



[7590-01-P]

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-271; NRC-2015-0157]

Entergy Nuclear Operations, Inc.; Vermont Yankee Nuclear Power Station

AGENCY: Nuclear Regulatory Commission.

ACTION: Final environmental assessment and finding of no significant impact; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing a final environmental assessment (EA) and finding of no significant impact (FONSI) regarding the issuance of two exemptions in response to a January 6, 2015 request from Entergy Nuclear Operations, Inc. (Entergy or the licensee), on behalf of the owners of the Vermont Yankee Nuclear Power Station (VY). The exemptions allow the licensee to use funds from the VY decommissioning trust fund (the Trust) for irradiated fuel management activities.

DATES: The EA and FONSI referenced in this documents are available on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Please refer to Docket ID **NRC-2015-0157** 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-2015-0157**. 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 (if it is available in ADAMS) is provided the first time that it is mentioned in this document.

- **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: Jack D. Parrott, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-6634; e-mail: Jack.Parrott@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction

On June 23, 2015 (80 FR 35992), the NRC issued exemptions from sections 50.82(a)(8)(i)(A) and 50.75(h)(1)(iv) of title 10 of the *Code of Federal Regulations* (10 CFR) to Entergy, for VY's Renewed Facility Operating License No. DPR-28. The VY facility is located in Windham County, Vermont. The licensee requested the exemptions by letter dated January 6, 2015 (ADAMS Accession No. ML15013A171). The exemptions allow the licensee to use funds from the Trust for irradiated fuel management activities, in the similar manner that funds from the Trust are used under 10 CFR 50.82(a)(8) for decommissioning activities. As explained below, although the exemptions also exempted VY from the regulatory requirement for prior notification to the NRC of disbursements from the Trust for irradiated fuel management activities, the licensee is still required to provide such prior notification to the NRC because of a separate requirement in the VY Renewed Facility Operating License.

At the time of issuance, the NRC's approval of the exemptions referenced the categorical exclusion criteria under 10 CFR 51.22(c)(25). However, on November 4, 2015, the State of Vermont, the Vermont Yankee Nuclear Power Corporation, and Green Mountain Power Corporation (together, Petitioners) filed a petition (ADAMS Accession No. ML16137A554) with the Commission that, in part, challenged the NRC staff's use of a categorical exclusion in granting the exemption request. The Commission, in their October 27, 2016 decision on the petition (ADAMS Accession No. ML16301A083), found that the exemptions were ineligible for a categorical exclusion under the National Environmental Policy Act (NEPA), and directed the staff to conduct an EA to examine the environmental impacts, if any, associated with the exemptions. Therefore,

consistent with Commission direction and with 10 CFR 51.21, the NRC prepared a draft EA to document its environmental review for the exemption request, and published the draft EA for comment on March 8, 2017 (82 FR 13015). Comments were received from the Petitioners on April 7, 2017 (ADAMS Accession No. ML17107A145). After consideration of those comments, the staff has prepared this final EA. Based on the results of this final EA, the NRC has determined that it is not necessary to prepare an environmental impact statement and is therefore issuing this final FONSI.

II. Final Environmental Assessment

Description of the Action

The exemptions requested by Entergy on January 6, 2015, and granted by the NRC on June 23, 2015, exempt Entergy from the requirements set forth in 10 CFR 50.82(a)(8)(i)(A) and 50.75(h)(1)(iv). Specifically, the exemptions allow Entergy to use funds from the Trust for irradiated fuel management activities, not associated with radiological decommissioning.

Need for the Action

By letter dated January 12, 2015 (ADAMS Accession No. ML15013A426), Entergy informed the NRC that it had permanently ceased power operations at VY and that the VY reactor vessel had been permanently defueled.

