

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. (ENO) to allow the Vermont Yankee Nuclear Power Station (VYNPS) to use a new regionalized loading pattern, load fuel that has been cooled for at least 2 years, and establish a per-cell maximum average burnup limit at 65,000 megawatt days per metric ton of uranium (MWD/MTU) in HI-STORM 100 multi-purpose canister (MPC)-68M 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 January 23, 2018.

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. 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. 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; email: Yen-ju.Chen@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction

The NRC is reviewing an exemption request from ENO, dated May 16, 2017 (ADAMS Accession No. ML17142A358), and supplemented by letters dated September 7, 2017 (ADAMS Accession No. ML17255A236) and December 7, 2017 (ADAMS Accession No. ML17346A685). ENO is requesting an exemption from the requirements of title 10 of the *Code of Federal Regulations* (10 CFR) §§ 72.212(a)(2), 72.212(b)(3), 72.212(b)(5)(i), 72.214, and the portion of 72.212(b)(11) that requires compliance with the terms, conditions, and specifications of the Certificate of Compliance (CoC) No. 1014, for spent fuel storage at the VYNPS independent spent fuel storage installation (ISFSI).

Specifically, ENO is requesting an exemption from certain requirements in Amendment No. 10 of the Holtec International (Holtec) CoC No. 1014 for the HI-STORM 100 Cask System (ADAMS Accession No. ML16144A177) to allow VYNPS to use a new regionalized loading pattern as described in Figure 2.4-1 of the exemption request, to load fuel that has been cooled for at least 2 years, and to establish a per-cell maximum average burnup limit at 65,000 megawatt days per metric ton of uranium (MWD/MTU) in a HI-STORM 100 MPC-68M canister. This would allow VYNPS to load fuel assemblies which have not been cooled for at least 3 years, as approved in the current CoC, but have been cooled for 2 years, into the MPC-68M.

II. Environmental Assessment Summary

Under the requirements of §§ 51.21 and 51.30(a), the NRC staff developed an EA (ADAMS Accession No. ML17249A160) to evaluate the proposed action, which is for the NRC to grant an exemption to ENO to allow the use of a new regionalized loading pattern as described in Figure 2.4-1 of the exemption request, to load fuel that has been cooled for at least 2 years, and to establish a per-cell maximum average burnup limit at 65,000 MWD/MTU in a HI-STORM 100 MPC-68M at the VYNPS site.

The EA defines the NRC's proposed action (i.e., to grant ENO'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 the use of a new regionalized loading pattern as described in Figure 2.4-1 of the exemption request, loading fuel that has been cooled for at least 2 years, and establishing a per-cell maximum average burnup limit at 65,000 MWD/MTU in a HI-STORM 100 MPC-68M at the VYNPS site. 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.

NRC staff finds that this exemption request is bounded by CoC No. 1014, Amendment No. 10, and that there will be no significant environmental impacts of the proposed action. The proposed action does not change the types or quantities of effluents that may be released offsite, and it does not increase 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. Thus, 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 the exemption requested for VYNPS, allowing the use of a new regionalized loading pattern as described in Figure 2.4-1 of the exemption request, and to load fuel that has been cooled for at least 2 years, and establishing a per-cell maximum average burnup limit at 65,000 MWD/MTU in a HI-STORM 100 MPC-68M, 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 with a draft copy of the EA for a 30-day review on October 16, 2017 (ADAMS Accession No. ML17289A422).

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 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act, respectively.

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 16th day of January, 2018.

For the Nuclear Regulatory Commission.

/RA/

Meraj Rahimi, Acting Chief,
Spent Fuel Licensing Branch,
Division of Spent Fuel Management,
Office of Nuclear Material Safety
and Safeguards.

SUBJECT: FEDERAL REGISTER NOTICE: NOTICE OF AVAILABILITY OF ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT FOR ENTERGY NUCLEAR OPERATIONS, INC., VERMONT YANKEE NUCLEAR POWER STATION, INDEPENDENT SPENT FUEL STORAGE INSTALLATION EXEMPTION REQUEST, DOCUMENT DATE: January 16, 2018

ADAMS Accession: ML17249A244

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