

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

June 28, 2021

EA-21-090

Mr. Scott E. State, PE Chief Executive Officer NorthStar Group Services, Inc. 17101 Preston Road, Suite 115 Dallas, TX 75248

SUBJECT: VERMONT YANKEE NUCLEAR POWER STATION AND CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT – ORDER APPROVING INDIRECT TRANSFER OF LICENSES (EPIDS L-2020-LLO-0008 AND L-2020-LLO-0009)

Dear Mr. State:

The U.S. Nuclear Regulatory Commission (NRC) staff has completed its review of the application dated November 19, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20324A058), as supplemented by letter dated April 13, 2021 (ADAMS Accession No. ML21103A415), submitted by NorthStar Nuclear Decommissioning Company, LLC (NNDC) and ADP CR3, LLC (ADP CR3), on behalf of themselves, NorthStar Vermont Yankee, LLC (NVY), and their corporate parents related to NorthStar Group Services, Inc. (NorthStar) (collectively, the Applicants).

This application was submitted pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Sections 50.80, "Transfer of licenses," and 72.50, "Transfer of license," requesting: (1) NRC approval of the indirect transfer of control of NNDC's licensed authority under, and NVY's licensed ownership of, Renewed Facility Operating License No. DPR-28 for the Vermont Yankee Nuclear Power Station (VY) and the general license for the VY independent spent fuel storage installation (ISFSI) to possess, maintain, and decommission VY and the ISFSI; and (2) NRC approval of the indirect transfer of control of ADP CR3's licensed authority under Facility Operating License No. DPR-72 for the Crystal River Unit 3 Nuclear Generating Plant (CR3) and the general license for the CR3 ISFSI to possess, maintain, and decommission CR3 and the ISFSI. Duke Energy Florida, LLC (DEF) will remain the licensed owner of CR3. The application did not involve any direct or indirect transfer of DEF's license or responsibilities. No physical changes to the VY or CR3 facilities or operational changes were proposed in the application.

The Applicants requested NRC consent to these indirect transfers in order to complete an internal reorganization with new intermediary holding companies that would acquire control of NorthStar. The enclosed Order approves the proposed indirect transfers of VY, CR3, and the associated ISFSIs. A copy of the related NRC staff safety evaluation is also enclosed. The Order has been forwarded to the Office of the Federal Register for publication.

In accordance with 10 CFR 2.390, "Public inspections, exemptions, requests for withholding," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of the NRC's

ADAMS. ADAMS is accessible from the NRC Web site at <u>http://www.nrc.gov/reading-rm/adams.html</u>.

If you have any questions concerning the above, please contact Jack Parrott at 301-415-6634 or via e-mail at <u>jack.parrott@nrc.gov</u> for VY and Marlayna Doell at 301-415-3178 or via e-mail at <u>marlayna.doell@nrc.gov</u> for CR3.

Sincerely,

Build Water Signed by Watson, Bruce on 06/28/21

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

Docket Nos. 50-271 and 72-59 for VY 50-302 and 72-1035 for CR3

Enclosures:

- 1. Order
- 2. Safety Evaluation

cc: VY and CR3 Listservs

ENCLOSURE 1

ORDER APPROVING INDIRECT TRANSFER OF LICENSES VERMONT YANKEE NUCLEAR POWER STATION CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT AND INDEPENDENT SPENT FUEL STORAGE INSTALLATIONS

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter of)	
NorthStar Nuclear Decommissioning Company, LLC NorthStar Vermont Yankee, LLC)))	
Vermont Yankee Nuclear Power Station and Independent Spent Fuel Storage Installation) Docket Nos.) License No.)	50-271 and 72-59 DPR-28
and		
ADP CR3, LLC Duke Energy Florida, LLC)	
Crystal River Unit 3 Nuclear Generating Plant and Independent Spent Fuel Storage Installation) Docket Nos.) License No.)	50-302 and 72-1035 DPR-72

ORDER APPROVING INDIRECT TRANSFER OF LICENSES (EA-21-090)

١.

NorthStar Nuclear Decommissioning Company, LLC (NNDC) is the licensed operator and NorthStar Vermont Yankee, LLC (NVY) is the licensed owner of Renewed Facility Operating License No. DPR-28 for the Vermont Yankee Nuclear Power Station (Vermont Yankee), as well as the general license for the Vermont Yankee Independent Spent Fuel Storage Installation (ISFSI), to possess, maintain, and decommission Vermont Yankee and the Vermont Yankee ISFSI. Vermont Yankee is located in Windham County, Vermont.

ADP CR3, LLC (ADP CR3) is the licensed operator of Facility Operating License No. DPR-72 for the Crystal River Unit 3 Nuclear Generating Plant (CR3), as well as the general license for the CR3 ISFSI, to possess, maintain, and decommission CR3 and the CR3 ISFSI. Duke Energy Florida, LLC (DEF) is the licensed owner of CR3. CR3 is located in Citrus County, Florida.

II.

By application dated November 19, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20324A058), as supplemented by letter dated April 13, 2021 (ADAMS Accession No. ML21103A415), NNDC and ADP CR3, on behalf of themselves, NVY, and their corporate parents related to NorthStar Group Services, Inc. (NorthStar) (collectively, the Applicants), requested, pursuant to Title 10 of the Code of Federal Regulations (10 CFR) Sections 50.80 and 72.50, that the U.S. Nuclear Regulatory Commission (NRC, the Commission) consent to (1) the indirect transfer of control of NNDC's licensed authority under, and NVY's licensed ownership of, Renewed Facility Operating License No. DPR-28 for Vermont Yankee and the general license for the Vermont Yankee ISFSI; and (2) the indirect transfer of control of ADP CR3's licensed authority under Facility Operating License No. DPR-72 for CR3 and the general license for the CR3 ISFSI. DEF will remain the licensed owner of CR3, and the application does not involve any direct or indirect transfer of DEF's license or responsibilities. No physical changes to the Vermont Yankee or CR3 facilities or operational changes are proposed. The Applicants requested NRC consent to these indirect transfers in order to complete an internal reorganization with new intermediary holding companies that would acquire control of NorthStar. The current intermediary holding company structure and the proposed intermediary holding company structure are described in Figures 1 and 2, respectively.

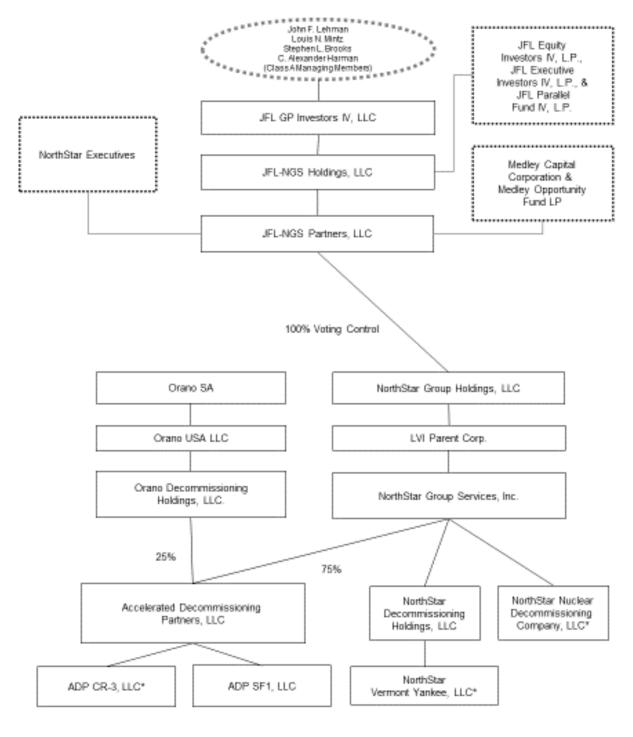


Figure 1: SIMPLIFIED ORGANIZATION CHART - PRIOR

* NRC Licensed Entities

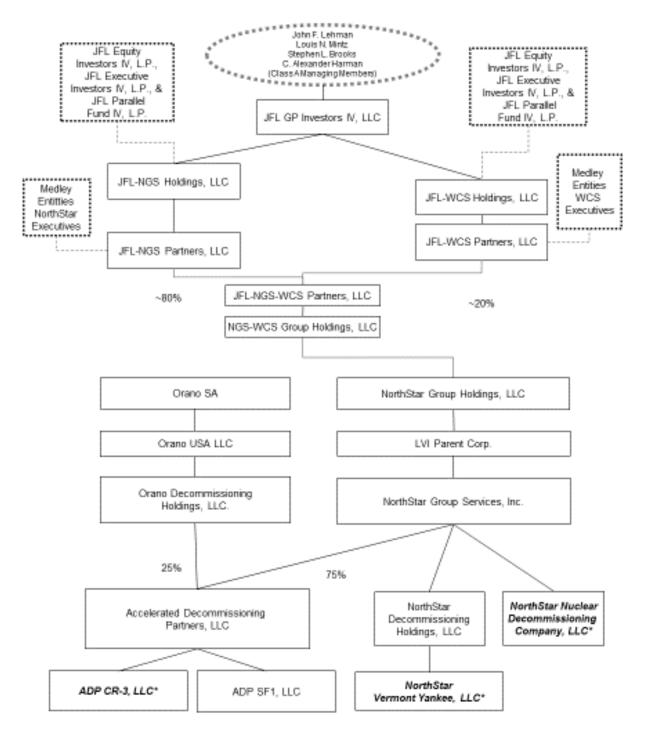


Figure 2: SIMPLIFIED ORGANIZATION CHART - AFTER INDIRECT TRANSFER

* Entities Holding NRC Licenses

Notices entitled "Vermont Yankee Nuclear Power Station; Consideration of Approval of Transfer of License" and "Crystal River Unit 3 Nuclear Generating Plant; Consideration of Approval of Transfer of License," were published in the *Federal Register* (FR) on April 2, 2021 (86 FR 17415 and 86 FR 17412, respectively). The NRC did not receive any comments or hearing requests related to these notices.

