

**NUCLEAR REGULATORY COMMISSION**

**[Docket Nos. 72-1014, 72-59, and 50-271; NRC-2017-0134]**

**Entergy Nuclear Operations, Inc.;**  
**Vermont Yankee Nuclear Power Station,**  
**Independent Spent Fuel Storage Installation**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Environmental assessment and finding of no significant impact; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is considering an exemption request from Entergy Nuclear Operations, Inc. (Entergy) to allow the Vermont Yankee Nuclear Power Station (VYNPS) to load higher enriched fuel assemblies with certain lower enriched fuel assemblies in the same HI-STORM 100 multi-purpose canister (MPC) using Certificate of Compliance (CoC) No. 1014, Amendment No. 10. The NRC prepared an environmental assessment (EA) documenting its finding. The NRC concluded that the proposed action would have no significant environmental impact. Accordingly, the NRC staff is issuing a finding of no significant impact (FONSI) associated with the proposed exemption.

**DATES:** The EA and FONSI referenced in this document are available on June 6, 2017.

**ADDRESSES:** Please refer to Docket ID **NRC-2017-0134** when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2017-0134**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**  
You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that a document is referenced.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

**FOR FURTHER INFORMATION CONTACT:** Yen-Ju Chen, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555; telephone: 301-415-1018; e-mail: [Yen-ju.Chen@nrc.gov](mailto:Yen-ju.Chen@nrc.gov).

## **SUPPLEMENTARY INFORMATION:**

### **I. Introduction**

The NRC is reviewing an exemption request from Entergy, dated November 9, 2016 (ADAMS Accession No. ML16319A102), and supplemented by letter dated January 9, 2017

(ADAMS Accession No. ML17010A300). Entergy is requesting an exemption from the requirements of title 10 of the *Code of Federal Regulations* (10 CFR) sections 72.212(a)(2), 72.212(b)(3), 72.212(b)(5)(i), 72.214, and the portion of section 72.212(b)(11) that requires compliance with the terms, conditions, and specifications of the CoC No. 1014, for spent fuel storage at the VYNPS independent spent fuel storage installation (ISFSI).

Specifically, Entergy requested an exemption from Appendix B, Table 2.1-3, Note 19 of Amendment No. 10 to CoC No. 1014, therefore allowing certain lower enriched channeled fuel assemblies classified as “undamaged” per the CoC to be loaded with higher enriched fuel assemblies in the same MPC.

## **II. Environmental Assessment Summary**

Under the requirements of 10 CFR 51.21 and 51.30(a), the NRC staff developed a draft EA (ADAMS Accession No. ML16343A859) to evaluate the proposed Federal action, which is for the NRC to grant an exemption to Entergy to allow storing certain lower enriched fuel assemblies with higher enriched fuel assemblies in a HI-STORM 100 MPC at the VYNPS site.

The EA defines the NRC’s proposed action (i.e., to grant Entergy’s exemption request per 10 CFR 72.7) and the purpose of and need for the proposed action. Evaluations of the potential environmental impacts of the proposed action and alternatives to the proposed action are presented, followed by the NRC’s conclusion.

This EA evaluates the potential environmental impacts of granting the exemption to allow loading of higher enriched fuel assemblies with certain lower enriched fuel assemblies in a HI-STORM 100 MPC at the VYNPS ISFSI. The potential environmental impact of using NRC-approved storage casks was initially analyzed in the EA for the rulemaking to provide for the storage of spent fuel under a general license on July 18, 1990 (55 *FR* 29181). The EA for using

the HI-STORM 100, Amendment No. 10, cask system (81 *FR* 13265) tiers off of the EA for the 1990 final rule.

There is no change to the types or quantities of effluents that may be released offsite, and there is no increase in occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed action. There is no change to the non-radiological effluents. The proposed action will take place within the site boundary, and does not have other environmental impacts. Therefore, the proposed action will not have a significant effect on the quality of the human environment. Therefore, the environmental impacts of the proposed action are no greater than those described in the EA for the rulemaking to add the HI-STORM 100, Amendment No. 10, cask system to 10 CFR 72.214.

### **III. Finding of No Significant Impact**

The NRC staff has prepared an EA and associated FONSI in support of the proposed action. The NRC staff has concluded that the proposed action, for the NRC to grant an exemption, allowing the loading of certain lower enriched fuel assemblies with higher enriched fuel assemblies in the same HI-STORM 100 MPC, will not significantly impact the quality of the human environment, and that the proposed action is the preferred alternative. The environmental impacts are bounded by the previous NRC EA for the rulemaking to add the HI-STORM 100, Amendment No. 10, cask system to 10 CFR 72.214.

The NRC provided the Vermont Department of Health (VDOH) with a draft copy of the EA for a 30-day review on February 7, 2017 (ADAMS Accession No. ML17038A468). On March 16, 2017, the VDOH provided its comments (ADAMS Accession No. ML17080A475). The NRC staff responded to VDOH's comments on May 23, 2017 (ADAMS Accession No. ML17144A045). The NRC did not make changes to this EA as a result of VDOH's comments;

however, the NRC will consider the VDOH's comments during the preparation of the safety evaluation report.

The NRC staff informed the Vermont State Historic Preservation Office (SHPO) of the NRC's "no effects" determination by letter dated February 9, 2017 (ADAMS Accession No. ML17040A337). The Vermont SHPO concurred on the NRC's determination by e-mail on February 24, 2017 (ADAMS Accession Package No. ML17055A594, including ADAMS Accession Nos. ML17055A626 and ML17055A636). The staff reviewed the updated listings of endangered species and critical habitats, and no changes were identified since the staff's review in 2007 (ADAMS Accession Nos. ML072050012 and ML072050013).

The NRC staff has determined that this exemption would have no impact on historic and cultural resources or ecological resources, and therefore no consultations are necessary under Section 106 of the National Historic Preservation Act and Section 7 of the Endangered Species Act.

Therefore, the NRC finds that there are no significant environmental impacts from the proposed action, and that preparation of an environmental impact statement is not warranted. Accordingly, the NRC has determined that a FONSI is appropriate.

Dated at Rockville, Maryland, this 25<sup>th</sup> day of May, 2017.

For the Nuclear Regulatory Commission.

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