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May 24, 2016

Mr. John Goshen, P.E. Project Manager
Spent Fuel Licensing Branch
Division of Spent Fuel Management
Office of Nuclear Material Safety & Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Subject: Maine Yankee Exemption Request - CAC No. L25110

Dear Mr. Goshen:

In a letter dated April 14, 2016, Maine Yankee submitted an exemption request from one of their Technical Specification surveillances. It is our understanding the request was on a very specific exemption from a one-time requirement on measuring the concrete cask average surface radiation dose rate when the casks were first loaded onto the concrete pads in the ISFSI. Initially, Maine Yankee performed the requirement under Amendment Number 2 of the NRC's Certificate of Compliance (CoC) for the casks, which required the surface radiation measurements to be performed during loading operations but prior to commencing storage operations. In 2011 in order to maintain current with the cask manufacturer's requirements Maine Yankee adopted Amendment Number 5 to the NRC's CoC. Unbeknownst to Maine Yankee the upgrade now required that the radiation surface measurements be performed during storage operations. Since Maine Yankee was now in storage operations, the question becomes how Maine Yankee will meet this radiation Tech Spec requirement of off-loading all the spent fuel assemblies from a storage cask within 30 days if the average surface dose rates exceeded the Tech Spec.

According to Maine Yankee, with the casks in storage for over ten years with declining surface radiation dose rates and spent fuel heat loads, there appeared to be no credible events that could trigger the Tech Spec requirement, unless there was a beyond design basis accident. In such a very unlikely event where the concrete cask was compromised so that surface dose rates exceeded the Tech Spec requirement, Maine Yankee could be compelled by their Tech Spec to remove all the fuel assemblies from the cask within 30 days.

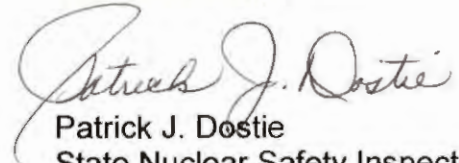
The State finds the intent somewhat misplaced. It appears to the State that the applicability of this Tech Spec requirement was to ensure that when a cask was first loaded onto a pad in the ISFSI, the surface dose rates would be below the maximum dose rates calculated in the Final Safety Analysis Report (FSAR). If so, then the Certificate Holder could ensure that the 25 mrem/year requirement and the design basis accident dose limits would be met at the border of the owner controlled area. If not, then the cask would be brought back and the contents rearranged to ensure that the new loading pattern would meet the Tech Spec requirement.

The State also noted that the FSAR computed a maximum surface dose rate under the assumption that several inches of concrete were lost from the entire outer surface of the concrete cask. The State would presume under these circumstances that the average dose rates would more than likely exceed the Tech Spec requirement. It would seem more appropriate for the licensee to take other measures within the same time frame such as shielding to lower the dose consequences to within acceptable levels as opposed to off-loading an entire cask. However, if, as Maine Yankee postulates, a "beyond" design basis accident would be required to exceed the surface dose rates and also the dose criterion at the boundary of the controlled area, the State would assume that the licensee would be facing a much greater problem to deal with than trying to meet a Tech Spec requirement to off-load a cask.

Since Maine Yankee was decommissioned in 2005, it currently has no means to safely remove the spent fuel, transfer it and place it into a safe condition. The State is concerned with the well-being of all its citizens including the workers at the Wiscasset facility. Because the State believes that the intent of the Tech Spec was to ensure that the surface dose rates were within established criteria to meet the NRC's regulatory dose requirements when placed on the ISFSI pads, therefore, the State is supportive of Maine Yankee's exemption request to allow them to return to their original Tech Spec under the CoC's Amendment Number 2 to conform to their original loading specifications.

Should you have any questions, please contact me at 207-287-6721 or via e-mail at pat.dostie@maine.gov.

Yours Sincerely,

A handwritten signature in dark ink, appearing to read "Patrick J. Dostie", is written over a light blue horizontal line.

Patrick J. Dostie
State Nuclear Safety Inspector

cc: Mr. Jay Hyland, P.E., Manager, Maine Radiation Control Program
Mr. J. Stanley Brown, Maine Yankee ISFSI Manager