Under 10 CFR 50.80 and 10 CFR 72.50, no license for a production or utilization facility or ISFSI, or any right thereunder, shall be transferred, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the Commission gives its consent in writing. Upon review of the information in the application, and other information before the Commission, the NRC staff has determined that the Applicants can indirectly transfer their licenses via the intermediary holding company structure proposed in the application. The proposed transferees are qualified to have indirect control over the holders of the licenses and the indirect transfer of the licenses is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto.

The findings set forth above are supported by an NRC staff safety evaluation dated the same date as this Order, which is available at ADAMS Accession No. ML21159A042.

III.

Accordingly, pursuant to Sections 161b, 161i, and 184 of the Atomic Energy Act of 1954, as amended, 42 USC § 2201(b), 2201(i), and 2234; and 10 CFR 50.80 and 10 CFR 72.50, IT IS HEREBY ORDERED that the application regarding the proposed indirect license transfers is approved for Vermont Yankee, CR3, and their respective ISFSIs.

IT IS FURTHER ORDERED that after receipt of all required regulatory approvals of the proposed indirect transfer action, the Applicants shall inform the Director of the NRC Office of Nuclear Material Safety and Safeguards in writing of such receipt, and of the date of the closing

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of the transfer, no later than two business days prior to the date of the closing of the transfer. Should the proposed indirect transfer not be completed within 1 year of the date of this Order, this Order shall become null and void, provided, however, upon written application and for good cause shown, such date may be extended by order.

This Order is effective upon issuance.

For further details with respect to this Order, see the indirect license transfer application dated November 19, 2020, the supplemental information dated April 13, 2021, and the NRC staff safety evaluation dated the same date as this Order, which are publicly available electronically through ADAMS in the NRC Library at https://www.nrc.gov/reading-rm/adams.html. Persons who encounter problems with ADAMS should contact the NRC's Public Document Room reference staff by telephone at 1-800-397-4209 or 301-415-4737 or by e-mail to pdr.resource@nrc.gov.

Dated this 28th day of June, 2021.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

John W. Lubinski, Director, Office of Nuclear Material Safety and Safeguards.

ENCLOSURE 2

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS RELATED TO THE INDIRECT TRANSFER OF CONTROL OF RENEWED FACILITY OPERATING LICENSE NO. DPR-28, FACILITY OPERATING LICENSE NO. DPR-72,

AND THE GENERAL LICENSES FOR THE

INDEPENDENT SPENT FUEL STORAGE INSTALLATIONS

VERMONT YANKEE NUCLEAR POWER STATION AND

CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

DOCKET NOS. 50-271 AND 72-59 AND 50-302 AND 72-1035



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR MATERIAL SAFETY AND

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DOCKET NOS. 50-271 AND 72-59 AND 50-302 AND 72-1035

1.0 INTRODUCTION

By application dated November 19, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20324A058), as supplemented by letter dated April 13, 2021 (ADAMS Accession No. ML21103A415), NorthStar Nuclear Decommissioning Company, LLC (NNDC) and ADP CR3, LLC (ADP CR3), on behalf of themselves, NorthStar Vermont Yankee, LLC (NVY), and their corporate parents related to NorthStar Group Services, Inc. (NorthStar) (collectively, the Applicants), requested, pursuant to Title 10 of the Code of Federal Regulations (10 CFR) Sections 50.80, "Transfer of licenses," and 72.50, "Transfer of license," U.S. Nuclear Regulatory Commission (NRC, the Commission) consent to: (1) the indirect transfer of control of NNDC's licensed authority under, and NVY's licensed ownership of, Renewed Facility Operating License No. DPR-28 for the Vermont Yankee Nuclear Power Station (VY) and the general license for the VY independent spent fuel storage installation (ISFSI) to possess, maintain, and decommission VY and the ISFSI; and (2) the indirect transfer of control of ADP CR3's licensed authority under Facility Operating License No. DPR-72 for the Crystal River Unit 3 Nuclear Generating Plant (CR3) and the general license for the CR3 ISFSI to possess, maintain, and decommission CR3 and the ISFSI. Duke Energy Florida, LLC (DEF) will remain the licensed owner of CR3. The application does not involve any direct or indirect transfer of DEF's license or responsibilities. No physical changes to the VY or CR3 facilities or operational changes are being proposed in the application.

The Applicants requested NRC consent to these indirect transfers in order to complete an internal reorganization with new intermediary holding companies that would acquire control of NorthStar. This request was submitted to the NRC for approval pursuant to Section 184, "Inalienability of Licenses," of the Atomic Energy Act of 1954, as amended (AEA), and 10 CFR 50.80 for the VY and CR3 facility operating licenses, and 10 CFR 72.50 for the general

licenses for the VY and CR3 ISFSIs. Information provided for NRC analysis included the VY Nuclear Decommissioning Trust (NDT) balance as of September 30, 2020, the CR3 NDT balance as of October 1, 2020, and identification of future contributions to the NDTs by sources secured through Memorandums of Understanding, via the U.S. Department of Energy (DOE) breach of its standard contract, and other sources identified by the Applicants.

2.0 BACKGROUND

VY was a 1,912 megawatts thermal (MWt) boiling-water reactor that began operation in 1972. Entergy Corporation (Entergy) acquired the plant from the Vermont Yankee Nuclear Power Corporation in 2002. The reactor was permanently shut down on December 29, 2014, and the fuel was permanently removed from the reactor as of January 12, 2015. Entergy submitted the VY Post-Shutdown Decommissioning Activities Report (PSDAR) to the NRC by letter dated December 19, 2014 (ADAMS Accession No. ML14357A110). In the PSDAR, Entergy stated its intention to move all of the spent nuclear fuel into dry cask storage by 2020 and to put the plant into SAFSTOR until it was ready to fully dismantle and decommission the facility, with license termination scheduled to take place by 2073.

By letter dated February 9, 2017 (ADAMS Accession No. ML17045A140), Entergy, on behalf of itself and NNDC, submitted to the NRC a request to transfer the VY license (including the VY ISFSI general license) from Entergy to NVY (as licensed owner) and NNDC (as licensed operator) for the purposes of expediting decommissioning. The NRC issued an Order approving the VY license transfer in October 2018 (ADAMS Accession No. ML18248A096). The sale of VY to NVY was completed in January 2019. Under the NVY and NNDC accelerated timeline, the completion of decommissioning work at VY (with the exception of decommissioning the ISFSI) was expected by 2030. By letter dated March 29, 2021 (ADAMS Accession No. ML21106A269), NVY reported to the NRC that as of December 31, 2020, over \$206 million had been spent on radiological decommissioning at the VY site, and that decommissioning work at VY (with the exception of decommissioning the ISFSI) will be completed in 2026. Spent fuel will continue to be stored in the onsite ISFSI until transferred to DOE, which is assumed to be completed in 2052, then the ISFSI will be decommissioned and the NRC license terminated.

CR3 was a 2,609 MWt pressurized-water reactor that was licensed to operate from December 1976 to February 2013. During a refueling outage that started on September 26, 2009, a large hole was made in the CR3 containment structure to support the replacement of the CR3 steam generators. When attempting to restore the containment structure was observed. The licensee attempted to repair the damage, but later decided to decommission the reactor instead, and certified to the permanent cessation of operations at CR3 in 2013.

