

LETTER FROM THE PRESIDENT

By L. Manning Muntzing

INTERNATIONAL INSTITUTE ON NUCLEAR SAFETY

At the international Conference on Nuclear Technology Transfer in Argentina and at the ANS Winter Meeting in Washington, D.C., I suggested consideration of forming an International Institute on Nuclear Safety.

While peaceful nuclear technology transfers from one country to another have been effective, there are significant variations in the technical requirements employed in the various supplying countries, so that a nation purchasing from more than one encounters problems of compatibility. Furthermore, there are increasing differences in safety regulations from country to country throughout the world. Developing nuclear countries expect to be able to have effective safety measure available for their use. Finally, we need to assure the public worldwide that safety recommendations of international experts exist and serve to support national nuclear power programs.

For these reasons, we should consider a mechanism for developing a more uniform nuclear safety philosophy and for agreeing on basic concepts that could be applied universally throughout the nuclear world.

A useful model may be found in the way minimum radiation standards have been established under the leadership of the International Commission on Radiological Protection (ICRP). The ICRP's approach is to set forth the fundamental principles upon which appropriate radiation protection measures can be based, while leaving it to the various national protective bodies to formulate specific and binding codes of practice or regulations based on the principles. In a formal sense, adoption of ICRP recommendations is voluntary. Yet, by virtue of its distinguished membership and the integrity of the ICRP has become such that the principles it espouses receive virtually universal acceptance.

In parallel fashion, the world nuclear community should consider the idea of an International Institute on Nuclear Safety. The aim would be to establish an organization with prestige so great that its conclusions would, like those of the ICRP, receive universal acceptance. The International Institute might consider a range of subjects, including, for example, safety goals, definition of source terms, probabilistic risk assessment methods, siting criteria, relevant engineered safety concepts, operating criteria, emergency response measures, and waste disposal features.

The International Institute's recommendations could achieve implementation in various ways, such as by being incorporated in the codes and regulations of national bodies. They could also be embodied by reference in international purchase contracts.

The International Atomic Energy Agency has worked on the development of nuclear safety guides in selected areas, and has prepared transportation recommendations that are widely used throughout the world. The Nuclear Energy Agency of the Organization for Economic Cooperation and Development has also pursued an active nuclear safety program.

Whether such an International Institute should be associated with an existing international organization or be an independent body similar to the ICRP is a question that needs to be evaluated. It would be essential to the prestige and influence of the International Institute that its work be guided by scientific and technical considerations. Industry and the political sector could also make major contributions within their expertise to the program.

The nuclear societies of the world are cooperating under the umbrella of the International Nuclear Societies Group. At its recent meeting in Washington, a decision was made to establish a committee to evaluate the concept and feasibility of an International Institute. Vincent Boyer from Philadelphia Electric Co. and Joseph Hendrie from Brookhaven National Laboratory have agreed to represent the ANS on this committee. I would encourage the members of our Society to communicate their views on this subject to them.

We cannot, through desire, achieve public support of nuclear power. We must aggressively seek it through solid scientific and technical performances that carry the force of international expertise and concurrence. Either with an International Institute on Nuclear Safety or through some comparable initiative, there needs to be the effort that will inspire public confidence, produce excellence in all that we do, channel the intellectual output of our day, and thereby sustain public support for peaceful nuclear uses.