February 27, 2013

The Honorable Frank L. Lautenberg
United States Senate
Washington, D.C. 20510

Dear Senator Lautenberg:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter of January 25, 2013, in which you raise three specific concerns regarding the safety of the Oyster Creek Nuclear Generating Station (Oyster Creek) following Hurricane Sandy.

Your first concern addressed the operability of emergency sirens in the Oyster Creek vicinity during Hurricane Sandy, when a total of 39 of the plant's 42 emergency sirens were rendered inoperable due to power outages and equipment damage. Exelon Generating Company (Exelon), the operator of Oyster Creek, is responsible for maintaining the reliability of the emergency sirens in accordance with Federal regulations. These require that the sirens be operable or that a Federal Emergency Management Agency (FEMA)-approved backup emergency alert and notification method be available. The approved backup method in place at Oyster Creek is route alerting, in which emergency personnel alert the public by traveling in vehicles along assigned roads and delivering emergency instructions with public address systems. This backup method was available during the storm. In addition to this existing, approved backup method of emergency notification, Exelon has voluntarily committed to the State of New Jersey to install new sirens with battery backup capability by June 1, 2013.

Your second concern addressed the issue of storm surge and flooding potential, and the adequacy of the existing Oyster Creek emergency plan. U.S. nuclear power plants are required to safely handle the most likely floods at their sites, in accordance with NRC regulations. The flooding analyses required for nuclear power plants are more conservative than the FEMA flood maps. Oyster Creek's Final Safety Analysis Report summarizes the results of the plant's flooding analysis, which concluded that the highest flood water level that can be expected on the plant site is 22 feet. This would happen during a "probable maximum hurricane," or the most severe storm that is reasonably expected to occur at the site. By design, such a flood would not enter plant buildings, which are at an elevation of 23.5 feet. The water level from Hurricane Sandy reached just 7.4 feet, so Oyster Creek was not in danger of flooding as a result of the storm. At this time, there is therefore no need to make changes to Oyster Creek's emergency plan to address the flooding issues based on the experience with Hurricane Sandy.

U.S. nuclear power plants are required to safely handle the most likely floods at their sites, in accordance with NRC regulations. As part of our response to the events at Japan's Fukushima Dai-ichi Nuclear Station on March 11, 2011, the NRC is requiring licensees to complete flooding hazard re-evaluations to confirm the appropriateness of the hazards assumed for their plants and their ability to protect against them. Licensees are being required to use updated-methods and information, and the results will determine whether additional regulatory actions are necessary (e.g., ordering plant modifications). Because of the complexity associated with conducting flood hazard evaluations for coastal sites, Oyster Creek's re-evaluation will take time to develop and is due to the NRC in March 2015.

Finally, you expressed concern over a pinhole leak in the Oyster Creek reactor cooling system. Licensees are required to perform various inspections and tests of the reactor coolant system piping during refueling outages. The NRC verifies the licensees' compliance with these requirements by performing a subsequent inspection. The NRC inspected the non-destructive testing and repair activities associated with indications of a small leak that was observed from a reactor head penetration (N7B flange) during the plant operational pressure test. In this case, the NRC inspector verified that the repair, the welding activities, and applicable non-destructive examination activities were completed successfully in accordance with American Society of Mechanical Engineers Code requirements. Based on our inspections, the NRC is confident that the flaws identified in the Oyster Creek reactor coolant system have been repaired successfully, and that the reactor coolant system is not weakened or compromised. These conclusions are documented in the agency's publicly available inspection report, which is enclosed for your reference.

I appreciate the opportunity to address your concerns regarding the impacts of Hurricane Sandy at Oyster Creek. If you have any additional questions, please contact me or Ms. Rebecca Schmidt, Director of the Office of Congressional Affairs, at (301) 415-1776.

Sincerely,

/RA/

Allison M. Macfarlane

Enclosure:
As stated