By letter dated December 2, 2013 (ADAMS Accession No. ML13340A009), DEF submitted a PSDAR for CR3, including a site-specific decommissioning cost estimate that relied on a period of SAFSTOR for CR3. Construction began on the CR3 ISFSI in 2016, with loading of fuel into dry casks beginning in the summer of 2017 and completed in January 2018. By letter dated June 14, 2019 (ADAMS Accession No. ML19170A209), DEF requested, on behalf of itself and ADP CR3, that the NRC consent to the transfer of DEF's NRC-licensed possession, maintenance, and decommissioning authorities to ADP CR3 for the purpose of completing the decommissioning of the CR3 facility. The NRC issued an Order approving the CR3 license transfer in April 2020 (ADAMS Accession No. ML20069A028). The transfer was completed in October 2020. Per the sale agreement, DEF remained the NRC-licensed owner of the plant, property, and the CR3 NDT, but not the spent fuel. ADP CR3 became the NRC-licensed

operator responsible for decommissioning, and ADP SF1, LLC (ADP SF1) became the owner of the spent fuel. By letter dated June 26, 2019 (ADAMS Accession No. ML19177A080), Accelerated Decommissioning Partners, LLC (ADP) (of which ADP CR3 is a wholly owned subsidiary), submitted a revised PSDAR for CR3 reflecting changes from SAFSTOR to DECON, with the intention to complete decommissioning work at CR3 (with the exception of decommissioning the ISFSI) as soon as 2026, but no later than the end of 2030.

By letter dated March 29, 2021 (ADAMS Accession No. ML21088A290), ADP CR3 reported to the NRC that as of December 31, 2020, over \$190 million had been spent on radiological decommissioning at the CR3 site, and that decommissioning work at CR3 (with the exception of decommissioning the ISFSI) will be completed in 2026. Spent fuel will continue to be stored in the onsite ISFSI until transferred to DOE, which is assumed to be completed in 2037, and then the ISFSI will be decommissioned and the NRC license terminated.

NVY and NNDC are wholly owned subsidiaries of NorthStar; ADP CR3 is a wholly owned subsidiary of ADP, which is 75 percent owned and controlled by NorthStar and 25 percent owned by Orano USA, LLC (Orano).

License Transfer Application

By application dated November 19, 2020, as supplemented by letter dated April 13, 2021, submitted by NNDC and ADP CR3, on behalf of themselves, NVY, and their corporate parents related to NorthStar, the Applicants requested NRC consent to: (1) the indirect transfer of NNDC's licensed authority under, and NVY's licensed ownership of, Renewed Facility Operating License No. DPR-28 for VY and the general license for the VY ISFSI to possess, maintain, and decommission VY and the ISFSI; and (2) the indirect transfer of ADP CR3's licensed authority under Facility Operating License No. DPR-72 for CR3 and the general license for the CR3 ISFSI to possess, maintain, and decommission CR3 and the ISFSI. DEF will remain the licensed owner of CR3. The application does not involve any direct or indirect transfer of DEF's license or responsibilities. No physical changes to the VY or CR3 facilities or operational changes are being proposed in the application.

Purpose of Proposed Indirect License Transfers

According to the application, the purpose of the proposed indirect license transfers is to allow the Applicants to complete an internal reorganization with new intermediary holding companies that would acquire control of NorthStar while retaining indirect control of the current licensees (NNDC, NVY, and ADP CR3). The subsequent reorganization would result in the combination of economic interests in, and voting control of, the NorthStar and Waste Control Specialists, LLC (WCS) businesses in a new intermediary holding company structure. JFL GP Investors IV, LLC (Lehman) indirectly controls both NorthStar and WCS. The application states that following the transfer, NorthStar will strengthen its ties with WCS, and will continue the active decommissioning of both VY and CR3. The NRC licensees NNDC and NVY for VY and ADP CR3 for CR3 would not be directly impacted by these indirect transfers.

As stated in the application, following the proposed indirect license transfers and the completion of the internal corporate reorganization, four intermediary holding companies would become part of the corporate structure that indirectly controls NorthStar. NorthStar Group Holdings, LLC, a current, indirect parent of NorthStar, would be a wholly owned subsidiary of NGS-WCS Group Holdings, LLC (for NRC purposes, Holding Company 1), which also owns WCS and is itself a subsidiary of JFL-NGS-WCS Partners, LLC (for NRC purposes, Holding

Company 2). Holding Company 2 is jointly owned by JFL-NGS Partners, LLC (for NRC purposes, Holding Company 3) and JFL-WCS Partners, LLC (for NRC purposes, Holding Company 4). Upon completion of the proposed indirect transfers of control, these two entities, Holding Companies 3 and 4, would own and control both NorthStar and WCS. Given that Holding Company 3 would own approximately 80 percent of Holding Company 2, Holding Company 3 would retain indirect control of NorthStar and the licenses held by its subsidiaries. However, it is the inclusion of two new intermediary holding companies with voting control that results in the indirect transfers of control requiring NRC approval.

According to the application, the ongoing decommissioning of VY and CR3 would be unaffected by the proposed internal reorganization to the holding company structure and so no adverse impact on public health and safety would result from the indirect license transfers. The application states that it demonstrates that: (1) NNDC and ADP CR3 have the requisite managerial, technical, and financial qualifications to continue to perform their obligations under the VY and CR3 licenses, respectively; (2) the NVY NDT and DEF NDT provide reasonable assurance of funding for decommissioning VY and CR3, respectively; (3) the terms of the VY and CR3 licenses will not be affected; and (4) the transfers requested in the application will not result in any impermissible foreign ownership, control, or domination.

3.0 REGULATORY EVALUATION

The proposed transaction described in the application constitutes indirect transfers of the VY and CR3 licenses, which require prior NRC approval. Specifically, for VY, the Applicants are seeking the indirect transfer of NNDC's licensed authority under, and NVY's licensed ownership of, Renewed Facility Operating License No. DPR-28 for VY and the general license for the VY ISFSI to possess, maintain, and decommission VY and the ISFSI. For CR3, the Applicants are seeking the indirect transfer of ADP CR3's licensed authority under Facility Operating License No. DPR-72 for CR3 and the general license for the CR3 ISFSI to possess, maintain, and decommission CR3 and the ISFSI. DEF will remain the licensed owner of CR3. Generally, for an indirect transfer of control of a license, the NRC must find that the transaction will not affect the technical and financial qualifications of the holders of the license.

The request for approval of the proposed transfers, as described above and as discussed in this safety evaluation, is made pursuant to 10 CFR 50.80(a), which states that:

No license for a production or utilization facility (including, but not limited to, permits under this part and part 52 of this chapter, and licenses under parts 50 and 52 of this chapter), or any right thereunder, shall be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the Commission gives its consent in writing.

In addition, the regulations at 10 CFR 50.80(b) and (c) apply. The regulation at 10 CFR 50.80(b) states, in part, that:

- (1) An application for transfer of a license shall include:
- (i) For a construction permit or operating license under this part, as much of the information described in [10 CFR] 50.33 and 50.34 ... with respect to the identity and technical and financial qualifications of the proposed transferee as would be required by those sections if the application were for an initial license.

Section 50.80(c) of 10 CFR 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 transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto.

In 10 CFR 50.33(a) through (d), the NRC requires applicants to provide information including the name of the applicant, address of the applicant, description of the corporate structure of the applicant, citizenship of the applicant, and a discussion of foreign ownership, control, or domination of the applicant, as applicable

In addition, 10 CFR 50.33(f) states, in part:

Except for an electric utility applicant for a license to operate a utilization facility of the type described in [10 CFR] 50.21(b) or [10 CFR] 50.22, [each application shall state] 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.

Section 50.2, "Definitions," of 10 CFR states, in part, that an electric utility means:

[A]ny entity that generates or distributes electricity and which recovers the cost of this electricity, either directly or indirectly, through rates established by the entity itself or by a separate regulatory authority.

The NRC staff applies guidance in NUREG-1577, Revision 1, "Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance" (ADAMS Accession No. ML013330264), to evaluate the financial qualifications of applicants to carry out the activities for which the permit or license is sought.

Section 50.33(k)(1) of 10 CFR requires that applicants provide information, in the form of a report, as described in 10 CFR 50.75, "Reporting and recordkeeping for decommissioning planning," indicating how reasonable assurance will be provided that funds will be available to decommission the facility. The regulation at 10 CFR 50.75 also specifies how a licensee will provide reasonable assurance that funds will be available for the decommissioning process. Specifically, 10 CFR 50.75(b) requires that decommissioning financial assurance be provided in an amount not less than the minimum formula amount in 10 CFR 50.75(c). In 10 CFR 50.75(e), the NRC includes the methods acceptable to the agency for covering this decommissioning financial assurance amount, including using an NDT. Finally, 10 CFR 50.75(f) and (h) provide additional requirements on the reporting and management of NDTs.

Section 50.82(a)(8)(i) of 10 CFR states that licenses may use funds held in NDTs if:

(A) The withdrawals are for expenses for legitimate decommissioning activities consistent with the definition of decommissioning in [10 CFR] 50.2;

(B) The expenditure would not reduce the value of the decommissioning trust below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise and; (C) The withdrawals would not inhibit the ability of the licensee to complete funding of any shortfalls in the decommissioning trust needed to ensure the availability of funds to ultimately release the site and terminate the license.

In accordance with 10 CFR 50.2, the term "decommission" means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license or (2) release of the property under restricted conditions and termination of the license.

