



[7590-01-P]

**NUCLEAR REGULATORY COMMISSION**

**[Docket No. 50-0271; NRC–2017–0125]**

**NorthStar Group Services, Inc.**

**Vermont Yankee Nuclear Power Station**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Exemption; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing an exemption in response to a May 25, 2018, request from NorthStar Group Services, Inc. (NorthStar), on behalf of Entergy Nuclear Vermont Yankee, LLC (ENVY, to be known as NorthStar Vermont Yankee, LLC or NorthStar VY following consummation of the license transfer described below). The exemption would allow NorthStar VY to use up to \$20 million in funds from the Vermont Yankee Nuclear Power Station (VY) nuclear decommissioning trust fund (NDT), on a revolving basis, for irradiated fuel management activities. By Order dated October 11, 2018, the NRC approved the request for the direct and indirect transfer of VY Renewed Facility Operating License No. DPR-28. This exemption is being issued simultaneously with the license transfer Order and will be effective upon the NRC's issuance of a conforming license amendment reflecting NorthStar VY and NorthStar NDC as the licensees for VY, following consummation of the license transfer transaction.

**ADDRESSES:** Please refer to Docket ID **NRC–2017–0125** 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–2017–0125**. Address questions about Docket IDs in Regulations.gov to Jennifer Borges; telephone: 301-287-9127; e-mail: [Jennifer.Borges@nrc.gov](mailto:Jennifer.Borges@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 “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 (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 Parrott, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-6634; e-mail: [Jack.Parrott@nrc.gov](mailto:Jack.Parrott@nrc.gov).

**SUPPLEMENTARY INFORMATION:**

**I. Background**

Vermont Yankee Nuclear Power Station is a single unit General Electric Mark-1 boiling water reactor (MWt 1,912) that was issued an operating license on

March 21, 1972. The facility is located in Vernon, Vermont. ENVY and Entergy Nuclear Operations, Inc. (ENOI), are the current holders of Renewed Facility Operating License No. DPR-28 for VY. VY has not operated since December 29, 2014. By letter dated January 12, 2015 (ADAMS Accession No. ML15013A426), in accordance with sections 50.82(a)(1)(i) and (ii) of title 10 of the *Code of Federal Regulations* (10 CFR), ENOI certified that VY had permanently ceased operations on December 29, 2014, and had permanently removed all fuel from the reactor vessel. Since January 12, 2015, ENVY and ENOI have been performing minor decommissioning activities while in SAFSTOR.

By letter dated February 9, 2017 (ADAMS Accession No. ML17045A140), ENOI, on behalf of itself and ENVY, and NorthStar Nuclear Decommissioning Company, LLC (NorthStar NDC), requested that the NRC consent to the proposed direct and indirect transfer of control of VY Renewed Facility Operating License No. DPR-28, and the Vermont Yankee Independent Spent Fuel Storage Installation (ISFSI) general license. The proposed license transfer would involve the indirect transfer of control of the VY licenses to NorthStar Decommissioning Holdings, LLC, and its parent companies, NorthStar, LVI Parent Corp. and NorthStar Group Holdings, LLC. Following the license transfer, the new licensees would be NorthStar VY and NorthStar NDC.

By letter dated April 6, 2017 (ADAMS Accession No. ML17096A394), NorthStar provided a revised Post Shutdown Decommissioning Activities Report (revised PSDAR). The NorthStar revised PSDAR reflected the immediate and accelerated decommissioning of VY by NorthStar VY and NorthStar NDC to be completed within a 7-year period after the proposed transfer is approved. The revised PSDAR also contained the most recent decommissioning cost estimate pursuant to 10 CFR 50.82, "Termination of license."

The proposed exemption would allow NorthStar VY to use up to \$20 million of funds on a revolving basis such that at any one time, up to \$20 million of the NDT could be used for irradiated fuel management. By Order dated October 11, 2018, the NRC approved the license transfer request (ADAMS Accession No. ML18242A638). This exemption is being issued simultaneously with the license transfer Order, and will only apply to NorthStar VY and NorthStar NDC following consummation of the license transfer transaction and NRC issuance of the conforming license amendment reflecting the transfer.

## **II. Request/Action**

By letter dated May 25, 2018 (ADAMS Accession No. ML18150A315), NorthStar, on behalf of ENVY (to be known as NorthStar VY after consummation of the license transfer), pursuant to 10 CFR 50.12, "Specific Exemptions," submitted a request for an exemption to 10 CFR 50.82(a)(8)(i)(A), that would allow Vermont Yankee decommissioning trust funds to be used for irradiated fuel management. As stated in 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. Therefore, NorthStar VY needs an exemption from 10 CFR 50.82(a)(8)(i)(A) to allow the use of funds from the NDT for irradiated fuel management activities.