In its January 6, 2015 exemption request, Entergy stated that it needed access to the funds in the Trust, in excess of those funds needed for radiological decommissioning, to support irradiated fuel management activities not associated with

radiological decommissioning. As required by 10 CFR 50.82(a)(8)(i)(A), decommissioning trust funds may be used by a licensee if the withdrawals are for expenses for legitimate decommissioning activities consistent with the definition of decommissioning in 10 CFR 50.2. This definition addresses radiological decommissioning and does not include activities associated with irradiated fuel management. Similarly, the requirements of 10 CFR 50.75(h)(1)(iv) restrict decommissioning trust fund disbursements (other than for payments of ordinary administrative costs and incidental expenses of the fund) to decommissioning expenses until final decommissioning has been completed. Therefore, Entergy needed exemptions from 10 CFR 50.82(a)(8)(i)(A) and 50.75(h)(1)(iv) to allow the use of funds from the Trust for irradiated fuel management activities.

Environmental Impacts of the Action

The exemptions are of a financial nature and allow Entergy to use funds from the Trust to pay for irradiated fuel management activities. The exemptions do not authorize any additional regulatory or land-disturbing activities, but do allow Entergy to finance irradiated fuel management activities, which support decommissioning.

In granting the exemptions, the NRC staff performed an independent analysis of the Trust and confirmed that the existing funds, planned future contributions, and projected earnings of the Trust provide reasonable assurance of adequate funding to complete all NRC required decommissioning activities and to conduct irradiated fuel management. Consequently, the staff concluded that application of the requirements that funds from the Trust only be used for decommissioning activities and not for

irradiated fuel management was not necessary to provide reasonable assurance that adequate funds will be available for the radiological decommissioning of VY.

The staff conclusion is also supported by the fact that the licensee has a comprehensive, regulation-based decommissioning funding oversight program to provide reasonable assurance that sufficient funding will be available for the radiological decommissioning of VY. After submitting its site-specific Decommissioning Cost Estimate as required by 10 CFR 50.82(a)(8)(iii), and until completing its final radiation survey and demonstrating that residual radioactivity has been reduced to a level that permits termination of its license as required by 10 CFR 50.82(a)(11), the licensee is required by 10 CFR 50.82(a)(8)(v) to annually submit to the NRC a financial assurance status report. The report must include, among other things, amounts spent on decommissioning, the remaining Trust balance, and estimated costs to complete radiological decommissioning. If the remaining Trust balance, plus earnings on such funds calculated at not greater than a 2 percent real rate of return, plus any other financial assurance methods being relied upon, does not cover the estimated costs to complete radiological decommissioning, 10 CFR 50.82(a)(8)(vi) requires that additional financial assurance to cover the estimated costs to complete radiological decommissioning must be provided. These annual reports provide a means for the NRC to monitor the adequacy of the funding available for the radiological decommissioning of VY notwithstanding the exemptions allowing Entergy to use funds from the Trust for irradiated fuel management activities.

Entergy also requested an exemption from the 10 CFR 50.75(h)(1)(iv) requirement that no disbursements may be made from the Trust until written notice of the intention to make the disbursement has been given to the NRC at least 30 working

days before the date of the intended disbursement, except that notification is not required after decommissioning has begun and withdrawals are made under 10 CFR 50.82(a)(8). The NRC granted this exemption. However, the granting of this exemption did not relieve Entergy from a requirement for prior notification of disbursements of funds from the Trust for irradiated fuel management activities because of additional language in the VY Renewed Facility Operating License and the VY Master Decommissioning Trust Agreement. Specifically, in accordance with the VY Renewed Facility Operating License (ADAMS Accession No. ML052720265), Condition 3.J.a.(iii), the decommissioning trust agreement must provide that no disbursements or payments from the Trust, other than for ordinary administrative expenses, shall be made by the trustee until the trustee has first given the NRC 30 days prior written notice of payment. Article IV, Section 4.05, of the VY Master Decommissioning Trust Agreement (ADAMS Accession No. ML15111A086), by and between Entergy Nuclear Vermont Yankee, LLC, and The Bank of New York Mellon as Trustee, provides that no disbursements or payments shall be made by the Trustee, other than administrative expenses, until the Trustee has first given the NRC 30 days prior written notice of payment. Although Entergy had submitted a September 4, 2014 license amendment request to delete License Condition 3.J.(a) and thus remove the prior notification requirement (ADAMS Accession No. ML14254A405), Entergy withdrew this license amendment request on September 22, 2015 (ADAMS Accession Nos. ML15267A074 and ML15265A583). Therefore, License Condition 3.J.a.(iii) remains in effect and, despite the granting of the exemptions, VY remains subject to a prior notification requirement. Similar to the annual financial assurance status reports, prior notifications provide a means for the NRC to monitor the adequacy of the funding available for the radiological decommissioning of

