

Nuclear Liability

Mr. Knelman, in his letter to the *Star*, takes up the specific points raised by Dean Bell. He writes:

1. Radiation Protection—The history of this issue offers so much support of my position, namely, the lag in the establishment of proper limits behind the total accumulated exposure from all sources, that it would require several issues of this newspaper to provide the evidence. After a dozen years of intense involvement in the issue of radiation hazards, I read Dean Bell's comments with a powerful sense of it all having happened before—the glib assurances of "tame" scientists and government atomic energy officials followed inevitably by the voluminous eating of their own words. I might paraphrase Dean Bell by stating that anyone who has the faintest knowledge of the subject couldn't possibly challenge my point. Ernest C. Tsvoglou, professor of sanitary engineering at Georgia Tech (chief of radiological water pollution control, U.S. Public Health Service, 1956 to 1966) has indicated that the International Commission on Radiological Protection (ICRP) constantly neglects both the problem of multiple sources and local conditions of high exposure. Moreover they ignore considerations of potential harm to lower organisms. Also they leave no reserve capacity for accident or expansion of radiation sources.

2. Water Pollution by Radioactive Substances—Here Mr. Bell reveals misquotation, misunderstanding and outright ecological ignorance. Let me cite some documented cases:

(a) A study of the Columbia River by Norman Lansdell revealed serious radioactive pollution and uptake by all forms of river life.

(b) Some radioactive isotopes from civil reactors such as Zinc 65 find their way into humans. Thus people in the Columbia River Valley have greater amounts of radiation in their systems than allowed for people in atomic energy installations.

(c) The fish kills and genetic mutations at White Oaks Lake, Tennessee as reported by Dr. Robert Pendleton of the University of Utah.

(d) A recent investigation found plankton in the ocean having radioactive levels 150,000 times that of the water. Dr. Lamont Cole, world famous ecologist at Cornell University, has argued that introduction of biologically active substances into the ocean could prove calamitous by destroying the diatoms which produce most of the earth's photosynthetic oxygen. Bell's supercilious, parenthetical date-dropping and public school posture just reflects his insensitivity to the hazards involved.

3. Thermal Pollution—there Bell once again reveals his ignorance. The fact that a coal fuelled power station can cause thermal pollution in no way detracts from the issue. Is Bell not aware of the Great Indian Point fish kill (Indian Point, N.Y.) or the Lake Cayuga controversy? A report by J. G. Terrill, Jr. to the American Society of Civil Engineers established that fossil fuel plants have thermal efficiencies about 1.5 times that of nuclear plants which therefore results in higher thermal pollution from the latter.

The letter continues at even greater length than I have quoted, Mr. Speaker. I shall not quote from it further. It goes on to indicate that we should be concerned not only about

[Mr. Rose.]

protection from possible atomic explosions, but also about the cumulative effects of radiation pollution.

I believe the committee, when it considers this subject, should propose amendments to the bill designed to prevent radioactive build-up, regulate transport of nuclear materials, and ensure that what has happened in the United States through neglect of such precautions does not happen in this country.

Mr. Ray Perrault (Burnaby-Seymour): Mr. Speaker, I had the privilege of representing Canada at the United Nations during the recent session of the United Nations. After reviewing the report of the United Nations Scientific Committee on the effects of atomic radiation, and having listened to testimony at the United Nations I can only say there is no reason for complacency on the part of any of us.

Increasingly we are discovering that serious dangers are attached not only to nuclear testing in the atmosphere but to underground testing and even to minor, peaceful applications of nuclear power. The United Nations Scientific Committee studying the effects of atomic radiation was established in December of 1955. This marked the beginning of the kind of co-operation which I believe is required increasingly in this world. Here was a committee not concerned with ideological differences; it was not concerned with the battle between communism, capitalism or the other "isms" in the world. It was concerned with trying to save poor, battered mankind from making itself extinct. Argentina, Australia, Belgium, Brazil, Canada, Czechoslovakia, France, India, Japan, Mexico, Sweden, the Soviet Union, the United Arab Republic, Britain and the United States are among the nations which make up the Scientific Committee.

This must be one of the rare instances in the history of mankind when Soviet scientists sat down with United States, British and French scientists to decide what might be done to save mankind. This is what they have been doing. Today, I want to tell the House briefly some of the frightening evidence which has just come out. The terms of reference given the committee were as follows:

(a) To receive and assemble in an appropriate and useful form the following radiological information furnished by States Members of the United Nations or members of the specialized agencies:

(i) Reports on observed levels of ionizing radiation and radio-activity in the environment;