

MAINE YANKEE

321 Old Ferry Road, Wiscasset, Maine 04578

April 1, 2022
OMY-22-006
Re: 10 CFR 50.59(d)(2)
10 CFR 50.4

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Maine Yankee Atomic Power Company
Maine Yankee Independent Spent Fuel Storage Installation
NRC License No. DPR-36 (NRC Docket No. 50-309) - 72-030

Subject: 10 CFR 50.59 Biennial Report

In accordance with 10 CFR 50.59(d)(2), Maine Yankee Atomic Power Company (Maine Yankee) is required to submit to the NRC a brief description of any changes, tests or experiments made pursuant to 10 CFR 50.59(c), including a summary of the evaluation of each. This report covers the period from April 1, 2020 to March 31, 2022. During this time frame, a 10 CFR 50.59 Evaluation was conducted pursuant to 10 CFR 50.59(c). The following is a summary of that evaluation:

50.59 Evaluation # 20-01

The impact of concrete spalling damage in unreinforced concrete in a triangular area below the lower chamfer of the NAC-UMS Vertical Concrete Casks (VCCs) storing Greater than Class C (GTCC) waste at the Maine Yankee Independent Spent Fuel Storage installation was assessed. The loss of the unreinforced triangular cross-sectional area of concrete below the lower VCC chamfer due to spalling was determined to be acceptable. This material serves no role in ensuring that the VCC provides structural support to the transportable storage canister. Its installation is simply a good construction practice to leave no sharp corners. The Maine Yankee Defueled Safety Analysis Report (DSAR) does not specifically discuss the chamfered corner of the VCC, nor does it include an analysis of failure of a VCC storing GTCC waste to provide adequate shielding. The radiation doses during storage operations are monitored in accordance with the Maine Yankee radiation protection program to ensure compliance with the applicable occupational and public dose limits. Based on the above, the removal of this unreinforced concrete in the triangular area below the lower VCC chamfer did not:

- Result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the DSAR.
- Result in more than a minimal increase in the likelihood of occurrence of a malfunction of an SSC important to safety previously evaluated in the DSAR.
- Result in more than a minimal increase in the consequences of an accident previously evaluated in the DSAR.
- Result in more than a minimal increase in the consequences of a malfunction of an SSC important to safety previously evaluated in the DSAR.

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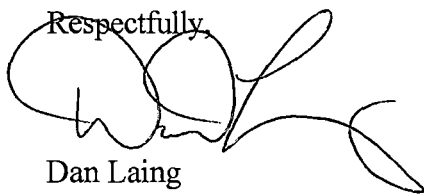
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- Create a possibility for an accident of a different type than any previously evaluated in the DSAR.
- Create a possibility for a malfunction of an SSC important to safety with a different result than any previously evaluated in the DSAR.
- Result in a design basis limit for a fission product barrier as described in the DSAR being exceeded or altered.
- Result in a departure from a method of evaluation described in the DSAR used in establishing the design bases or in the safety analyses.

This letter contains no commitments.

If you have any questions regarding this submittal, please do not hesitate to contact me at (207) 882-1303.

Respectfully,

A handwritten signature in black ink, appearing to read 'Dan Laing', with a large, stylized flourish extending to the right.

Dan Laing
ISFSI Manager

cc: D. Lew, NRC Region I Administrator
A. Dimitriadis, Chief, Decommissioning Branch, NRC, Region 1
Y. Diaz-Sanabria, Chief, Division of Fuel Management, Storage and Transportation
Licensing Branch
J. Hyland, State of Maine, Manager Radiation Control Program