Section 50.82(a)(8)(v) of 10 CFR requires power reactor licensees that have permanently ceased operations to provide to the NRC annually, by March 31, a decommissioning financial assurance status report. Among other things, the report must include the remaining balance of any decommissioning funds, an estimate of the costs to complete decommissioning, and additional financial assurance to cover any projected shortfalls.

Regarding decommissioning of ISFSIs, 10 CFR 72.30(b) requires that:

Each holder of, or applicant for, a license under this part must submit for NRC review and approval a decommissioning funding plan that must contain:

(1) Information on how reasonable assurance will be provided that funds will be available to decommission the ISFSI....

In 10 CFR 50.54(bb), the NRC requires, in part, a licensee to submit, for NRC review and preliminary approval, the program by which the licensee intends to manage and provide funding for the management of all spent fuel at the reactor following permanent cessation of operation of the reactor until title to the spent fuel and possession of the spent fuel is transferred to the DOE for its ultimate disposal in a repository. In addition, 10 CFR 50.82(a)(8)(vii) provides, in part, for the licensee's annual submittal to the NRC of a report on the status of its funding for managing spent fuel. If the funds accumulated do not cover the projected cost, a plan to obtain additional funds to cover the cost must be included.

In addressing foreign ownership, control, or domination (FOCD) issues, Section 103d of the AEA provides, in relevant part, that no license may be issued to:

[A]ny corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government.

The NRC's regulation at 10 CFR 50.38 is the regulatory provision that implements the FOCD provisions of the AEA. Section 50.38 of 10 CFR provides, in part, that:

[A]ny corporation, or other entity which the Commission knows or has reason to believe is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, shall be ineligible to apply for and obtain a license.

The NRC staff evaluates license transfer applications in a manner that is consistent with the guidance provided in the NRC "Final Standard Review Plan on Foreign Ownership, Control, or Domination" (FOCD SRP), which was published in the *Federal Register* on September 28, 1999 (64 FR 52357), to determine whether the proposed transferee is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government. The NRC's position on

FOCD, outlined in the FOCD SRP, states that "the foreign control limitation should be given an orientation toward safeguarding the national defense and security." Further, the FOCD SRP outlines how the effects of foreign ownership may be mitigated through implementation of a "negation action plan" to ensure that any foreign interest is effectively denied control or domination over the NRC licensee.

In 10 CFR 50.34(b)(7), the NRC requires that applicants provide the following information in the final safety analysis report:

The technical qualifications of the applicant to engage in the proposed activities in accordance with the regulations in this chapter.

The NRC staff also reviews information that relates to nuclear onsite property damage insurance requirements under 10 CFR 50.54(w) and the Price-Anderson insurance and indemnity requirements under Section 170 of the AEA and 10 CFR part 140, "Financial Protection Requirements and Indemnity Agreements."

4.0 TECHNICAL QUALIFICATIONS

As noted above, pursuant to 10 CFR 50.34(b)(7), licensees must be technically qualified to engage in their licensed activities, which, for permanently shutdown facilities, are possessing, maintaining, and decommissioning the facilities in accordance with the NRC requirements. Section 4, "Technical Qualifications," of Attachment 1 to the application dated November 19, 2020, states, in part:

NNDC and ADP CR3 will continue to be technically qualified to carry out their responsibilities as the licensees responsible for the VY Facility and CR3 Facility, respectively. NNDC and ADP CR3 will continue to perform the decommissioning, decontamination and site restoration work and ISFSI management by leveraging the experience of their parent companies and existing plant staff....

The substantial technical qualifications of the current licensees were recently reviewed in connection with the transfers of responsibility for the licensed VY Facility to NNDC and responsibility for the licensed CR3 Facility to ADP CR3. The proposed indirect transfers of control do not have any impact on the existing technical qualifications of the licensees. The transfers do not impact the VY and CR3 site organizations that have been implemented consistent with information previously reviewed by the NRC, or the support provided by the licensees' corporate parents and strategic partners.

The NRC staff reviewed the application and determined that the proposed indirect license transfers are not expected to have any impact on the existing management, technical support, or operating organizations at VY, CR3, and the associated ISFSIs. The staff also reviewed the application to determine whether (1) the proposed corporate management is involved with, informed of, and dedicated to the safe possession, maintenance, and decommissioning of VY, CR3, and the associated ISFSIs; and (2) sufficient technical resources would continue to be provided to adequately possess, maintain, and decommission VY, CR3, and the associated ISFSIs as a result of the proposed indirect license transfers. Because there would be no actual impact on the facility management, technical support, or operating organizations responsible for oversight at the facilities, the NRC staff finds the application in this area to be acceptable.

Based this evaluation, the NRC staff finds that the management and technical support organization and the operating organization of VY, CR3, and the associated ISFSIs will continue to support the safe possession, maintenance, and decommissioning of the facilities and will retain responsibility for the facilities after the proposed indirect license transfers. Therefore, the NRC staff concludes that the proposed indirect license transfers satisfy 10 CFR 50.80 with respect to technical qualifications.

5.0 FINANCIAL EVALUATION

5.1 <u>Financial Qualifications</u>

As noted above, pursuant to 10 CFR 50.33(f), an application shall contain information sufficient to demonstrate to the Commission the financial qualifications of the applicant to carry out the activities for which a license is sought. Additionally, pursuant to 10 CFR 50.2, "decommission" means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license or (2) release of the property under restricted conditions and termination of the license. Finally, pursuant to 10 CFR 50.54(bb), licensees in decommissioning must have a program to manage and provide funding for the management of all spent fuel at the site following permanent cessation of operations until title to and possession of the fuel is transferred to DOE. As explained below, the NRC staff's review of financial qualifications for the proposed indirect license transfers related to VY and CR3 assesses whether the Applicants have provided reasonable assurance that funds will be available following the transfers to cover estimated costs for radiological decommissioning (including ISFSI decommissioning) and spent fuel management activities at VY and CR3, in accordance with the requirements of 10 CFR 50.33(f), 10 CFR 50.33(k)(1), 10 CFR 50.54(bb), 10 CFR 50.75, 10 CFR 50.82(a), and 10 CFR 72.30.

As previously noted, VY permanently ceased operations in 2014, and CR3, following a shutdown for a refueling outage in 2009, notified the NRC of its permanent cessation of operations in 2013. According to the application, following the consummation of the proposed reorganization and indirect license transfers, the decommissioning activities at VY and CR3 would continue unaffected. NorthStar, Orano (part owner of ADP with NorthStar), and WCS, would continue their activities to support the decommissioning of VY and CR3.

Since both VY and CR3 are permanently shutdown reactors, following the proposed indirect license transfers, NNDC and NVY for VY and ADP CR3 and DEF for CR3, as the licensees, would solely have the authority to possess VY and CR3, respectively, and the obligations to maintain and decommission VY and CR3 in accordance with the NRC requirements. Therefore, NNDC and ADP CR3 would not conduct the operations contemplated by the financial qualifications provisions of 10 CFR 50.33(f); rather, all of their licensed activities would involve the possession of radioactive material in connection with maintaining the safe condition of the plants, radiological decommissioning of the VY and CR3 sites, termination of the licenses, and operational responsibilities associated with spent fuel management. As such, the financial qualifications provisions of 10 CFR 50.33(f) are satisfied in this instance by the Applicants meeting the requirements regarding decommissioning financial assurance and spent fuel management financial assurance. The satisfaction of these requirements at VY and CR3 is discussed in the following two sections, respectively.

5.1.1 Decommissioning and Spent Fuel Management Financial Assurance at VY

Information in the application indicates that following the proposed indirect license transfers, NVY will remain financially qualified to fund NNDC's possession, maintenance, and decommissioning of the VY site. The proposed indirect license transfers would not result in changes to NVY's NDT funds or to the method of providing financial assurance for decommissioning and spent fuel management at VY.

In the safety evaluation accompanying the October 11, 2018, Order authorizing the transfer of VY to the current licensees (ADAMS Accession No. ML18242A639), the NRC staff stated that:

[T]he NRC staff concludes that the funds in the NDT are expected to be available and sufficient to cover the estimated costs for the radiological decommissioning of the facility (including the ISFSI), and spent fuel management to the extent allowed.... Therefore, the NRC staff concludes that the Applicants have provided reasonable assurance of obtaining the funds necessary to cover estimated costs for decommissioning VY and its ISFSI in accordance with the requirements of 10 CFR 50.33(f), 10 CFR 50.33(k)(1), 10 CFR 50.75, and 10 CFR 50.82(a).

NVY maintains the existing NDT for VY and is responsible for funding the costs of decommissioning (including decommissioning of the ISFSI) and spent fuel management. Under the provisions of exemptions issued on June 17, 2015 (ADAMS Accession No. ML15128A219), NVY is authorized to use the VY NDT for both radiological decommissioning and spent fuel management. NVY has also established a \$30 million escrow account, with plans to contribute an additional \$25 million for a total of \$55 million, to further support, as needed, NDT decommissioning obligations until partial license termination is completed in the 2026-2027 timeframe. The balance of funds in the NDT, including the escrow account, totaled \$400,855,000 as of September 30, 2020, with \$33,664,000 being escrow funds.

