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December 12, 2019

Delivered via email

The Honorable Representative Laura Sibilía
Member, House Committee on Energy & Technology
Member, Vermont Nuclear Decommissioning Citizens Advisory Panel
lhsibilia@gmail.com

Re: Vermont Yankee Decommissioning Fund

Dear Representative Sibilía:

Please accept this letter as the response of the Department of Public Service (“Department”) to the following questions you recently posed about the Vermont Yankee (“VY”) Decommissioning Fund:

1. Is the estimated cost to complete the project updated on a regular basis?
2. What happens if there is a surplus in the Vermont Yankee decommissioning fund?
3. What happens if there are insufficient funds?

As a preliminary matter, it should be noted that the VY decommissioning project has multiple funding sources. Originally, the decommissioning work was expected to be paid for through the Nuclear Decommissioning Trust (“NDT”), which was funded by regular payments over many years from ratepayers. Several decades later, the Vermont Public Utility Commission (“PUC”) further ordered the creation of the Site Restoration Trust (“SRT”) as an additional financial resource for the site restoration (*i.e.*, non-radiological work) at the VY site. Finally, in March of 2018, the PUC approved the Memorandum of Understanding in Docket 8880 (the “Docket 8880 MOU”) pursuant to which NorthStar acquired the VY facility from Entergy, subject to the obligation to fund a variety of additional financial safeguards that are directed at ensuring there is adequate funding to complete the sound decommissioning of the VY facility and restoration of the VY site.¹

¹The PUC’s Docket 8880 Order can be reviewed here:

https://publicservice.vermont.gov/sites/dps/files/documents/8880_2018.12.06_PUC_Order_Approve_VY_Sale_0.pdf

The PUC’s Docket 8880 MOU can be reviewed here:

https://publicservice.vermont.gov/sites/dps/files/documents/8880_2018.03.02_Signed_MOU.pdf



Please be assured that the financial issues raised in your questions are the subject of careful and regular scrutiny by Department attorneys, as well as by external experts who have the requisite financial expertise to independently assess NorthStar's progress relative to the decommissioning project schedule and related funding disbursements from the Nuclear Decommissioning Trust and the Site Restoration Trust.² NorthStar regularly files reports and other documents with its regulators (both state and federal), answers information requests, and otherwise is in regular communication with the State of Vermont about the decommissioning activities and associated finances.³

1. Is the estimated cost to complete the project updated on a regular basis?

Yes. NorthStar is obliged to provide an updated projection of the cost to complete decommissioning annually, no later than March 31. This is required both under the Docket 8880 MOU and pursuant to federal regulations administered by the Nuclear Regulatory Commission ("NRC").

For site restoration work, the Docket 8880 MOU sections 2.h.(3) & (4) require NorthStar to report the "amount of funds available for site restoration as of the end of the calendar year preceding the date of the report" and the "amount of funds estimated to be required to complete site restoration."⁴ For nuclear decommissioning work, the Docket 8880 MOU sections 2.i.(3) & (4) require NorthStar to provide updated financial information to the Department annually. This includes projected fund activity for the NDT and SRT funds that breaks down all future decommissioning, site restoration, and spent fuel management activities; an updated "pay item disbursement schedule;" the equivalent of an update of the current "Deal Model;" and a variance

² NorthStar is entitled to compensation for its work during the decommissioning project by taking periodic disbursements from the NDT and SRT. There is a line-item payment schedule that limits how much NorthStar can be paid upon completing any particular task. Subject to monitoring by the NRC and the Department, NorthStar is authorized to draw payment of the entire sum allocated for a given project line-item on the payment schedule once the work for that line-item is complete. There is a 10% contingency amount built into each line-item on the payment schedule. The Docket 8880 MOU provides that NorthStar has the right to payment of the full line-item amount even if the actual cost of completing the work for that line-item proves to be lower than the payment amount allocated to that line-item on the schedule.

³ The Department is mindful of the heightened and sustained interest that the public takes in the progress of the VY decommissioning. Accordingly, the Department has recently revamped its website to publish reports that NorthStar provides to its regulators and to provide regular updates on the NDT and SRT balances. *See* <https://publicservice.vermont.gov/content/trust-balances>; <https://publicservice.vermont.gov/content/public-reports>. The website also provides links to the video recordings of our NDCAP meetings where the Department regularly reports on the decommissioning project's progress and related financials.

