



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

November 3, 2017

A. Christopher Bakken III
President and Chief Executive Officer
Entergy Nuclear Operations, Inc.
1340 Echelon Parkway
Jacksonville, MS 39213-1995

**SUBJECT: VERMONT YANKEE NUCLEAR POWER STATION - REQUEST FOR
ADDITIONAL INFORMATION REGARDING THE REQUEST FOR DIRECT AND
INDIRECT LICENSE TRANSFERS FROM ENTERGY TO NORTHSTAR (EPID
NO. L-2017-LLM-0002)**

Dear Mr. Bakken III:

By letter dated February 9, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17045A140), Entergy Nuclear Operations, Inc. (ENOI), Entergy Nuclear Vermont Yankee, LLC (ENVY), NorthStar Vermont Yankee, LLC (NorthStar VY), and NorthStar Nuclear Decommissioning Company, LLC (NorthStar NDC) (together, Applicants) submitted an application for direct and indirect license transfers for Vermont Yankee Nuclear Power Station (VY) from ENOI and ENVY to NorthStar NDC and NorthStar VY. Specifically the Applicants requested written consent to transfer the Vermont Yankee Renewed Facility Operating License No. DPR-28 and the generally licensed Independent Spent Fuel Storage Installation to the named entities.

The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing the submittal and has determined that additional information is needed to complete its review. The specific requests are found in the enclosed request for additional information (RAI). The NRC staff requests that a response to the RAIs be provided within 30 days of the date of this letter.

The RAIs identified in this letter are based on the NRC staff's review of the original license transfer request, submitted on February 9, 2017, the August 22, 2017 supplemental information submittal (ADAMS Accession No. ML17234A141), and the notification of significant decommissioning schedule change dated August 28, 2017 (ADAMS Accession No. ML17248A468).

Please contact me at (301) 415-6634 if you have any questions.

Sincerely,

/RA/

Jack D. Parrott, Senior Project Manager
Reactor Decommissioning Branch
Division of Decommissioning, Uranium
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

Docket Nos.: 50-271 and 72-59
License No.: DPR-28

Enclosure: RAI

cc w/encl: Vermont Yankee ListServ
Vermont Yankee Service List

SUBJECT: VERMONT YANKEE NUCLEAR POWER STATION - REQUEST FOR
ADDITIONAL INFORMATION REGARDING DIRECT AND INDIRECT LICENSE
TRANSFERS FROM ENTERGY TO NORTHSTAR
(EPID NO. L-2017-LLM-0002), DATED NOVEMBER 3, 2017

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ADAMS Accession No.: ML17313A431

***by email**

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DATE	9/5/2017	9/6/2017	9/15/2017	9/8/2017	10/12/2017

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US NUCLEAR REGULATORY COMMISSION
REQUEST FOR ADDITIONAL INFORMATION
REGARDING THE DIRECT AND INDIRECT LICENSE TRANSFER REQUEST
FOR VERMONT YANKEE NUCLEAR POWER STATION
DOCKET NOS. 50-271 & 72-59

By letter dated February 9, 2017 (ML17045A140), the Applicants submitted a request for the direct and indirect license transfer of VY from ENOI and ENVY to NorthStar NDC and NorthStar VY. Specifically, the Applicants requested written consent to transfer the Vermont Yankee Renewed Facility Operating License No. DPR-28 and the generally licensed VY Independent Spent Fuel Storage Installation (ISFSI) in accordance with Section 184 of the Atomic Energy Act, and Title 10 of the Code of Federal Regulations (CFR), sections 10 CFR 50.80 and 10 CFR 72.50.

NRC regulations at 10 CFR 50.80 require the Commission's written consent for transfer of an operating license under Part 50 of the same chapter. Specifically, 10 CFR 50.80(c) states, in part, that "the Commission will approve an application for the transfer of a license, if the Commission determines: (1) That the proposed transferee is qualified to be the holder of the license; and (2) That the transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto."

