July 29, 2014

The Honorable Patty Murray United States Senate Washington, DC 20510

Dear Senator Murray:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter of May 30, 2014, to Amy Powell, Acting Director of the NRC's Office of Congressional Affairs. You enclosed a communication from Peter Crane dated March 28, 2014, and a copy of a paper that he submitted to the December 2012 Conference on Radiation Safety and Health of the International Atomic Energy Agency regarding NRC regulations addressing the release of patients who have been treated with Iodine-131, and asked us to consider his concerns.

The NRC is aware of Mr. Crane's longstanding interest in this issue and agrees that appropriate patient release practices are necessary to adequately protect the health of members of the public who may come into contact with patients who have been treated with lodine-131. While there is analytical information that our current requirements are protective of public health and safety, there does not appear to be much empirical data regarding the doses actually received by members of the public exposed to treated patients.

In 2012, the NRC staff advised the Commission that it had concluded that there are gaps in the available empirical data regarding doses being received by members of the public as a result of the release of patients treated with medical isotopes. These gaps related to internal doses to members of the public from close physical contact with patients or radioactive contamination from bodily fluids, and internal and external doses to members of the public from patients released to locations other than their primary residences. As a result, the Commission directed the staff to perform analytical and limited empirical research/data collection, and revisit calculations and methods described in agency guidance for patient release. The Commission also directed that the staff should include informal discussions with experts in the field, as well as the Advisory Committee on Medical Uses of Isotopes (ACMUI), as appropriate. That work is ongoing, under the primary leadership of the NRC's Office of Nuclear Regulatory Research.

More recently, on April 28, 2014, the Commission directed the staff to undertake a number of activities related to potential enhancements to the guidance and regulations governing patient release. Specifically, the NRC staff will consider providing general, widely available information through a patient guidance brochure and a website with information for patients; developing a standardized set of guidelines on patient release that licensees can use to provide instructions to patients; updating regulatory guidance documents; and evaluating whether regulatory changes are warranted. The staff expects to hold multiple public meetings around the country to obtain stakeholder views that can inform these agency efforts.

The NRC has welcomed Mr. Crane's input and communicated with him from time to time over the years to discuss his concerns and suggestions. Most recently, Mr. Crane submitted a

statement at ACMUI's May 2014 meeting expressing his view that the April 28, 2014, SRM was a positive step and represented "enormous progress."

I hope this information is useful to you. Please be assured that we take seriously the views of Mr. Crane and other members of the public on this important issue. If you have any questions, please contact me or Amy Powell at (301) 415-1776.

Sincerely,

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Allison M. Macfarlane

cc: Mr. Peter Crane