August 22, 2012

The Honorable Howard L. Berman
United States House of Representatives
Washington, D.C. 20515

Dear Congressman Berman:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your January 27, 2012, letter to President Obama, regarding your concern about the safety of U.S. boiling water reactors with Mark I containments. You also expressed concern about indefinite storage of spent nuclear fuel in nuclear power plant spent fuel pools and requested special attention by the NRC in accelerating the transfer of spent nuclear fuel to dry cask storage at reactors with Mark I containments. Finally, you requested our review of a study by the French nuclear authority, L'Autorité de Sûreté Nucléaire (ASN), regarding enhanced safety measures at French nuclear power reactors.

Immediately following the March 11, 2011, accident at the Fukushima Dai-ichi nuclear power plant in Japan, the Commission established a Near-Term Task Force (NTTF) of senior agency experts to conduct a methodical and systematic review of NRC processes and regulations to determine whether any improvements to our regulatory system were warranted. On July 12, 2011, the NTTF issued its report, which concluded that continued U.S. plant operation and NRC licensing activities posed no imminent risk to public health and safety. This conclusion reflected operations of all U.S. reactors, including those with design features similar to the affected Japanese reactors.

While the NTTF also concluded that the current regulatory system has served the Commission and the public well, it found that enhancements to safety and emergency preparedness were warranted and made a dozen recommendations for Commission consideration. On December 15, 2011, the Commission approved the prioritization of these recommendations as well as other actions identified during the agency's review into three categories, or tiers. The Tier 1 actions are those that should be implemented without unnecessary delay. The Tier 2 actions are those that require further technical assessment or critical skill sets to implement. The Tier 3 actions are longer-term items that depend on the completion of shorter-term actions or need additional study to support a regulation action.

The NRC subsequently developed schedules and milestones to address the prioritized issues, and has since taken actions to further enhance the safety and emergency response capability of U.S. nuclear power plants. On March 12, 2012, following Commission approval, the agency issued immediately effective orders to all reactor licensees, including holders of construction permits and holders of combined licenses. For all reactor licensees, those orders require mitigation strategies for responding to extreme natural events, and the installation of enhanced spent fuel pool instrumentation to ensure reliable and available water level indication. For boiling water reactors with Mark I and Mark II containments (which are similar to the

affected reactors in Japan), a third order requires reliable hardened containment vents to remove decay heat and maintain control of containment pressure following events that result in the loss of active containment heat removal capability or prolonged station blackout.

Regarding your concern about onsite storage of spent nuclear fuel in nuclear power plant spent fuel pools, it is the NRC's assessment that spent fuel pools and dry casks both provide adequate protection of public health and safety. Regarding the event at Fukushima, the currently available information indicates there was no significant offsite radioactive release from spent fuel stored in either the spent fuel pools or the dry casks. Although during the crises, there was some erroneous information indicating that the pools lost water during the event, subsequent information and observations suggest that the pools maintained an adequate inventory of water. We have carefully evaluated the progression of the Fukushima Dai-ichi event, but have not identified evidence that would indicate that the NRC should require expedited transfer of spent fuel from spent fuel pools to dry casks. However, as part of the lessons-learned process, the NRC is continuing an evaluation of whether the agency should require expedited transfer of older spent nuclear fuel from spent fuel pools to dry cask storage.

Regarding actions taken by European power plant regulators and, in particular, the report by the French nuclear authority ASN addressing safety assessments at French nuclear power reactors, the NRC is aware of these safety assessments and recommendations. The actions taken by French authorities, as well as those of other countries, are largely consistent with those taken by the NRC. Review of overseas responses to Fukushima reinforces our belief that the additional requirements we are undertaking are the appropriate steps to pursue at this time to ensure the continued protection of public health and safety. However, consistent with the NRC's mission, the NRC staff will continue to monitor all lessons-learned activities developed by domestic stakeholders and international counterparts to ensure information from all available sources is considered in applying lessons learned to U.S. plants.

Thank you for your interest in these matters. Please contact me or Ms. Rebecca Schmidt, Director of the Office of Congressional Affairs, at (301) 415-1776, if you have any questions or would like to discuss this further.

Sincerely,

/RA/

Allison M. Macfarlane