According to the application, the VY decommissioning cost estimate as of September 30, 2020, includes approximately \$362,664,000 for radiological decommissioning, including the ISFSI, and approximately \$259,055,000 for spent fuel management, for a total of approximately \$621,720,000. Following partial license termination, spent fuel management activities and ISFSI decommissioning will be completed sometime in the 2052-2053 timeframe, following retrieval of spent fuel by DOE and its permanent removal from the VY site.

In addition to the NDT balance and escrow funds, NorthStar has provided a parental financial Support Agreement to NVY in the amount of \$140 million to ensure that NVY is able to meet its financial and regulatory obligations to maintain and decommission VY and comply with all NRC requirements until the VY license is terminated. Further, the application states decommissioning work is being performed under fixed price or fixed unit contracts, subject to performance bonds (or insurance, where appropriate) issued by qualified surety companies to guarantee the performance of the tasks, and with withdrawals from the NDT "limited under a decommissioning pay-item approach, which reasonably assures completion of the work within the cost estimates."

Finally, regarding spent fuel management at VY, withdrawals from the NDT for spent fuel management are not to exceed \$20 million, and in addition to expected recoveries from DOE, NorthStar is committed to funding these costs. While this commitment is backed by the \$140 million Support Agreement previously referenced, NVY also has committed to obtain a performance bond for its annual spent fuel management costs, if it is unable to obtain a

settlement with DOE. Accordingly, in its Order dated October 11, 2018, the NRC imposed the following condition related to spent fuel management at VY:

NorthStar Vermont Yankee, LLC shall obtain a performance bond if a Settlement Agreement with the U.S. Department of Energy (DOE), on DOE reimbursements for spent fuel management expenses, is not entered into by January 1, 2022. The performance bond will be effective January 1, 2022, initially in the amount of \$4.3 million, and it will be renewed annually. This amount covers the annual amount of Independent Spent Fuel Storage Installation (ISFSI) operation and maintenance (O&M) costs projected for 2022-2024. If a settlement is not reached by January 1, 2024, this amount will be increased to \$9.3 million, which covers the annual amount of ISFSI O&M costs projected for years after 2024.

Based upon its ability to fund decommissioning and spent fuel management from the NDT, the pay-item approach employed for decommissioning activities, use of performance bonds to ensure work performance, the availability of escrow funds and the additional parental support committed by NorthStar, and anticipated recoveries from DOE for spent fuel management, the Applicants claim that NVY will remain financially qualified as VY's owner licensee following the proposed indirect license transfers. Under the terms of an operating agreement with NNDC, NVY is obligated to fund NNDC's costs of operations, which are to include decommissioning costs and spent fuel management costs. Accordingly, NNDC will be financially qualified because under the terms of its operating agreement, NVY will be required to pay for NNDC's costs of operations, including decommissioning and spent fuel management costs.

Enclosure 2, "Schedule and Financial Information for Decommissioning (VY)," of the application provides financial projections for the remaining duration of the VY decommissioning project and reflects that the amount of funds in the VY NDT, including escrow funds, will continue to be adequate to fund the costs of decommissioning VY (including the ISFSI), as well as spent fuel management costs up to \$20 million. The Applicant's cash-flow analysis shows that the existing NDT balance, with a credit for projected earnings assuming a 2-percent real rate of return as allowed by NRC regulations, is sufficient to fund the entire remaining estimated cost of decommissioning and spent fuel management. Thus, the Applicants indicate that the availability of funds in the VY NDT satisfies the "prepayment" method of providing decommissioning funding assurance pursuant to 10 CFR 50.75(e)(1)(i), provides funding assurance for spent fuel management satisfying 10 CFR 50.54(bb), and satisfies the "prepayment" method of providing ISFSI decommissioning funding assurance pursuant to 10 CFR 72.30.

In analyzing the Applicants' proposed use of the NDT and other available sources of funds to cover decommissioning and spent fuel management costs, the NRC staff generated an independent cash-flow analysis, which is presented in Attachment A to this safety evaluation. The NRC staff's review of the information provided in the application and its independent cash-flow analysis found that there was reasonable assurance that adequate funds would be available in the NDT, including escrow funds, and other identified sources of funds, as necessary, to complete the radiological decommissioning of VY, including the decommissioning of the ISFSI, and to pay for the entirety of estimated spent fuel management costs at the site.

This conclusion was based on the current VY NDT balance of \$400,855,000, including escrow funds, as of September 30, 2020, and an estimate of the VY total decommissioning costs of approximately \$362,664,000, and spent fuel management costs of approximately \$259,055,000. In its analysis, and to confirm the Applicants' assumptions and calculations, the NRC staff, consistent with 10 CFR 50.75(e)(1)(i), applied a 2-percent annual real rate of return to the DTF

balances, less annual costs for radiological decommissioning and spent fuel management, resulting in a positive NDT balance at the time that all license termination and spent fuel management activities are projected to be completed.

Therefore, based on this analysis, and with projected excess funds at the time of completion of license termination and spent fuel management activities in the year 2053, the NRC staff determined that funding as presented by the Applicants will be sufficient to cover the costs associated with decommissioning and spent fuel management at VY following the proposed indirect license transfers.

Based on this review, and in consideration of the above analysis including consideration of all VY funding sources, the NRC staff finds that the Applicants have provided information sufficient to demonstrate that there is reasonable assurance that, after the proposed indirect license transfers, sufficient funds will be available to cover all decommissioning and spent fuel management costs at VY.

5.1.2 Decommissioning and Spent Fuel Management Financial Assurance at CR3

Information in the application indicates that following the proposed indirect license transfers, ADP CR3 will remain financially qualified to conduct decommissioning and spent fuel management activities at CR3. The proposed indirect license transfers would not result in changes to the CR3 NDT funds, the method of providing financial assurance for decommissioning CR3, or ADP SF1's role in financing spent fuel management activities at CR3.

In the safety evaluation accompanying the April 1, 2020, Order authorizing the transfer of licensed authority from DEF to ADP CR3 and the transfer of ownership of the ISFSI and spent fuel from DEF to ADP SF1 (ADAMS Accession No. ML20101G583), the NRC staff stated that:

[T]he NRC staff evaluated the Applicants' financial qualifications, including decommissioning financial assurance and spent fuel management financial assurance. Based on this evaluation and an independent cash flow analysis, the staff determined that there is reasonable assurance that the funds in the NDT will be sufficient to cover the costs of the radiological decommissioning of [CR3] and its ISFSI, spent fuel management, and site restoration. Additional assurance of adequate funds is provided by the license conditions requiring an ISFSI Decommissioning Trust, financial Support Agreements, a Provisional Trust, and a performance bond or settlement agreement with the DOE. Therefore, the staff concludes that DEF and ADP CR3 are financially qualified to hold the [CR3] license, as proposed.

According to the indirect license transfer application, because ADP CR3 will not be authorized under the CR3 license to operate or load fuel in the reactor pursuant to the terms of 10 CFR 50.82(a)(2), ADP CR3 will not conduct any of the operations contemplated by the financial qualifications provisions of 10 CFR 50.33(f), but rather all of its licensed activities will involve possession of radioactive material in connection with maintaining the safe condition of the plant, decommissioning the CR3 site (including the ISFSI), and maintaining the ISFSI until it can be decommissioned. Thus, the existing CR3 NDT funds, including an initial deposit of \$3.95 million for future ISFSI decommissioning provided by ADP SF1, provide the appropriate basis for the financial qualifications of ADP CR3. Moreover, ADP SF1 will be ADP CR3's source of funding for spent fuel and ISFSI management.

Information in the application indicates that following the proposed indirect license transfers, ADP CR3 would remain financially qualified to possess, maintain, and decommission the CR3 site. The proposed indirect license transfers would not result in changes to the CR3 NDT funds or to the method of providing financial assurance for decommissioning CR3. According to the application, the availability of funds in the CR3 NDT satisfies the "prepayment" method of providing financial assurance pursuant to 10 CFR 50.75(e)(1)(i) and satisfies the "prepayment" method of providing ISFSI decommissioning funding assurance pursuant to 10 CFR 72.30. By exemptions dated January 26, 2015 (ADAMS Accession No. ML14247A545), funds from the CR3 NDT are authorized to be used for radiological decommissioning, spent fuel management, and site restoration activities.

In addition to CR3 NDT funds, ADP CR3 will also have access to other financial assurance provided by its parent companies, NorthStar and Orano. NorthStar has entered into a financial Support Agreement in the amount of \$105 million and Orano has entered into a financial Support Agreement in the amount of \$35 million. These agreements provide that \$140 million will be available if needed for ADP CR3 to meet any of its obligations so that CR3 is maintained and decommissioned in compliance with the requirements of the NRC.

