

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

May 13, 1994

The Honorable Hazel R. O'Leary Secretary of Energy Washington, D.C. 20585

Dear Secretary O'Leary:

I am writing to you to express the Nuclear Regulatory Commission's growing concern that the availability of molybdenum-99 (Mo-99) and other important radionuclides used by the U.S. nuclear medicine industry could be seriously threatened by reductions in isotope production capacity in Canada. This situation could have serious implications for the nuclear medicine industry and create a virtual state of emergency in U.S. health care within a very short period of time. Although the NRC's responsibilities in this area are limited to regulating the possession and use of these isotopes, the Commission urges you from a public health standpoint to take prompt action to ensure that a viable nuclear medicine supply can be maintained.

It is our understanding that, since the closure of Cintichem in Tuxedo, New York, in February 1990, Atomic Energy of Canada, Ltd. (AECL), has become the sole manufacturer in North America for Mo-99 and the producer of 90% of all other important medical radionuclides used by the U.S. nuclear medicine industry. Moreover, approximately 90% of the world's Mo-99 and 80% of the world's medical isotopes are produced at a single facility, the aging NRU research reactor at Chalk River, Canada. No capacity exists anywhere in the world that would compensate for an extended reactor outage or work stoppage at NRU.

The effects of such an outage or work stoppage at NRU would be immediately felt in the U.S. NRU-produced Mo-99 and its daughter product, *echnetium-99m, are used in 80% of nuclear medicine procedures, and one of every three U.S. hospital patients undergoes a procedure involving nuclear medicine.

The Commission has reviewed and agrees with the Department of Energy's December 6, 1993 statement before the Subcommittee on Environment, Energy, and Natural Resources that U.S. reliance on a single foreign source of medical isotope supply is not sound public policy. We fully support and strongly endorse prompt and direct action by the Department of Energy to ensure the availability of a second source of Mo-99 and other medical isotopes.

Sincerely,

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