⁴ *See* Docket 8880 MOU §§ 2.h.(3) & (4), p. 7, https://publicservice.vermont.gov/sites/dps/files/documents/8880_2018.03.02_Signed_MOU.pdf.

analysis comparing actual disbursements detailed in the updated “Deal Model” to estimated disbursements in the prior year’s reporting.⁵

These requirements are in addition to the annual report NorthStar is required to provide to the NRC by March 31. As detailed in the federal regulations, by March 31st of each year NorthStar must file a “financial assurance status report.”⁶ This report must include an “estimate of the costs to complete decommissioning, reflecting any difference between actual and estimated costs for work performed during the year, and the decommissioning criteria upon which the estimate is based.”⁷

In addition to answering your question about whether the estimated decommissioning cost is updated on a regular basis, I also promised during the December 5th NDCAP meeting last week to provide you with more details about the current status of the estimated cost to complete the VY Decommissioning. The starting point is in the Docket 8880 Order, where the PUC made a finding based on the evidence in the record that the estimated cost of decommissioning at the time of the proceeding was as follows: \$498,450,000 for radiological decommissioning and NRC license termination; \$287,802,000 for spent nuclear fuel management; and \$25,272,000 for site restoration.

NorthStar reported on the estimated cost to complete the decommissioning project in March 2019, at which time the company also provided the Department an updated deal model and line-item payment disbursement schedule. As of March 2019, the estimated cost for the decommissioning project was unchanged, though there were minor changes to the allocation of costs between license termination and site restoration work.⁸

⁵ See Docket 8880 MOU §§ 2.i.(3) & (4), p. 7,
https://publicservice.vermont.gov/sites/dps/files/documents/8880_2018.03.02_Signed_MOU.pdf.

⁶ 10 C.F.R. § 50.82(a)(8)(v).

⁷ 10 C.F.R. § 50.82(a)(8)(v)(B).

⁸ The applicable NRC regulation requires the licensee to report decommissioning funding information “through the end of the previous calendar year.” 10 C.F.R. § 50.82(a)(8)(v). As the sale from Entergy to NorthStar closed on January 11, 2019, Entergy submitted the March 2019 report to the NRC that covered the 2018 calendar year. NorthStar will file the annual report that is due March 31, 2020. NorthStar’s report will cover the 2019 calendar year.

As of November 2019, NorthStar estimated the decommissioning project to be 14% complete.⁹ In turn, based on its monitoring to date, the Department believes the decommissioning project is on track and is going well.¹⁰

2. What happens if there is a surplus in the Vermont Yankee decommissioning fund?

The answer to this question varies depending on whether a surplus has accrued in the NDT or the SRT. Turning first to the NDT, the PUC issued an order in 2002 directing that any surplus funds in the NDT be distributed to the Vermont Yankee Nuclear Power Corporation (“VYNPC”) for the benefit of electric ratepayers.¹¹ The distribution would be based on the ownership percentages held by the eight utility sponsors of the VYNPC.¹²

<u>Sponsor</u>	<u>Sponsorship Percentage</u>
Central Vermont	35.0%
New England Power Company	22.5%
Green Mountain	20.0%
The Connecticut Light and Power Company	9.5%
Central Maine Power Company	4.0%
Public Service Company of New Hampshire	4.0%
Western Massachusetts Electric Company	2.5%
Cambridge Electric Light Company ¹⁶	2.5%

Due to the intervening merger in 2012 of Green Mountain Power and Central Vermont, Green Mountain Power would receive a combined 55% of any surplus funds for the benefit of electric ratepayers.

⁹ See <https://publicservice.vermont.gov/sites/dps/files/documents/November%202019%20Monthly%20Summary%20of%20Expenditures.pdf>. NorthStar’s monthly summary of expenditures includes the company’s calculation of percentages that express the degree of completion for the decommissioning as a whole, as well as for discrete task categories.

¹⁰ That said, the Department does not share NorthStar’s assessment that the project is ahead of schedule. This assessment seems premature because, to the Department’s knowledge at this time, NorthStar has not shortened the critical path to license termination. This critical path includes tasks such as reactor vessel and internals segmentation, followed by reactor building system removal, reactor building demolition, site cleanup, and, finally, the license termination proceeding at the NRC.

¹¹ See *Investigation into General Order No. 45 Notice filed by Vermont Yankee Nuclear Power Corporation re: proposed sale of Vermont Yankee Nuclear Power Station to Entergy Nuclear Vermont Yankee, LLC, and related transactions*, Docket 6545, Order of 6/13/2002 at 37-38.

¹² *Id.* at 1213.

With regard to the SRT, any surplus funds would be returned to NorthStar as the successor-in-interest to Entergy, who was the sole source of funding for the SRT. NorthStar's entitlement to any SRT surplus is memorialized in the Docket 8880 MOU.¹³

3. What happens if there are insufficient funds?

This straightforward question has long been asked and remains difficult to answer because it turns on unsettled questions of law and fact scenarios with consequences that could vary depending on the source and the cause of any inadequacy.