Finally, ADP CR3 has established a Provisional Trust, which was initially funded with \$20 million. ADP CR3 retains 6 percent of each invoice for decommissioning services performed and paid from the CR3 NDT and deposits such amounts into the Provisional Trust. This retainage will continue until the Provisional Trust contains \$50 million. This provides additional financial assurance related to the performance of ADP CR3, and these amounts will not be fully released to ADP CR3 until the NRC approves partial license termination.

According to the application, the balance of funds in the CR3 NDT, including the Provisional Trust and ISFSI decommissioning funds provided by ADP SF1 (further discussed below), totaled \$558,057,000 as of October 1, 2020. The CR3 decommissioning cost estimate as of October 1, 2020, includes approximately \$494,017,000 for radiological decommissioning, approximately \$5,407,000 for ISFSI decommissioning, and approximately \$279,143,000 for spent fuel management, totaling approximately \$778,567,000. An additional approximately \$40,090,000 has been identified for site restoration costs. Following partial license termination in the 2026-2027 timeframe, spent fuel management activities and ISFSI decommissioning will be completed in 2037, following retrieval of spent fuel by DOE and its permanent removal from the CR3 site.

Enclosure 3, "Schedule and Financial Information for Decommissioning (CR3)," of the application provides financial projections for the remaining duration of the CR3 decommissioning project and reflects that the amount of the funds in the CR3 NDT being made available to ADP CR3 under the Decommissioning Services Agreement will continue to be adequate to fund the costs of decommissioning CR3 (including the ISFSI). The Applicants assert that their right to draw on the sources of funds described above and the projected costs for the planned remaining decommissioning period provide the requisite financial assurance for the indirect license transfer request consistent with 10 CFR 50.33(f).

ADP CR3 has analyzed the remaining expected costs of decommissioning, including the expected annual cash flows, and believes that funds in the accounts available to ADP CR3 will be sufficient to cover all of the remaining expected costs of decommissioning CR3. According to the application, the NDT, with a credit for projected earnings assuming a 2-percent real rate of return as allowed by NRC regulations, is sufficient to fund the entire remaining estimated cost of decommissioning CR3. Therefore, the Applicants indicate that the availability of funds in the

CR3 NDT satisfies the "prepayment" method of providing decommissioning funding assurance pursuant to 10 CFR 50.75(e)(1)(i) and satisfies the "prepayment" method of providing ISFSI decommissioning funding assurance pursuant to 10 CFR 72.30.

Further, the application states that decommissioning work will be performed under fixed price or fixed unit contracts, subject to performance bonds (or insurance, where appropriate) issued by qualified surety companies to guarantee the performance of the tasks, and with withdrawals from the NDT "limited under a decommissioning pay-item approach, which reasonably assures completion of the work within the cost estimates." The Applicants indicate that under this approach, any cost overruns on one task do not affect the funds remaining in the NDT to pay for the completion of other decommissioning tasks.

Regarding spent fuel management at CR3, ADP SF1 owns the ISFSI and its associated equipment, and it holds title to the CR3 spent nuclear fuel, the high-level waste, and the greater than Class C waste at the CR3 facility, as well as the associated dry cask storage canisters. ADP SF1 owns, but does not possess, the spent fuel and radiological waste pursuant to the general license provided in 10 CFR 72.6(b).

ADP SF1 and ADP CR3 have entered into a Services Agreement dated October 1, 2020, which provides for ADP SF1 to pay the costs incurred by ADP CR3 in maintaining and removing the spent nuclear fuel, the high-level waste, the greater than Class C waste, and the associated dry cask storage canisters from the site. Therefore, according to the application, ADP CR3 satisfies the requirement in 10 CFR 50.54(bb) for a plan for funding spent fuel management based upon its entitlement to funding under the Services Agreement with ADP SF1. This agreement also provides the foundation for the financial assurance for the decommissioning of the ISFSI, which is provided for under the terms of a contract, as contemplated by 10 CFR 50.75(e)(1)(v). ADP SF1 estimates that the current cost of decommissioning the CR3 ISFSI is approximately \$3.7 million. Funding for decommissioning the ISFSI is provided by an ADP SF1 deposit of \$3.95 million into the CR3 NDT, which, at the allowed 2-percent real rate of return, is projected to grow to \$5.4 million by 2037, when the ISFSI is expected to be decommissioned. Thus, ADP SF1 provides adequate financial assurance for ISFSI decommissioning using the prepayment method set forth in 10 CFR 72.30(e)(1).

According to the application, ADP SF1 has also been assigned the DOE Standard Contract governing the CR3 spent fuel, including all rights and obligations under that contract. ADP SF1's payments to ADP CR3 under the Services Agreement to operate, maintain, and decommission the ISFSI, and to ultimately remove spent fuel from the CR3 ISFSI, will be substantially recoverable from DOE either through litigation of ADP SF1's claims under the Standard Contract or through the settlement of ADP SF1's future claims under that contract. ADP SF1 expects that its parent companies will provide funding in order to fund ISFSI activities until it obtains a settlement and, thereafter, to fund ongoing costs in advance of recovering damages and for any disallowed damages claims. ADP SF1 is a beneficiary of the \$140 million in Support Agreements provided by NorthStar and Orano and, therefore, its parent companies will provide the funds necessary to pay ADP CR3 in advance of ADP SF1 recovering its costs from DOE through litigation or under a settlement, as well as to pay for ADP CR3's costs that are not recoverable from DOE through either litigation or settlement.

In analyzing the Applicants' proposed use of the CR3 NDT and other available sources of funds to cover decommissioning and spent fuel management costs, the NRC staff generated independent cash-flow analyses, which are presented in Attachments B1 and B2 to this safety evaluation. The NRC staff's review of the information provided in the application and its

independent cash-flow analyses found that there was reasonable assurance that adequate funds would be available in the CR3 NDT, including other identified sources of funds, as necessary, to complete the radiological decommissioning of CR3, including decommissioning of the ISFSI, and to pay for the entirety of estimated spent fuel management costs at the site.

This conclusion was based on the current CR3 NDT balance of \$558,057,000, including the value of the Provisional Trust and funds provided by ADP SF1 for ISFSI decommissioning, as of October 1, 2020, and an estimate of the CR3 decommissioning costs of approximately \$494,017,000, spent fuel management costs of approximately \$279,143,000, and ISFSI decommissioning costs of approximately \$5,407,000, and accounts for withdrawals for site restoration costs of approximately \$40,090,000. In its analysis, and to confirm the Applicants' assumptions and calculations, the NRC staff, consistent with 10 CFR 50.75(e)(1)(i), applied a 2-percent annual real rate of return to the DTF balances, less annual costs for radiological decommissioning and spent fuel management, resulting in a positive NDT balance at the time that all license termination and spent fuel management activities are projected to be completed. These analyses also accounted for withdrawals for CR3 site restoration costs.

Therefore, based on these analyses, and with projected excess funds at the time of completion of license termination and spent fuel management activities in the year 2037, the NRC staff determined that funding as presented by the Applicants will be sufficient to cover the costs associated with decommissioning, spent fuel management, and ISFSI decommissioning at CR3. The staff's cash-flow analyses also indicate funding availability for site restoration at CR3.

Based on this review, and in consideration of the above analysis including consideration of all CR3 funding sources, the NRC staff finds that the Applicants have provided information sufficient to demonstrate that there is reasonable assurance that, after the proposed indirect license transfers, sufficient funds will be available to cover all decommissioning, spent fuel management, and ISFSI decommissioning costs at CR3.

5.2 Financial Evaluation Conclusion

As described above, the NRC staff evaluated the financial qualifications of the VY and CR3 licensees to be the holders of the VY and CR3 licenses, respectively, following the proposed indirect license transfers, which consist of decommissioning financial assurance and spent fuel management financial assurance. Based on this evaluation and independent cash-flow analyses, the staff determined that there is reasonable assurance that the funds in the VY and CR3 NDTs, along with other identified sources of funds dedicated to decommissioning and spent fuel management, will be sufficient to cover the costs of radiological decommissioning, including decommissioning the ISFSIs, and spent fuel management at VY and CR3. Therefore, the staff concludes that the Applicants provided information sufficient to demonstrate the financial qualifications of the licensees to carry out the activities permitted by the VY and CR3 licenses following the proposed indirect license transfers.

6.0 DOE STANDARD CONTRACTS

According to the application, for spent fuel at the VY site, NVY maintains and will continue to maintain the Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Waste with DOE for the disposal of spent fuel to be performed by DOE (Standard Contract), including all rights and obligations under that contract. This Standard Contract,

No. DE-CR01-83NE44431, dated June 10, 1983, was entered into by the Yankee Companies and the United States of America, represented by the DOE, to govern spent fuel generated

at VY. NNDC is responsible for the VY spent fuel and for the maintenance and security of the spent fuel, including the ISFSI site. NNDC has exclusive responsibility under the VY license for the possession, maintenance, and decommissioning of VY, which includes responsibility to the NRC for the maintenance and security of the ISFSI site.

