage level applied. That is the controlling body of the energy industry in Canada which is unilaterally raising the acceptable dosage in the nuclear industry.

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The whole question of health and safety requires an investigation, Mr. Speaker, but beyond that there are other fields with which this motion attempts to deal in a brief introduction to a very important motion, that is, the whole question of mine wastes. We have heard a Member from the Government side indicate that he feels confident that the federal Government and the nuclear industry are adequately coping with tailings, mine wastes and uranium production wastes. If we look at the amounts of mine tailings in Canada we find that there are 99.3 million tonnes of mine tailing wastes in Ontario alone, 19.2 million tonnes in Saskatchewan and 1.1 million tonnes in the Northwest Territories. Altogether, there are 120 million tonnes of radioactive tailings covering 87,400 acres of which Canada does not know how to properly dispose. The disposal of those mine wastes and the associated nuclear reactor wastes is still causing scientists in Canada and throughout the world real concerns. We know that the half life of many of the radioactive materials is somewhere in the neighbourhood of 250,000 years. Today's scientists, with whatever technology we have, cannot possibly determine how those particles may get back into the environment in the future.

Nuclear reactors are also producing deadly wastes. Ontario reactors are producing 800 tonnes of deadly used fuel every year. Already the total amount of this waste is enough to fill a hockey rink waist high. In Ontario there are about 6,000 tonnes of nuclear waste so deadly that an unprotected person would die instantly if exposed to it. His central nervous system would be destroyed.

It is not our intention unduly to create fear in the public with this debate, Mr. Speaker. We are raising concerns that have been raised with all Members of Parliament and with governments both provincially and federally. It is our contention that the nuclear industry and its regulatory bodies have not been opened to public and parliamentary scrutiny. There are great concerns that the AECB and AECL are not entities that are responsible to Parliament. That is one of the reasons that we want a royal commission rather than a parliamentary commission to look into the nuclear industry in Canada. Not only will it give Members of Parliament an opportunity to determine the economic feasibility of the nuclear industry and allow us to look at the cost of that industry in terms of the production of jobs, but it would give us an opportunity to look at expenditures other than in the nuclear industry, expenditures in alternate energy, hydrogen gas production or solar energy, and to look at the number of jobs that could be produced in energy-related fields outside the nuclear energy field.

The Darlington plant in Ontario, which will come on stream in 1992, had an original cost estimate of \$3.4 billion. Recognizing that it is going to be one of the largest nuclear power plants in the world, producing some 3,500 megawatts of electricity when on steam, the costs are now estimated to be \$12 billion. In an age when Ontario Hydro has overestimated its need for energy and the United States has overestimated its need for energy and is in fact reducing the number of plants that it is going to bring on stream, it would be feasible for the