VY notwithstanding the exemptions allowing Entergy to use funds from the Trust for irradiated fuel management activities.

The environmental impacts of decommissioning have been generically evaluated by the NRC and documented in NUREG-0586, Supplement 1, Generic Environmental Impact Statement [GEIS] on Decommissioning of Nuclear Facilities (Decommissioning GEIS). Entergy's Post-Shutdown Decommissioning Activity Report (PSDAR) (ADAMS Accession No. ML14357A110) discussed that the impacts from the planned decommissioning activities at VY are less than and bounded by the impacts considered in the Decommissioning GEIS and NUREG-1496, Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities. The NRC staff found that the PSDAR contained the required information, including a discussion that provides the reasons for concluding that the environmental impacts associated with the decommissioning activities at VY will be bounded by previous analyses (ADAMS Accession No. ML15343A210).

The exemptions do not authorize Entergy to perform new land-disturbing activities that could affect land use, soils and geology, water resources, ecological resources, or historic and cultural resources. The exemptions do not authorize Entergy to conduct additional regulatory activities, outside those already licensed by the NRC; therefore, there are no incremental effects to air quality, traffic and transportation, socioeconomics, environmental justice, or accidents. The exemptions only change the source of funds allowed for irradiated fuel management activities. This will not increase the probability or consequences of accidents and, as a result of the exemptions, there are no changes in the types or amounts of effluents that are, or may be, released offsite. Entergy must continue to comply with all appropriate NRC regulations related to

occupational and public radiation exposure and thus the exemptions will not result in an increase to occupational or public doses. Finally, Entergy is required to maintain adequate funding for the radiological decommissioning of VY and to provide information regarding this funding to the NRC. Accordingly, the NRC concludes that there are no potential incremental environmental impacts as a result of the granted exemptions.

Environmental Impacts of the Alternatives to the Action

As an alternative to the action, the NRC staff could have denied Entergy's exemption request. Denial of the exemption request would have resulted in Entergy using funds from the Trust only for radiological decommissioning and not also for irradiated fuel management activities. The environmental impacts of this alternative would be substantively the same as the environmental impacts for granting the exemption request because there are no potential incremental environmental impacts as a result of granting the exemption request. Therefore, the environmental impacts of the alternative to the action would be the same as those already considered by the previous environmental analyses.

Alternative Use of Resources

The action does not involve the use of any different resources than those previously considered.

Agencies and Persons Consulted

The NRC issued for public comment a draft of the EA and FONSI in the Federal Register on March 8, 2017 (82 FR 13015). Comments were received from the

Petitioners on April 7, 2017 (ADAMS Accession No. ML17107A145).

Discussion of Comments

The NRC staff has summarized the Petitioners' comments and has responded to them below.

Petitioners comment 1. NRC staff's EA and FONSI fail to address numerous factors that trigger the need to prepare an Environmental Impact Statement (EIS). NRC should withdraw the EA and FONSI, and the approval of the exemption request granting approval to use the decommissioning trust fund for spent fuel management, and proceed to prepare an EIS that, among other things, addresses these comments and brings NRC's actions into compliance with NEPA.