NRC regulations at 10 CFR 50.33(f) require that the applicant for a license to operate a utilization facility "provide information sufficient to demonstrate to the Commission the financial qualification of the applicant to carry out, in accordance with regulations in this chapter, the activities for which the permit or license is sought." The regulation further states that, as applicable, the following should be provided:

. . . .

(4) Each application for a[n]. . . operating license . . . submitted by a newly-formed entity organized for the primary purpose of constructing and/or operating a facility must also include information showing:

(i) The legal and financial relationships it has or proposes to have with its stockholders or owners;

(ii) The stockholders' or owners' financial ability to meet any contractual obligation to the entity which they have incurred or proposed to incur; and

(iii) Any other information considered necessary by the Commission to enable it to determine the applicant's financial qualification.

(5) The Commission may request an established entity or newly-formed entity to submit additional or more detailed information respecting its financial arrangements and status

Enclosure

of funds if the Commission considers this information appropriate. This may include information regarding a licensee's ability to continue the conduct of the activities authorized by the license and to decommission the facility.

In addition to requirements in 10 CFR Part 50, certain regulations in 10 CFR Part 72 apply to a generally licensed ISFSI, as listed in 10 CFR 72.13(c), including 10 CFR 72.30(b)-(f); that regulation includes provisions for demonstration of financial assurance for decommissioning of a generally licensed ISFSI.

Financial RAIs

The NRC staff is continuing to review the Applicants' submittal. To verify that there is adequate funding for the decommissioning of VY, spent fuel management, and ISFSI decommissioning, the NRC staff has the following requests for information:

RAI – 1:

On page 4 of the application, the Applicants stated, in part:

...The NDT will also provide up to \$20 million in revolving funds for the spent fuel management costs necessary to maintain the ISFSI, subject to replenishment from recovery of claims under the Standard Contract, consistent with the requirements of 10 CFR 50.54(bb) and 50.82(a)(8)(vii).

The requirements of 10 CFR 50.82(a)(8)(i)(A) restrict the use of decommissioning trust funds to withdrawals for expenses for legitimate decommissioning activities consistent with the definition of decommissioning in 10 CFR 50.2. This definition does not include activities associated with spent fuel management. Therefore, an exemption from 10 CFR 50.82(a)(8)(i)(A) would be needed to use funds from the decommissioning trust fund for spent fuel management.

On June 23, 2015, the NRC issued an exemption to ENOI that, among other things, permitted ENOI to make withdrawals from the nuclear decommissioning trust (NDT) fund for spent fuel management in accordance with ENOI's Irradiated Fuel Management Plan and Post Shutdown Decommissioning Activities Report (PSDAR) (80 FR 35992).

Please state whether the Applicants intend to apply for an exemption from 10 CFR 50.82(a)(8)(i)(A), or provide the rationale for why the Applicants believe that the exemption issued to ENOI to use decommissioning trust funds for spent fuel management in accordance with ENOI's Irradiated Fuel Management Plan and PSDAR would also apply to NorthStar VY upon transfer of the VY license, including applicability of the rationale that supports ENOI's exemption.

Also, it is unclear whether the potential recovery of claims against the U.S. Department of Energy under the Standard Contract constitutes a reliable source of funds. Please provide the rationale as to why the Applicants believe that if NorthStar VY uses the NDT fund for non-radiological decommissioning costs, such as spent fuel management, that these funds will be replenished.

RAI – 2:

On page 4 of the application, the Applicants further stated, in part:

...NorthStar will provide a parental financial Support Agreement to NorthStar VY in the amount of \$125 million to assure that it is able to meet its financial and regulatory obligations to maintain and decommission VY and comply with all NRC requirements until the Licenses are terminated.

Provide additional information on the calculations used to determine the adequacy of the \$125 million parental financial Support Agreement to NorthStar VY for payment of spent fuel management until the Department of Energy is scheduled to take receipt of fuel in 2052. Specifically, in your discussion, include the time period by which the Support Agreement is anticipated to be executed by NorthStar VY and whether a percentage growth of those monies (annually) has been considered.

