May 20, 2016

ADAMS Accession No: 16141B253

Betty and Charlie Shank

Betty and Charlie,

I am responding to questions that were asked in your May 3, 2016, letter to me.

The first three questions are in reference to a fire in a breaker cubicle on April 5, 2015, which is documented in an inspection report available in the NRC's ADAMS database at Accession no. ML15307A386. The fire was in an electrical breaker that provides power to the High Pressure Coolant Injection (HPCI) condensate pump. That breaker is located in a separate room from the HPCI pump and did not affect the operability or functionality of the pump itself. The NRC regulates the Limerick Generating Station, and does not operate or maintain the equipment on site. The licensee had not performed maintenance on the breaker cubicle in question because it was missing from their list of breaker cubicles that require cleaning. The licensee corrected this error and replaced the damaged components contained in the cubicle.

On whether there's a connection between NRC's regulatory oversight and this finding, NRC regulatory enforcement is based upon the Regulatory Oversight Process. Issues that the NRC determined to have very low safety significance and do not require traditional enforcement are non-cited violations that are Green. The NRC focuses its supplemental inspection and regulatory resources on issues that are greater than "very low safety significance". In 2015, Limerick received over 5300 hours of inspection and inspection related activity. This is a sufficient amount of inspection to ensure public health and safety.

You also asked several questions about the overflow of a backwash receiving tank on June 28, 2015. This issue is discussed in an integrated inspection report available at ADAMS Accession No. ML15307A386. The contamination was discovered when the workers were proceeding through the radiation monitors as they were exiting the Radiologically Controlled Area (RCA). The Backwash Receiving Tank and its overflow are located with the RCA. Each worker that enters the RCA wears electronic dosimetry to track exposure to radiation, and each worker is monitored for contamination by two portal radiation monitors as they exit the RCA. Decontamination of the individuals commenced immediately upon discovery of the contamination, and ended when they removed their shoes. There was no skin contamination of either person, and the additional dose to the individuals was less than 10 mrem each.

As a result of this tank overflow and subsequent decontamination of portions of the RCA, there was no radiation released into the Schuylkill River or into the air. All air that leaves the RCA passes through air filters prior to leaving the building and entering the atmosphere. There were no high airborne radiation alarms due to the spill, even inside of the RCA. All water that is captured in the RCA drains goes through a filtering process and is retained onsite and reused in plant processes. Any releases to the river are closely monitored and must comply with the operating license.

Exelon concluded that the lack of an adequate procedure for the control of backwashing operations was the probable cause of the overflow. The company was not aware of the small volume between the tank high level alarm and the tank overflow, as this evolution had been successfully completed many times in the past. Personnel took action when the alarm was received, but in this case it was too late to prevent the tank overflow.

The next set of questions are related to a dry storage cask that was loaded and located on the refuel floor. On July 8, water was inadvertently drained from the cask, resulting in increased radiation levels on the refuel floor. Details of the NRC finding related to the cask draining are documented in an integrated inspection report ADAMS Accession No. ML15307A386.

The RP technician was performing a survey of the cask on the refuel floor using a radiation meter and noticed an increase in the dose rates in the vicinity of the cask. Water that drained from the cask travelled through a hose to a drain located on the refuel floor. The drain tank that captured the water is designed to handle radioactive water.

Decontamination of the cask was performed following loading of the cask in the spent fuel pool, where the cask is submerged in order to load fuel bundles into the cask. No personnel were contaminated during the inadvertent draining, and no radiation was released into the Schuylkill River or into the air. The drain that captured the water was not clogged.

You then asked several questions about the Unit 1 and Unit 2 cooling tower lights being out during 2015. Questions related to cooling tower lights were answered in an email response to ACE, delivered on November 30, 2015. As we explained, the NRC does not inspect or regulate the aircraft warning lights located on top of the Limerick cooling towers. Exelon reported the warning light outages to the FAA, as required.

You asked why NRC had not required a Limerick-specific seismic study in response to the Fukushima earthquake. We did require all plants to conduct a seismic hazards analysis. The results of the Limerick Seismic Hazard and Screening Report are contained in a document located in ADAMS Accession No. ML14090A236

You asked about the elimination of filters. We're assuming you're referring to filtered containment vents in this question. The Commission determined it was not necessary to complete a rulemaking that would have required filtered vents at boiling water reactors because it would not provide a substantial safety benefit.

Finally, regarding high burn-up fuel, as we've explained previously, we cannot provide information on whether high burn up fuel has been used at Limerick as that is considered security-related information. Answers to similar questions from ACE were addressed in two previous responses to ACE. They're available in ADAMS at Accession No. ML13346A734 and ML13301A756.

Should you have any further questions, I'd be happy to discuss those with you at the Monday's open house.
Sincerely,

Daniel Schroeder
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