

October 7, 2014

Mr. Ray Fernald, Manager  
Environmental Services Section  
Virginia Department of Game and Inland Fisheries  
4010 W Broad Street  
Richmond VA, 23230

SUBJECT: PRELIMINARY DETERMINATION OF NO EFFECTS REGARDING  
RESOURCES FOR THE NORTH ANNA POWER STATION INDEPENDENT  
SPENT FUEL STORAGE INSTALLATION LICENSE AMENDMENT REQUEST  
REGARDING CHANGES TO TECHNICAL SPECIFICATIONS 4.2.3. "STORAGE  
PAD"

Dear Mr. Fernald:

The United States Nuclear Regulatory Commission (NRC) has received, by letter dated June 9, 2014, an application from the Virginia Electric and Power Company (Dominion) to amend Materials License Number SNM-2507 for the North Anna Power Station (NAPS) Independent Spent Fuel Storage Installation (ISFSI). NAPS is requesting that its license be amended to change the ISFSI Technical Specifications (TS) 4.2.3, "Storage Pad." This change would allow the storage casks to be spaced not closer than 14 feet center to center rather than the currently specified spacing of nominally 16 feet apart center to center.

Dominion is licensed to receive, store, and transfer spent fuel from NAPS Units 1 and 2. The NAPS ISFSI is located within the site boundary of the North Anna Power Station, in Louisa County, Virginia approximately 40 miles north-northwest of Richmond, VA. Following the August 23, 2011, seismic event in Virginia, inspections found that some of the storage casks in the ISFSI had shifted resulting in a center to center spacing range from 15 feet 2.25 inches to 16 feet 11.25 inches. Therefore, the spacing between some of the storage casks might not meet the intent of the nominal spacing requirement in TS 4.2.3, "Storage Pad."

Both, the NRC and Dominion conducted inspections of the ISFSI to ensure no immediate threat to the health and safety of the public. Following the seismic event, NAPS conducted thermal analyses that showed the affected casks, which had heat loads less than 27.1 kW, continued to meet thermal requirements with center-to-center spacing as close as 14 feet. Therefore, the licensee is requesting that rather than moving the affected casks back to their pre-earthquake location, they be allowed to remain in their current location and with the current spacing. If approved by the NRC, the licensee would modify TS 4.2.3, "Storage Pad," to define the minimum allowable center to center spacing to 14 feet for storage casks with heat loads no greater than 27.1 kW. For casks with heat loads in excess of 27.1 kW, the current minimum 16 feet spacing requirement will be maintained.

Dominion anticipates no new construction at the existing NAPS ISFSI facility or changes to routine operations due to this amendment request. Therefore, no land disturbances are expected if NRC's approves Dominion's license amendment request.

As established in Title 10 *Code of Federal Regulations* Part 51 (10 CFR 51), the NRC regulation that implements the National Environmental Policy Act of 1969, as amended, the agency is preparing an Environmental Assessment (EA) for the proposed action. In support of the environmental review, the NRC is requesting concurrence from Virginia Department of Game and Inland Fisheries on NRC's preliminary determination that the proposed amendment to the TS 4.2.3, "Storage Pad," will not affect local environmental resource areas. This determination is based on the following information.

With respect to the original issuance of the North Anna ISFSI license, the NRC staff analyzed the potential environmental impacts associated with construction and operation of the ISFSI. The staff's assessment was documented in an EA, dated March 1997 (ADAMS Accession No. ML123480192). In this EA, the staff determined that the construction and operation of the ISFSI would not result in a significant disturbance to the ecological system in the area.

The current proposed action is a license amendment request that, if approved by the NRC, would revise the minimum allowable center to center spacing to 14 feet for storage casks with heat loads no greater than 27.1 kW and, thus, allow the affected storage casks to remain in their current location. No changes to routine operations would be associated with the proposed license amendment. No new construction activities or land disturbances would be expected. In addition, no radioactive gaseous or liquid effluents are released from, nor is solid waste generated at, the ISFSI during operation. No changes in the types, characteristics, or quantities of radiological or non-radiological effluents or solid waste are expected as a result of the license amendment. Dominion also anticipates no changes in radiological dose impacts to workers or the public, as a result of the license amendment.

The NAPS ISFSI amendment application is publicly available in the NRC Public Document Room located at One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852, or from the NRC's Agencywide Documents Access and Management System (ADAMS). The ADAMS Public Electronic Reading Room is accessible at <http://www.nrc.gov/reading-rm/adams.html>. The accession number for the application package is ML14160A707.

R. Fernald

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Please submit any comments/information that you may have regarding this environmental review within 30 days of the receipt of this letter to the NRC, ATTN: Ms. Lydia Chang, Mail Stop T-8F05, Washington, DC 20555. If you have any questions, please contact Ms. Jean Trefethen of my staff by telephone at 301-415-0867 or by email at [Jean.Trefethen@nrc.gov](mailto:Jean.Trefethen@nrc.gov). Thank you for your assistance.

Sincerely,

**/RA/**

Lydia Chang, Chief  
Environmental Review Branch  
Division of Fuel Cycle Safety, Safeguards  
and Environmental Review  
Office of Nuclear Material Safety  
and Safeguards

Docket No.: 72-16

License No.: SNM-2507

R. Fernald

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Sincerely,

/RA/  
Lydia Chang, Chief  
Environmental Review Branch  
Division of Fuel Cycle Safety, Safeguards  
and Environmental Review  
Office of Nuclear Material Safety  
and Safeguards

Docket No.: 72-16  
License No.: SNM-2507

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