RAI – 3:

Explain the principal characteristics of the parental financial Support Agreement provided in the application as Enclosure 6, and provide the rationale for using the parental financial Support Agreement in lieu of a parent company guarantee or some other financial assurance mechanism as a means for decommissioning financial assurance, as described in 10 CFR 50.75(e)(1)(iii).

Technical RAIs

The NRC staff considered the following regulations and guidance for the technical qualification evaluation: 10 CFR 50.40(b), "Common Standards"; 10 CFR 50.80, "Transfer of Licenses"; the applicable section of 10 CFR 72.50, "Transfer of License" (Section 72.50(a) for the transfer of general licenses); Standard Review Plan (SRP) NUREG-0800, Section 13.1.1, "Management and Technical Support Organization," and Sections 13.1.2 - 13.1.3, "Operating Organizations"; Regulatory Guide 1.8, Revision 3, May, 2000, Qualification and Training of Personnel for Nuclear Power Plants; and American Nuclear Society/ American National Standards Institute (ANS/ANSI) 3.1-2014, Selection, Qualification and Training of Personnel for Nuclear Power Plants.

RAI – 4:

More information is needed to determine the technical qualifications of the proposed transferee, as required under 10 CFR 50.40(b), 50.80(b)(1) and 50.80 (c)(1).

Further detail on both the responsibilities and experience of the senior managers identified on the organization chart in Enclosure 3 to the application (Attachment 1) is needed to determine the qualifications of the persons who will be filling those positions.

In addition to the resumes provided for the key management personnel in the application, please provide the resumes for each named person in the management positions identified in the planned NorthStar NDC organization chart in Enclosure 3 of the application, namely the QA

Manager, Health & Safety Manager, ISFSI/Plant Manager, D&D Operations Manager, Remediation Manager, Waste Manager, and Compliance Engineering Manager. For those management positions without a named individual please provide a description of the position responsibilities.

Please identify the individual on the organization chart who would be considered the "Site Manager," or the onsite person who would have the ultimate responsibility for day to day operations at the site; in addition, describe the responsibilities of the manager responsible for radiological protection and the experience of that person if one has been named.

Also, Attachment 1, Section 4b, "Strategic Partner Experience and Expertise," of the application lists four university research reactors, at the Universities of Buffalo, Arizona, Illinois and Washington, as successful NorthStar decontamination and decommissioning projects. It is mentioned that NorthStar has been, or will be, involved with decommissioning at the Hanford and Savannah River sites, at several university laboratories, and at ten reactor sites in the United Kingdom. Please provide information regarding NorthStar's management and technical role in these decommissioning projects. For each project, please describe NorthStar's role as either the principal lead contractor or subcontractor and the technical services it provided at these sites.

RAI – 5:

SRP NUREG-0800, Section 13.1.1, "Management and Technical Support Organization," and Sections 13.1.2 - 13.1.3, "Operating Organizations," indicate that the objective of a review of license transfers under 10 CFR 50.80 is to ensure that the corporate management is involved with, informed of, and dedicated to the safe decommissioning of the plant. In addition, the review is to ensure that sufficient technical resources will be provided to adequately accomplish this objective and that there are sufficient interface arrangements and controls between the applicant and the major support organizations that the applicant will be responsible for and oversee.

More information is needed to evaluate any proposed changes to the current technical organization as a result of the transfer and to evaluate the supporting technical resources that will be used for the decommissioning operations.

Please describe how the current Entergy organizational chart for decommissioning the VY facility will change if the application is approved by the NRC. If a function under the current organization will not be carried to the organization proposed by the Applicants, please explain why.

NorthStar NDC identified the ability to leverage the experience of its parent, NorthStar Group Services Inc., and strategic partners AREVA, Burns & McDonnell, and Waste Control Specialists, named in the application as support for performing the decommissioning, decontamination and site restoration of the VY facility. Please identify where the parent company and strategic partners fit into the planned NorthStar NDC organization chart in Enclosure 3 of the application. Also, please identify where in the organization these supporting organizations would provide support to operations at the site, and identify the lines of communication and authority these supporting organization would have in the overall

organization.