One possible scenario in the event of a funding inadequacy would be for NorthStar to return the reactor to a safe storage condition known as "SAFSTOR". NRC regulations require NorthStar to retain funds sufficient to effect SAFSTOR should unforeseen conditions or expenses arise in the course of decommissioning.¹⁴ The purpose of SAFSTOR would be to provide time for the remaining funds in the NDT to grow. The Vermont PUC acknowledged the SAFSTOR option for dealing with a funding inadequacy in the Docket 8880 order approving the license transfer to NorthStar.¹⁵

Beyond the SAFSTOR scenario, to the Department's knowledge, there is no case law, or state or federal statute or rule, that determines what would happen if the decommissioning funds and all the financial assurances were unavailable. The circumstances of this decommissioning project are materially different from other US commercial nuclear reactors that have been decommissioned. Generally speaking, the decommissioning projects that have been completed to date in the United States involved rate-regulated licensees who could seek to recover cost overruns from ratepayers. By comparison, Vermont Yankee is being decommissioned by NorthStar, a company that specializes in work of this nature, but that is not a rate-regulated licensee.

Vermont law vests the Department with a statutory responsibility in "any proceeding where the decommissioning fund for the Vermont Yankee Nuclear Facility is involved," to "represent the consuming public in a manner that acknowledges that the general public interest requires that the consuming public . . . ought to provide for all costs of decommissioning," rather than having those costs be borne by future electric consumers or the State's taxpayers.¹⁶ The

¹³ See Docket 8880 MOU § 3.a., p. 8,
https://publicservice.vermont.gov/sites/dps/files/documents/8880_2018.03.02_Signed_MOU.pdf.

¹⁴ See 10 C.F.R. § 50.82(a)(8)(i)(B).

¹⁵ Docket 8880 Order, p. 41,
https://publicservice.vermont.gov/sites/dps/files/documents/8880_2018.12.06_PUC_Order_Approve_VY_Sale_0.pdf. ("In the worst case, it might be necessary to reassess plans, schedules, and budgets and explore, depending on circumstances, the possibility of a SAFSTOR option.").

¹⁶ 30 V.S.A. § 2(d).

Department also must seek to have the decommissioning fund be based on all reasonably expected costs.

Given the different nature of the NorthStar decommissioning project, the Department to date has met its statutory responsibilities by advocating for and ultimately securing additional financial assurances for the completion of the VY decommissioning. Specifically, the Department and other state parties negotiated the terms in the Docket 8880 MOU to secure multiple sources of additional funding for decommissioning and/or site restoration work. Those additional funding resources are: (1) NorthStar payment for cost overruns; (2) performance bonds; and (3) sequential deployment of multiple financial assurances.

NorthStar Responsibility for Cost Overruns

First, NorthStar is liable for any cost overruns on any of the 900 line-items detailed in the payment disbursement schedule that governs the timing and basis for the company's real time compensation for its work during the decommissioning project.¹⁷

Performance Bonds

Second, NorthStar must obtain performance bonds, or an equivalent, for any major subcontracted work with a value of approximately \$400 million, to provide protection if a contractor materially defaults or fails to complete contracted work as required.¹⁸ NorthStar would likely make claims on any such bonds before using funds in the financial assurances described below, but it is not required to do so.

Financial Assurance

Third, sections 2 and 3 of the Docket 8880 MOU obligate NorthStar to provide financial assurances that can be drawn upon if the funds in the NDT and SRT prove insufficient. Section 4 of the Docket 8880 MOU prescribes the order of priority in which NorthStar must utilize six of those financial assurances:

- (1) proceeds under a \$30 million pollution legal liability insurance policy, if the need for funds is within the scope of coverage;
- (2) the \$140 million Support Agreement issued by NorthStar's corporate parent;

¹⁷ As a condition of the order approving the transfer in Docket 8880, the Commission held that NorthStar bears the expense, "[i]f the actual cost of a line-item task exceeds the estimated cost to complete that task[.]" Docket 8880 Order, p. 20,

https://publicservice.vermont.gov/sites/dps/files/documents/8880_2018.12.06_PUC_Order_Approve_VY_Sale_0.pdf.

¹⁸ Docket 8880 Order, p. 23,

https://publicservice.vermont.gov/sites/dps/files/documents/8880_2018.12.06_PUC_Order_Approve_VY_Sale_0.pdf.

