The Honorable Edward M. Kennedy United States Senate Washington, D.C. 20510

Dear Senator Kennedy:

I am writing in response to your letter of December 14, 1999, on behalf of the Massachusetts Citizens for Safe Energy regarding the U.S. Nuclear Regulatory Commission's (NRC's) proposed rulemaking concerning the use of potassium iodide (KI) in emergency plans. Specifically, you raise issues relating to stockpiling KI in communities near nuclear power plants. You also requested that we give every consideration to the Massachusetts Citizens for Safe Energy proposal on the KI proposed rulemaking. As you may know, the Federal Emergency Management Agency (FEMA) and the NRC are the two Federal agencies that evaluate emergency preparedness at and around nuclear power plants.

Since 1980, when FEMA and the NRC developed the basic components of an emergency response program, KI was recognized for its potential contribution to public health and safety. KI, if administered before or within a few hours of exposure to inhaled (or ingested) radioiodines and accompanied by other preventative measures (such as sheltering, evacuation, or embargoing of foodstuffs), can reduce the radiological dose to the thyroid. Doses to the whole body and internal organs from other radionuclides associated with reactor accidents, such as noble gases and cesium, are not reduced or affected by the use of KI. Current KI Federal policy, promulgated in 1985, provides for the use of KI by emergency workers and institutionalized persons who are expected to be exposed to radioiodines and allows the State and local decision-makers to decide on the availability of KI for the general public. The NRC is working with FEMA, the U.S. Food and Drug Administration, and other Federal agencies in reviewing this 1985 policy.

Separately, the NRC is in the process of considering a proposed amendment to its emergency planning regulations that would require that consideration be given to including KI as a protective measure for the general public as a supplement to evacuation and/or sheltering. The proposed amendment, however, would not require that KI be made available; that decision would be made by State and local governments. The Commission is currently considering the draft final rule and will take into consideration the public comments received in reaching its decision. In this connection, the NRC is also developing a guidance document to assist State and local decision-makers in their consideration of the role and use of KI for the general public in their site-specific emergency plans. This guidance document is scheduled to be available for public comment in mid-2000.

The NRC will consider the Massachusetts Citizens for Safe Energy proposal as part of our evaluation of public comments on the proposed rulemaking in developing the final rule. A copy of the <u>Federal Register</u> notice for the Commission's action on the final rule, which will provide an

evaluation of public comments on the proposed rule, will be provided to the Massachusetts Citizens for Safe Energy when it becomes available.

Your letter mentions the nuclear criticality accident in Tokaimura, Japan. According to an International Atomic Energy Agency report (available on the Internet at www.IAEA.org), effluent samples taken during and after the accident revealed that some radioactive material was released off site and that a small fraction of that material was radioiodine. However, the maximum radioiodine concentration in air outside the building in which the accident occurred was about 250 times less than the Japanese effluent concentration limit. Because of these low concentrations of radioiodines, KI, stockpiled locally, was not distributed to the general public in the communities surrounding the accident site. Local decision-makers recommended evacuation and sheltering in place to the residents of the immediate surrounding areas, as well as a suspension of harvesting of crops and vegetables. These emergency measures were terminated after 2 days. Based on information available to us, we thus do not believe that the Japanese incident was one in which KI should have played a role.

The NRC, together with FEMA, continues to support fully the emergency response activities of State and local governments associated with nuclear power plant sites. We will continue to work with our licensees and FEMA to ensure that the emergency response programs around plant sites continue to provide reasonable assurance that public health and safety are protected.

Sincerely,

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Richard A. Meserve