The application states that upon initial receipt of proceeds from DOE for reimbursement of the dry fuel storage project costs, NVY will use those proceeds to pay down debt relating to construction of the VY ISFSI. NVY expects to pursue subsequent claims against DOE for its ongoing costs of maintaining the ISFSI. Withdrawals from the NDT for maintaining the ISFSI will not exceed \$20 million, and in addition to expected recoveries from DOE, NorthStar is committed to funding these costs. This commitment is backed by the \$140 million Support Agreement. In addition, NVY has committed to obtain a performance bond for its annual spent fuel management costs if it is unable to obtain a settlement with DOE, as required by NRC Order dated October 11, 2018 (discussed above).

According to the application, for spent fuel at the CR3 site, the DOE Standard Contract, including all rights and obligations under that contract, was assigned to ADP SF1. This Standard Contract, No. DE-CR01-83NE44382, dated June 30, 1983, was entered into by the predecessor to DEF, Florida Power Corporation, and the United States of America, represented by the DOE, to govern the disposal of spent fuel generated at CR3. The Applicants assert that ADP SF1's payments to ADP CR3 under the Services Agreement to operate, maintain, and decommission the CR3 ISFSI, and to ultimately remove spent fuel from the ISFSI, will be substantially recoverable from DOE either through litigation of ADP SF1's claims under the Standard Contract or through the settlement of ADP SF1's future claims under that contract. ADP SF1 expects that its parent companies will provide funding in order to fund ISFSI activities until it obtains a settlement and, thereafter, to fund ongoing costs in advance of recovering damages and any disallowed damages claims. In addition, the application states that if ADP SF1 is unable to obtain a settlement agreement from the DOE by January 1, 2025, it will post a performance bond in an amount equal to one year's worth of spent fuel management expense. It will thereafter maintain a performance bond for subsequent years, in the amount of the applicable estimated annual expense, until a settlement is obtained from DOE.

7.0 ANTITRUST CONSIDERATION

The AEA does not require or authorize antitrust reviews of post-operating license transfer applications (*Kansas Gas and Electric Co.*), *et al.* (Wolf Creek Generating Station, Unit 1), CLI-99-19, 49 NRC 441 (1999)). The application post-dates the issuance of the operating license for the units under consideration in this safety evaluation and, therefore, no antitrust review is required or authorized. Additionally, the subject licenses do not contain any antitrust conditions; therefore, there are no antitrust issues to be considered in the review of these indirect license transfers related to the VY and CR3 facilities.

8.0 FOREIGN OWNERSHIP, CONTROL, OR DOMINATION

Consistent with 10 CFR 50.33(d), the application contains the names, addresses, and citizenship of the directors and principal officers for all of the parent companies and license holders involved. The application indicates that all of the directors and principal officers are U.S. citizens with the exception of one, a citizen of the United Kingdom who currently is associated with the indirect corporate structure above the current licensees.

According to the application, NorthStar is privately held and ultimate control is exercised by four U.S. citizens, John F. Lehman, Louis N. Mintz, Stephen L. Brooks, and C. Alexander Harman, who are currently, and will remain, the managing members of JFL GP Investors IV, LLC. Each of the affiliated investor funds has multiple limited partnership investors, who are passive investors. The passive investors may include foreign investors, but NorthStar is not aware of any foreign passive investor that holds more than 5 percent of the indirect ownership interests of NorthStar. Moreover, the passive investors are not able to exercise control over either the private equity funds or NorthStar. The Applicants indicate that there is no reason to believe that licensees NNDC, NVY, and ADP CR3 are or would become subject to foreign ownership, control, or domination (FOCD) as a result of the proposed indirect license transfers.

According to the application, Orano's existing indirect ownership interest in ADP CR3 would not be affected by the proposed indirect license transfers. Although Orano is ultimately majority owned by a foreign state, Orano owns only 25 percent of ADP (of which ADP CR3 is a wholly owned subsidiary), and it is not able to exercise control over ADP (the remaining 75 percent of which is owned by NorthStar). When ADP was formed, NorthStar and Orano included FOCD negation measures in Section 11.4 of the Limited Liability Agreement of ADP, which was dated February 7, 2017. In addition, ADP CR3 adopted an FOCD Negation Action Plan (NAP) that was submitted to the NRC by letter dated January 17, 2020 (ADAMS Accession No. ML20017A216) and made a condition of the CR3 license. This NAP will continue in effect after the proposed indirect license transfers. As such, Orano's participation in ADP does not and will not involve any prohibited FOCD that could affect the CR3 license.

Based on its review, the NRC staff concludes that it does not know or have reason to believe that NNDC, NVY, or ADP CR3 would be owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, as a result of the proposed indirect license transfers.

9.0 NUCLEAR INSURANCE AND INDEMNITY

Upon review of the requirements of the Price-Anderson Act (Section 170 of the Act) and the NRC's implementing regulations at 10 CFR Part 140, the NRC staff finds that the current VY and CR3 indemnity agreements do not need to be modified to reflect the proposed indirect license transfers of the parent companies since there would be no change to the named license holders. Additionally, the financial protection currently provided by the licensees in the form of offsite liability insurance and onsite property insurance would continue to remain in effect. The licensees remain required to provide, maintain, and report the appropriate amount of insurance in accordance with 10 CFR 50.54(w), 10 CFR 140.11(a)(4), and 10 CFR 140.21.

10.0 SUMMARY

Based on its review of the information provided in the application and its independent analysis, the NRC staff finds that the proposed indirect license transfers for VY and CR3 satisfy the NRC's technical qualifications; financial qualifications; decommissioning funding; antitrust; foreign ownership, control, or domination; and nuclear insurance and indemnity requirements.

11.0 <u>CONCLUSION</u>

The Commission has concluded, based on the considerations discussed above, that (1) the proposed transferees are qualified to be the indirect holders of the licenses and (2) the indirect transfers of the licenses are otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto.

Principal Contributor: Richard Turtil, NMSS

Date of Issuance: June 28, 2021

ATTACHMENT A: Vermont Yankee Nuclear Power Station Cash-Flow Analysis in Support of Proposed Indirect License Transfer

(thousands of constant 2020 Dollars)

	Ononing	Lieenee	Chant Fuel	Contributions	NDT	Clasing
Year	Opening Fund	License Termination	Spent Fuel Management	Contributions and	NDT Interest	Closing Fund
rear	Balance	Costs	Costs	Distributions ^b	Earned ^c	Balance
Q4-2020	\$400,855 ª	\$11,105	\$1,060	\$2,523	\$1,943	\$393,156
2021	\$393,156	\$88,930	\$4,241	\$9,6110	\$6,000	\$315,597
2022	\$315,597	\$79,925	\$4,241	\$8,1840	\$4,629	\$244,242
2023	\$244,242	\$69,758	\$4,241	\$10,000	\$3,605	\$183,848
2024	\$183,848	\$65,692	\$4,241	\$16,964	\$2,618	\$133,497
2025	\$133,497	\$33,188	\$4,241	\$4,241	\$2,006	\$102,315
2026	\$102,315	\$10,613	\$4,241	(\$1,211)	\$1,834	\$88,084
2027	\$88,084	\$0	\$8,944	(\$51,759)	\$1,668	\$29,049
2028	\$29,049	\$0	\$8,944	\$8,944	\$581	\$29,630
2029	\$29,630	\$0	\$8,944	\$8,944	\$593	\$30,222
2030	\$30,222	\$0	\$8,944	\$8,944	\$604	\$30,827
2031	\$30,827	\$0	\$8,944	\$8,944	\$617	\$31,443
2032	\$31,443	\$0	\$8,944	\$8,944	\$629	\$32,072
2033	\$32,072	\$0	\$8,944	\$8,944	\$641	\$32,713
2034	\$32,713	\$0	\$8,944	\$8,944	\$654	\$33,368
2035	\$33,368	\$0	\$8,944	\$8,944	\$667	\$34,035
2036	\$34,035	\$0	\$8,944	\$8,944	\$681	\$34,716
2037	\$34,716	\$0	\$8,944	\$8,944	\$694	\$35,410
2038	\$35,410	\$0	\$8,944	\$8,944	\$708	\$36,118
2039	\$36,118	\$0	\$8,944	\$8,944	\$722	\$36,841
2040	\$36,841	\$0	\$8,944	\$8,944	\$737	\$37,577
2041	\$37,577	\$0	\$8,944	\$8,944	\$752	\$38,359
2042	\$38,359	\$0	\$8,944	\$8,944	\$767	\$39,096
2043	\$39,096	\$0	\$8,944	\$8,944	\$782	\$39,877
2044	\$39,877	\$0	\$8,944	\$8,944	\$798	\$40,675
2045	\$40,675	\$0	\$8,944	\$8,944	\$814	\$41,489
2046	\$41,489	\$0	\$8,944	\$8,944	\$830	\$42,319
2047	\$42,319	\$0	\$8,944	\$8,944	\$846	\$43,165,
2048	\$43,165	\$0	\$8,944	\$8,944	\$863	\$44,028
2049	\$44,028	\$0	\$8,944	\$8,944	\$881	\$44,909
2050	\$44,909	\$0	\$8,944	\$8,944	\$898	\$45,807
2051	\$45,807	\$0	\$8,944	\$8,944	\$916	\$46,723