- (3) the \$30 million escrow account established by NorthStar;¹⁹
- (4) \$10 million from expected litigation proceeds from NorthStar's claim against the Department of Energy ("DOE") for existing ISFSI operations activities;
- (5) \$40 million in additional proceeds from the DOE litigation, which are to be retained in escrow; and
- (6) the \$25 million guaranty provided by Orano USA LLC, which is performing decommissioning work related to the reactor vessel.²⁰

When the NRC approved the license transfer from Entergy to NorthStar, the federal agency conducted a cash flow analysis and then concluded that "funds are expected to be available to pay for the radiological decommissioning of the facility . . ."²¹ The NRC based its conclusion on the financial assurances listed above. The NRC specifically considered "the most conservative opening NDT balance in 2019 (\$488 million) . . . the financial Support Agreement in the amount of \$140 million, the \$20 million revolving credit from DOE reimbursements and/or the performance bonds, and a 2% real-rate of return on annual balances."²² In turn, the NRC's conclusion was incorporated into the PUC's Docket 8880 Order transferring Entergy's certificate of public good to NorthStar.²³ And, as the PUC further stated:

In the Commission's view, the MOU provides additional financial assurances and other provisions that reduce or have the potential to reduce the risks and uncertainties related to the adequacy of the funding and other financial resources committed to the project. We take specific note of the enhanced financial assurances related to site restoration and the

¹⁹ NorthStar will make continuing contributions to the escrow account of up to an additional \$25 million, after NorthStar has withdrawn the first \$100 million from the NDT. See Docket 8880 MOU § 2.c., p. 4, https://publicservice.vermont.gov/sites/dps/files/documents/8880_2018.03.02_Signed_MOU.pdf.

²⁰See Docket 8880 MOU § 4, p. 10 https://publicservice.vermont.gov/sites/dps/files/documents/8880_2018.03.02_Signed_MOU.pdf. In addition to the separate assurances mentioned in § 4, the Docket 8880 MOU requires NorthStar to obtain a letter of credit under certain circumstances tied to the projected dates for project commencement and completion, and required Entergy to contribute funds to the SRT to bring the balance to \$60 million. *Id.* §§ 2.a.(4), 3.a.

²¹ Safety Evaluation, *Related to Request for Direct and Indirect Transfers of Control of Renewed Facility Operating License No. DPR-28 And the General License for the Independent Spent Fuel Storage Installation from Entergy to NorthStar*, Docket Nos. 50-721 and 72-59, at 17 (N.R.C. Oct. 11, 2018) available at <https://publicservice.vermont.gov/sites/dps/files/documents/NRC%20Safety%20Evaluation%20of%20License%20Transfer%20Request.pdf>. The NRC's findings would not include site restoration work.

²² *Id.*

²³ Docket 8880 Order, pp. 5, 26, https://publicservice.vermont.gov/sites/dps/files/documents/8880_2018.12.06_PUC_Order_Approve_VY_Sale_0.pdf.

various provisions of the MOU designed to reduce uncertainties and risk by setting forth requirements for non-radiological site characterization, informational reporting, and oversight by State agencies.

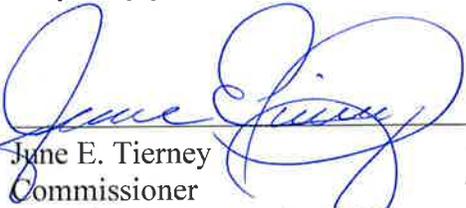
We must also take into account the decision of the NRC to approve the transfer of the NRC licenses to NorthStar. The NRC has responsibility for overseeing radiological decommissioning and has specialized knowledge, experience, and expertise regarding the decommissioning of nuclear power plants. The NRC found NorthStar to be both technically and financially qualified to hold the licenses and specifically concluded that NorthStar had provided reasonable assurance of obtaining the funds necessary to cover the estimated costs of decommissioning the VY Station and the ISFSI and of spent fuel management in accordance with applicable NRC requirements.

Despite NRC approval and the additional assurances provided by the MOU, risks related to the adequacy of available funding remain. As acknowledged in the Department's testimony, the additional financial assurances provided in the MOU reduce but do not eliminate risks related to the adequacy of financial support for the project, and 'approval of this transaction under the terms memorialized in the MOU represents a balancing of interests[.]'²⁴

To summarize, there is no settled answer as to what happens if the decommissioning funding proves inadequate. This is why significant measures were taken by state and federal regulators in reviewing and approving the sale to NorthStar to guard against any decommissioning funding inadequacy. That said, should such a funding inadequacy nonetheless materialize, the Department likely would take the legal position that NorthStar, as Entergy's successor-in-interest, must bear the burden of any such financial shortfall.

I hope you will find this letter to be helpful in answering your questions. Please do not hesitate to reach out to me if you have any additional questions or would like more information about this important topic.

Very truly yours,



June E. Tierney
Commissioner
Vermont Department of Public Service

²⁴ Docket 8880 Order, pp. 35–36,
https://publicservice.vermont.gov/sites/dps/files/documents/8880_2018.12.06_PUC_Order_Approve_VY_Sale_0.pdf

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