NorthStar states that its cash flow analysis in Enclosure 1 of the application dated May 25, 2018, demonstrates that the NDT contains adequate funds to cover the estimated costs of radiological decommissioning and the additional funds for \$20 million

in irradiated fuel management activities that are covered by the exemption request. The adequacy of funds in the NDT to cover the costs of activities associated with radiological decommissioning and the additional funds for \$20 million in irradiated fuel management activities through license termination is supported by NorthStar's revised PSDAR. NorthStar states that application of the 10 CFR 50.82(a)(8)(i)(A) requirement restricting use of the trust fund is not necessary to ensure that adequate funds will be available for the radiological decommissioning of VY. NorthStar also states that a permanent repository for irradiated nuclear fuel currently does not exist. Therefore, NorthStar states it is faced with circumstances that were not explicitly contemplated by the existing regulations, because it will not be possible to fully decommission VY and terminate the license without first arranging for interim storage of spent nuclear fuel at an on-site ISFSI. For these reasons, NorthStar states that an exemption is needed to avoid unnecessary and undue costs to cover irradiated fuel management expenses from other sources.

### **III. Discussion**

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR part 50, (1) when the exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security; and (2) when any of the special circumstances listed in 10 CFR 50.12(a)(2) are present. These special circumstances include, among other things, the following:

(a) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule; or

(b) Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated.

**A. The Exemption is Authorized by Law**

The proposed exemption from 10 CFR 50.82(a)(8)(i)(A) would allow NorthStar VY to use \$20 million on a revolving basis from the NDT for irradiated fuel management, consistent with the revised PSDAR. As stated above, 10 CFR 50.12 allows the NRC to grant exemptions from the requirements of 10 CFR part 50 when the exemptions are authorized by law. The proposed exemption would not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the exemption is authorized by law.

**B. The Exemption Presents no Undue Risk to Public Health and Safety**

The underlying purpose of 10 CFR 50.82(a)(8)(i)(A) is to provide reasonable assurance that adequate funds will be available for radiological decommissioning of power reactors. Based on the staff's review of the applicant's site-specific cost estimate and the staff's independent cash flow analysis, provided as Attachment 1 to the NRC staff's Safety Evaluation of the associated License Transfer Request (ADAMS Accession No. ML18242A639), the NRC staff finds that use of \$20 million from the NDT, on a revolving basis, for irradiated fuel management activities will not adversely impact NorthStar VY and NorthStar NDC's ability to terminate the VY license (*i.e.*, complete radiological decommissioning) as planned, consistent with the schedule and costs contained in the revised PSDAR.

There are no new accident precursors created by using the decommissioning trust fund in the proposed manner. Thus, the probability of postulated accidents is not increased. Also, the consequences of postulated accidents are not increased. The exemption does not involve any significant changes to the types or amounts of effluents that may be released offsite as a result of site activities associated with radiological decommissioning and irradiated fuel management, only the potential funding sources for those activities would be impacted by the exemption. Similarly, there is no significant increase in occupational or public radiation exposure. This exemption does not diminish the effectiveness of other regulations that ensure available funding for decommissioning, including 10 CFR 50.82(a)(6) which prohibits licensees from performing any decommissioning activities that could foreclose release of the site for possible unrestricted use, result in significant environmental impacts not previously reviewed, or result in there no longer being reasonable assurance that adequate funds will be available for decommissioning. Therefore, the exemption will not present an undue risk to the public health and safety.

**C. The Exemption is Consistent with the Common Defense and Security**

The requested exemption would allow NorthStar VY to use funds from the NDT for irradiated fuel management. Irradiated fuel management under 10 CFR 50.54(bb) is an integral part of the planned VY decommissioning and final license termination process and will not adversely affect NorthStar VY and NorthStar NDC's ability to physically secure the site or protect special nuclear material. This change to enable the use of a portion of the funds from the NDT for activities other than decommissioning activities has no relation to security issues. Therefore, the common defense and security is not impacted by the requested exemption.

**D. Special Circumstances**

According to 10 CFR 50.12(a)(2), the NRC will not consider granting an exemption to its regulations unless special circumstances are present. Special circumstances, in accordance with 10 CFR 50.12(a)(2)(ii), are present whenever application of the regulation in the particular circumstances is not necessary to achieve the underlying purpose of the regulation.