NRC response. The NRC disagrees with this comment. The NRC has evaluated the environmental impacts of the exemptions in its EA and concluded that the exemptions did not, and will not, have a significant effect on the quality of the human environment. Accordingly, the NRC has decided not to prepare an EIS for the action and is issuing a FONSI. Therefore, the NRC staff will not withdraw the draft EA and FONSI to prepare an EIS nor will the NRC staff withdraw the approval of the exemption request. The staff's responses to the Petitioners' comments that the EA and FONSI fail to address numerous factors triggering the need to prepare an EIS are described below.

Petitioners comment 1.a. The sale of VY to NorthStar Nuclear Decommissioning Company, LLC (NorthStar), and its resulting changes to the plan, schedule, and cost estimate for decommissioning, is a reasonably foreseeable event that must be

considered in the EA. The NRC ignored the pending sale of VY to NorthStar, and that sale's resulting changes to the plan, schedule, and cost estimate for decommissioning VY.

NRC response. The NRC disagrees with this comment. The NRC is aware of the possible sale of VY to NorthStar, and that the sale may result in changes to the plan, schedule, and cost estimate for decommissioning. However, the NRC does not consider the sale reasonably foreseeable for purposes of this EA. The sale transaction is still pending regulatory review and approval by both the Vermont Public Service Board and the NRC. Pursuant to 10 CFR 50.80, the VY license may not be transferred, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the NRC gives its consent in writing. The license transfer request related to the pending sale of VY to NorthStar is currently under NRC review. For the NRC to evaluate the exemption request as if approval of the license transfer request were "reasonably foreseeable" would suggest that the NRC is inappropriately pre-judging the merits of the license transfer request that is still under the agency's review. Thus, the NRC does not consider it "reasonably foreseeable" that the license transfer request will be approved by the NRC and the Vermont Public Service Board. Accordingly, the NRC will not consider the possible sale of VY to NorthStar for purposes of this EA. Furthermore, pursuant to 10 CFR 50.33(k), the license transfer request is required to state information in the form of a report indicating how reasonable assurance will be provided that funds will be available to decommission the facility.

Petitioners comment 1.b. The EA fails to consider the reasonably foreseeable possibility of a shortfall in the Trust resulting from allowing \$225 million or more from the

Trust to be diverted to non-decommissioning expenses. By allowing \$225 million or more to be diverted from the Trust for non-decommissioning expenses, the NRC has greatly increased the chances of a shortfall in the Trust that could leave the site radiologically contaminated.

NRC response. The NRC disagrees with this comment. In its evaluation of the underlying exemption request (80 FR 35992), the NRC staff performed an independent analysis of the Trust and confirmed that the existing funds, planned future contributions, and projected earnings of the Trust provide reasonable assurance of adequate funding to complete all NRC required decommissioning activities and to conduct irradiated fuel management in accordance with the VY Irradiated Fuel Management Plan and PSDAR.

The NRC's regulations in 10 CFR 50.82 provide for the oversight of decommissioning funding until decommissioning is complete and the license is terminated. At all times, the licensee remains responsible to assure that sufficient funding remains available for decommissioning. Once a licensee has permanently ceased operations, it is required to report its decommissioning funding status on an annual basis. In these submittals, the licensee is required to report any differences between the estimated costs to decommission the site, and the amount of decommissioning funding available or anticipated at that time, including plans for making up any identified shortfalls. Independent of these submittals, the NRC staff will validate the licensee's reporting of this information and review the Trust status against any new information regarding radiological contamination at the site and the ability to meet the requirements for release of the site for unrestricted use. Any unanticipated Trust shortfalls must be covered by the licensee. Should the licensee fail to cover a shortfall, the NRC may pursue enforcement methods as determined to be appropriate.

Given the NRC's regulatory framework for decommissioning funding assurance and the NRC's reasonable assurance findings in its evaluation of the exemption request, the NRC does not consider a shortfall in the Trust resulting from the exemptions to be reasonably foreseeable. Therefore, the Petitioners' comments suggesting that the NRC has greatly increased the chances of a shortfall in the Trust that could leave the site radiologically contaminated are unsupported and speculative.