ATTACHMENT A: Vermont Yankee Nuclear Power Station Cash-Flow Analysis in Support of Proposed Indirect License Transfer (thousands of constant 2020 Dollars)						
Year	ar Opening License Spent Fuel Contributions Interest Closi Fund Termination Management and Earned ^c Fun Balance Costs Costs Distributions ^b Balan					
2052	\$46,723	\$3,454	\$8,944	\$8,944	\$865	\$44,134
2053	\$44,134	\$0	\$0	\$8,944	\$1,062	\$54,140
Total		\$362,664	\$259,055	\$231,097	\$43,903	

a – Reflects the value of the NDT, \$367,192,000, including Financial Assurance Escrow funds of \$33,664,000, and excluding the Site Restoration subaccount, as of September 30, 2020. For years beyond 2020, Opening Fund Balance reflects fund balance on January 1.

 b – Reflects NorthStar contributions as required by Section 2(c) of the Memorandum of Understanding (MOU) dated March 2, 2018 and approved by the State of Vermont Public Utility Commission, totaling \$20,318 in years 2020-2022, and distributions totaling \$61,452,000, to be made pursuant to Section 2(c)(2) of the MOU, in years 2026-2027; and cost recoveries from DOE for breach of Standard Contract in years 2023 through 2053.

c – Based on 2-percent real rate of return.

	ATTACHMENT B1: Crystal River Unit 3 Nuclear Generating Plant Cash-Flow Analysis in Support of Proposed Indirect License Transfer License Termination, Site Restoration, and ISFSI Decommissioning (thousands of constant 2020 Dollars)							
Year	Opening Balance, NDT and ISFSI Decomm. Fund Sources	License Termination Costs	Site Restoration Costs	ISFSI Decomm. Costs	Contributions and Distributions ^b	Interest Earned ^c	Closing Balance	
Q4 - 2020	\$558,057 ª	\$62,247	\$48	\$0	\$4,421	\$2,479	\$502,662	
2021	\$562,662	\$88,863	\$250	\$0	\$5,118	\$8,271	\$426,938	
2022	\$426,938	\$116,274	\$5,220	\$0	\$7,557	\$6,109	\$319,110	
2023	\$319,110	\$67,492	\$1,055	\$0	\$3,807	\$5,012	\$259,382	
2024	\$259,382	\$66,193	\$1,693	\$0	\$4,156	\$3,830	\$199,482	
2025	\$199,482	\$42,799	\$5,988	\$0	\$296	\$3,014	\$154,005	
2026	\$154,005	\$50,149	\$25,836	\$0	(\$980)	\$1,561	\$78,601	
2027 d	\$78,601	\$0	\$0	\$0	(\$74,130)	\$89	\$4,560	
2028	\$4,560	\$0	\$0	\$0	\$0	\$91	\$4,651	
2029	\$4,651	\$0	\$0	\$0	\$0	\$93	\$4,744	
2030	\$4,744	\$0	\$0	\$0	\$0	\$95	\$4,839	
2031	\$4,839	\$0	\$0	\$0	\$0	\$97	\$4,936	
2032	\$4,936	\$0	\$0	\$0	\$0	\$99	\$5,035	
2033	\$5,035	\$0	\$0	\$0	\$0	\$101	\$5,135	
2034	\$5,135	\$0	\$0	\$0	\$0	\$103	\$5,238	
2035	\$5,238	\$0	\$0	\$0	\$0	\$105	\$5,343	
2036	\$5,343	\$0	\$0	\$0	\$0	\$107	\$5,450	
2037	\$5,450	\$0	\$0	\$5,407	(\$43)	\$0	\$0	
Total		\$494,017	\$40,090	\$5,407	(\$49,798)	\$31,255		

 a – Reflects the value of the NDT, including the value of the Provisional Trust and funding provided by ADP SF1 for ISFSI decommissioning (\$3.95 million), as of October 1, 2020. For years beyond 2020, Opening Balance, NDT and ISFSI Decommissioning Fund Sources reflects fund balance on January 1.

b – Reflects ADP incremental contributions and (distributions) pursuant to the terms of the Decommissioning Services Agreement (DSA) between ADP CR3 and DEF.

c – Based on 2-percent real rate of return.

 d – Partial license termination (with only ISFSI and spent fuel management activities remaining) occurs in the 2026-2027 timeframe; ADP makes final withdrawal of license termination and site restoration funds.

	ATTACHMENT B2: Crystal River Unit 3 Nuclear Generating Plant Cash-Flow Analysis in Support of Proposed Indirect License Transfer Irradiated Fuel Management (Spent Fuel Management) (thousands of constant 2020 Dollars)							
Year	Beginning Fund Balance ª	Spent Fuel Management Costs	ADP Withdrawals ^b	ADP Contributions (Distributions)	DOE Cost Recovery ^c	Interest Earned ^d	Closing Fund Balance	
Q4- 2020	\$0	\$1,955	\$1,955	\$2,500	\$0	\$3	\$548	
2021	\$548	\$7,976	\$7,976	\$8,000	\$0	\$3	\$575	
2022	\$575	\$19,770	\$19,770	\$19,750	\$0	\$3	\$557	
2023	\$557	\$9,617	\$9,617	(\$600)	\$10,191	\$3	\$534	
2024	\$534	\$8,464	\$8,464	(\$5,000)	\$19,770	\$34	\$6,874	
2025	\$6,874	\$8,634	\$8,634	\$0	\$9,617	\$39	\$7,897	
2026	\$7,897	\$8,806	\$8,806	\$0	\$17,379	\$82	\$16,552	
2027	\$16,552	\$12,302	\$12,302	\$0	\$8,806	\$65	\$13,121	
2028	\$13,121	\$12,548	\$12,548	\$0	\$12,601	\$66	\$13,240	
2029	\$13,240	\$12,799	\$12,799	\$0	\$12,548	\$65	\$13,054	
2030	\$13,054	\$13,055	\$13,055	\$0	\$12,799	\$64	\$12,862	
2031	\$12,862	\$13,316	\$13,316	\$0	\$13,372	\$65	\$12,983	
2032	\$12,983	\$13,583	\$13,583	\$0	\$13,316	\$64	\$12,780	
2033	\$12,780	\$13,854	\$13,854	\$0	\$13,583	\$63	\$12,571	
2034	\$12,571	\$14,131	\$14,131	\$0	\$14,191	\$63	\$12,693	
2035	\$12,693	\$14,414	\$14,414	\$0	\$14,131	\$62	\$12,473	
2036	\$12,473	\$14,702	\$14,702	\$0	\$14,414	\$61	\$12,245	
2037	\$12,245	\$79,214	\$79,214	(\$126)	\$67,094	\$0	\$0	
Total		\$279,143	\$279,143	\$24,525	\$253,815	\$804		

a – Reflects the Fund Balance as of October 1, 2020. For years beyond 2020, Beginning Fund Balance reflects fund balance on January 1.

b – Reflects the annual expenditures from the Irradiated Fuel Management Account paid by ADP SF1 pursuant to the Services Agreement dated October 1, 2020.

c – Reflects Cost Recovery from DOE for breach of the Standard Contract. Assumes recovery of approximately 91 percent of costs, net of legal costs and disallowed costs; Year 2023: \$10,191 recovery reflects initial NorthStar DOE settlement for costs incurred from 2020 through 2021; Year 2037: \$67,094 recovery reflects NorthStar DOE settlement for costs incurred in 2036 and 2037 (excludes recovery of DOE Fuel Loading Costs (\$21,415) incurred in 2037).

d – Based on 2-percent real rate of return.

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Vermont Yankee and Crystal River Indirect License Transfer Approval Package DATE June 28, 2021

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NAME	MDoell <i>ML</i>	JParrott J	PTWertz TW	BWatson <i>BW</i>
DATE	Jun 8, 2021	Jun 8, 2021	Jun 8, 2021	Jun 8, 2021
	OGC/GCHA/AGCOR /NLO*	NMSS/DUWP	OE/EB	NMSS/PMDA/OMT
NAME	JWachutka <i>JV</i>	/PHolahan <i>P</i>	HRFretz RF	CGoode CG
DATE	Jun 21, 2021	Jun 22, 2021	Jun 23, 2021	Jun 25, 2021
OFFICE	NMSS	NMSS/DUWP/RDB		
NAME	JLubinski <i>Jl</i>	BWatson B	N	
DATE	Jun 28, 2021	Jun 28, 2021		

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