The underlying purpose of 10 CFR 50.82(a)(8)(i)(A) is to provide reasonable assurance that adequate funds will be available for radiological decommissioning of power reactors. Strict application of the rule would prohibit withdrawal of funds from the NDT for activities associated with irradiated fuel management until final radiological decommissioning at VY has been completed. Based on the NRC staff's review of NorthStar's submittals, the staff has determined that the revised PSDAR demonstrates reasonable assurance exists that funds within the NDT, when combined with a \$140 million support agreement (ADAMS Accession No. ML18009A459), \$30 million escrow account (ADAMS Accession No. ML18143B484), and anticipated future United States

Department of Energy (DOE) reimbursements (ADAMS Accession No. ML17339A896), are in excess of the amount needed to cover the estimated costs of radiological decommissioning and irradiated fuel management. The NRC staff's conclusion is reflected in the independent cash flow analysis, provided as Attachment 1 to the NRC staff's Safety Evaluation of the License Transfer Request (ADAMS Accession No. ML18242A639), which considers the most conservative opening NDT balance in 2019 (\$488 million), as indicated in NorthStar's letter dated June 28, 2018 (ADAMS Accession No. ML18183A220). The staff's cash flow analysis projects that the NDT may contain approximately \$197 million at the end of license termination activities in 2053 (using a 2.0% real rate of return as indicated in the regulations) when the spent fuel is removed from the site and the ISFSI is decommissioned.

The NorthStar PSDAR reflected NorthStar VY and NorthStar NDC's intention to use the NDT for irradiated fuel management. In its application dated May 25, 2018, NorthStar states that use of NDT for irradiated fuel management costs will not exceed \$20 million at any given time, and proposes that this "not to exceed" limitation be applied on a revolving basis. NorthStar further states that if it returns funds to the NDT through its anticipated DOE reimbursements, this would reduce the amount deemed withdrawn under the cumulative \$20 million limitation.

Based on its review, the staff has determined that reasonable assurance exists that adequate funds will be available in the NDT to complete radiological decommissioning, license termination, and the irradiated fuel management activities within the scope of this exemption request.

Therefore, since the underlying purposes of the rule would be achieved while allowing NorthStar VY to use the NDT to fund the irradiated fuel management activities within the scope of the exemption, the special circumstances of 10 CFR 50.12(a)(2)(ii)

are present, provided that the amounts withdrawn are limited to a total of \$20 million at any given time.

Special circumstances, in accordance with 10 CFR 50.12(a)(2)(iii) are also present whenever compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated.

The NRC has stated that funding for irradiated fuel management may be commingled in the decommissioning trust provided the licensee is able to identify and account for the radiological decommissioning funds separately from the funds set aside for irradiated fuel management (see NRC Regulatory Issue Summary 2001-07, Rev 1, “10 CFR 50.75 Reporting and Recordkeeping for Decommissioning Planning,” dated January 8, 2009, and Regulatory Guide 1.184, Rev 1, “Decommissioning of Nuclear Power Reactors”). As such, the NRC did not intend to prevent the use of these funds solely because they are commingled in the decommissioning trust, and to do so would create an unnecessary financial burden without any corresponding safety benefit. Consistent with this guidance, the NRC does not preclude use of funds from the NDT in excess of those needed for radiological decommissioning for other purposes, such as irradiated fuel management.

The adequacy of the NDT to cover both the cost of activities associated with decommissioning and the irradiated fuel management activities within the scope of this request is supported by the staff's cash flow analysis.

If NorthStar VY cannot use funds from the NDT for irradiated fuel management activities, it would be forced to provide additional funding that would not be recoverable from the NDT until the VY operating license is terminated. To prevent access to the excess funds in the decommissioning trust would impose an unnecessary and undue

burden in excess of that contemplated when the regulation was adopted without any corresponding safety benefit.

Therefore, compliance with the rule would result in an undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated. Accordingly, the special circumstances required by 10 CFR 50.12(a)(2)(iii) are present.

**E. Environmental Considerations**

In accordance with 10 CFR 51.31(a), the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment (see Environmental Assessment and Finding of No Significant Impact published on October 10, 2018 (83 FR 50966)).

#### **IV. Conclusions**

The NRC staff finds that the proposed exemption would confirm the availability for use of the NDT funds for irradiated fuel management activities in accordance with the revised PSDAR. The NRC staff also finds that there is reasonable assurance that adequate funds are available in the NDT to complete all activities associated with radiological decommissioning, license termination, and irradiated fuel management activities within the scope of this exemption request. Additionally, there is no decrease in safety associated with the NDT being used to fund activities associated with irradiated fuel management, limited to a total of \$20 million at any given time.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. Also, special circumstances are present. Therefore, the Commission hereby grants NorthStar VY and NorthStar NDC an exemption from 10 CFR 50.82(a)(8)(i)(A) to allow the use of up to \$20 million of funds from the Vermont Yankee Nuclear Power Station nuclear decommissioning trust fund for purposes of managing irradiated fuel on a revolving basis.

This exemption is effective upon the NRC's issuance of a conforming license amendment reflecting NorthStar VY and NorthStar NDC as the licensees for VY, following NRC approval of the license transfer application and consummation of the transaction.

Dated at Rockville, Maryland, this 12<sup>th</sup> day of October 2018.

For the Nuclear Regulatory Commission.

John R. Tappert, Director,  
Division of Decommissioning, Uranium  
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