

*Nuclear Control and Administration*

themselves. We have no nuclear waste disposal capacity at present, anywhere in the country. Although much research is under way into the disposal of nuclear wastes, the fact that the field is still virginal underscores the earlier point which I made, namely, that we have allowed the industry to grow at a faster pace than the research and development required to keep it within appropriate health and environmental boundaries.

I hope, Mr. Speaker, that Bill C-270 will help redress the imbalance of which I have spoken. Lost time cannot be recaptured with one legislative stroke, but this Bill is a beginning. I urge all Members to join me this afternoon in making that start by allowing the Bill to go before committee. After all, in this field, more so than in most others, much more than just debate is involved. We are dealing, sir, with the health and safety and the well-being of the very people whom we have been elected to represent.

**Mr. Leonard Hopkins (Renfrew-Nipissing-Pembroke):** Mr. Speaker, in rising this afternoon to speak on Private Member's Bill C-270, sponsored by the Hon. Member for Hillsborough (Mr. McMillan), I would like to say that I know he is sponsoring this Bill with good intent. Unfortunately, whenever we get into a discussion such as this, quite often the factor of nuclear energy becomes automatically mixed up with nuclear power in warfare. This is very unfortunate because Canada's emphasis has been on nuclear energy for peaceful purposes, and certainly Canada's emphasis has also been on medical research through the nuclear industry. We have made great strides in that field.

● (1730)

The Hon. Member correctly mentioned the emphasis on nuclear reactors producing hydroelectric power in Provinces such as Ontario. I think that it is a good thing that we have nuclear reactors producing that amount of electricity in Ontario which is our major industrial Province. Until that happened, every white water rapids and every river in the Province was being dammed and that kind of environment was being destroyed. Everyone was trying to get electrical power by damming the rivers. The nuclear reactors producing hydroelectric energy in Ontario have used the situation and have saved the remaining white water rapids for recreational and other uses.

Although the Atomic Energy Control Board was established 36 years ago with the passage in August, 1946 of the Atomic Energy Control Act, like many administrative tribunals, its role and function in the regulatory process which it applies had evolved very significantly during this period. The changes which have taken place over the years reflect not only the vast scientific and technological developments which have occurred, but also the marked difference between contemporary society and the social milieu of the late 1940s. The basic philosophy of nuclear regulation in Canada and the underlying principles of the regulatory process have changed very little, however. Certainly the process is far more open in terms of the general public. It has also become appreciably more comprehensive and systematic in terms of the depth and extent in both the pre-

and post-licensing technical evaluations which are conducted from time to time and the ensuing compliance program itself. Furthermore, it applies to the whole of the nuclear fuel cycle as well as the industrial, agricultural and medical applications of radionuclides.

Nevertheless, the following fundamental principles remain unchanged: the primary responsibility for achieving high standards of nuclear safety and environmental protection in the design, construction, commissioning and operation of nuclear facilities resides with the licensee; the credibility of the nuclear regulatory process depends not only upon its technical correctness and practicability, but also upon acceptance by the public at large of its perceived effectiveness and efficiency. That is another very important factor. Even when a good job is done or is attempted by people with expertise, they are not always given full credit for the effort because this is a subject about which it is easy to create fear.

The regulatory criteria and principles should be concise, clearly stated and understandable; regulatory decision-making should be based upon stated criteria and principles, taking into account pertinent scientific and technical facts only; fairness and impartiality must characterize all regulatory decision-making. It is very important that people in the Atomic Energy Control Board or the board set up by Bill C-270, be impartial and have expertise. The regulatory process should be subject to a comprehensive periodic review and evaluation to ensure that it continues to produce the desired results at justified costs.

The jurisdiction of the AECB is, of course, established by the AEC Act, which came into effect in October, 1946. The exercise of that jurisdiction by the AECB, as expressed in regulations and licensing action, has come about in large measure through a series of precedents established as the nuclear program evolved. However, it is worthy of note that the areas of jurisdiction occupied by the AECB in terms of current practice, are significantly less than the potential jurisdictional field embraced by the AEC Act. It would be possible, given the strength and breadth of the current Act, for the AECB to make additional regulations that would explicitly cover, for example, conventional occupational health and safety in addition to the new specified radiological health and safety. It has not done this, for obvious reasons, and such careful attention to the practical necessities of nuclear regulation and control have marked its activities since 1946.

In the present situation, workers in all parts of the nuclear industry, including the medical, research and industrial uses of radioisotopes, are protected to an equal degree against radiation exposures, according to the schedule appended to the AEC Regulations. Exposure dose limits for the general public are also provided. All Canadians, in effect, are given protection under one Act and with one authority responsible for exerting the control, and being held accountable for same.

This single authority position assures consistency across the country for all Canadians, and it represents the best source and use of expertise. Some Provinces, by their own admission, have little experience in radiological health and safety matters