Petitioners comment 1.c. The EA fails to consider cumulative impacts resulting from all of the non-decommissioning expenses Entergy withdraws from the Trust. The EA looks only at one of Entergy's uses of the Trust for a non-decommissioning expense (spent fuel management). NRC staff simply provided conclusory statements supporting its position.

NRC response. The NRC disagrees with this comment. The EA appropriately considered all withdrawals from the decommissioning trust that would be permissible under the NRC's regulations and under the exemptions. Specifically, the EA considered withdrawals for decommissioning expenses, which are permitted by the NRC's regulations, and withdrawals for spent fuel management expenses, which are permitted by the exemptions. The EA did not consider withdrawals for any non-decommissioning expenses beyond spent fuel management expenses, because such withdrawals are prohibited by the NRC's regulations and are not allowed by the exemptions. In addition, this scope of the EA is appropriate because the NRC staff reviews the status of decommissioning funds annually during decommissioning to ensure that adequate funds for decommissioning are available and that withdrawals from the decommissioning fund are for approved purposes. Finally, the cumulative impacts of decommissioning were

considered in the Decommissioning GEIS. Therefore, the EA's consideration of impacts was appropriate.

Petitioners comment 1.d. The EA fails to consider reasonable alternatives. The only alternative that the NRC staff evaluated was denying Entergy's exemption request. The NRC staff failed to evaluate other alternatives, such as granting conditional approval.

NRC response. The NRC disagrees that the EA fails to consider reasonable alternatives. The exemptions at issue here allow Entergy to use funds from the Trust for the non-decommissioning expense of irradiated fuel management activities. This EA evaluates denying the exemption request as a reasonable alternative to the action of granting the exemption request. Consistent with the NRC's regulations, imposing conditions on a licensee is typically done through the license amendment process and not through the exemption process; therefore, the NRC disagrees that it should have also evaluated as a reasonable alternative granting conditional approval of the exemption request.

Petitioners comment 2. The publication of the EA after the relevant decision has already been made does not comply with NEPA's requirement that the analysis occur before a decision is made. The NRC approved the exemption request on June 23, 2015, but published the draft EA and FONSI for comment on March 8, 2017. The NRC staff relies on the Decommissioning Financial Status Report from March 30, 2015 to support the EA, when it had a more recent report from March 30, 2016.

NRC response. The NRC disagrees with this comment. In CLI-16-17, the

Commission directed the NRC staff “to conduct an environmental assessment to examine the environmental impacts, if any, associated with the exemption.” Although the Commission declined to reverse the staff’s approval of the exemption request, it specified that if the staff’s environmental review “results in a determination of significant impacts, the Staff should promptly notify [the Commission] and, at that time, [the Commission] may reconsider whether the exemption should be stayed or vacated.”

The March 30, 2015 Decommissioning Financial Status Report (ADAMS Accession No. ML15092A141) was not needed to support the EA and neither was the more recent report from March 30, 2016 (ADAMS Accession No. ML16090A355). The supporting analysis of the adequacy of the Trust to provide reasonable assurance of adequate funding to complete all NRC required decommissioning activities and to conduct irradiated fuel management is described in the June 23, 2015 Federal Register Notice of the issuance of the exemptions.

III. Finding of No Significant Impact

Entergy proposed exemptions from 10 CFR 50.82(a)(8)(i)(A) and 50.75(h)(1)(iv) to allow the licensee to use funds from the Trust for irradiated fuel management activities. The NRC granted the exemptions on June 23, 2015.

Consistent with 10 CFR 51.21, the NRC conducted the EA for the exemptions included in Section II of this document and incorporated by reference into this finding. On the basis of this EA, the NRC concludes that the exemptions did not, and will not, have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an EIS for the action.

Dated at Rockville, Maryland, this 19th day of December, 2017.

For the Nuclear Regulatory Commission.

Bruce Watson, Chief,
Reactor Decommissioning Branch
Division of Decommissioning, Uranium
Recovery and Waste Programs
Office of Nuclear Material Safety and
Safeguards