



**YANKEE ATOMIC ELECTRIC COMPANY**  
49 Yankee Road, Rowe, Massachusetts 01367

March 5, 2018  
BYR 2018-005  
10 CFR 50.4  
10 CFR 50.75(f)(1) and (2)  
10 CFR 50.82(a)(8)(v) and (vi)

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555 - 0001

Yankee Atomic Electric Company  
Yankee Nuclear Power Station Independent Spent Fuel Storage Installation  
NRC License No. DPR-3 (NRC Docket Nos. 50-029)

Subject: Decommissioning Funding Assurance Status Report

On February 26, 1992, Yankee Atomic Electric Company (YAEC) informed the USNRC that the Board of Directors of YAEC had decided to permanently cease operations at the Yankee Nuclear Power Station and that fuel had been permanently removed from the reactor (Reference 1). In accordance with 10 CFR 50.82(a)(2), the certifications in the letter modified the YAEC license to permanently withdraw YAEC's authority to operate the reactor. In 1993, YAEC commenced decommissioning the power plant. On August 10, 2007, the NRC released most of the formerly licensed land for unrestricted use, shrinking the licensed land to the Independent Spent Fuel Storage Installation (ISFSI) only (Reference 2). The only decommissioning activities that remain are those associated with the decommissioning of the Yankee Nuclear Power Station ISFSI, which is currently scheduled to occur after the Department of Energy (DOE) removes the irradiated fuel and Greater than Class C (GTCC) waste.

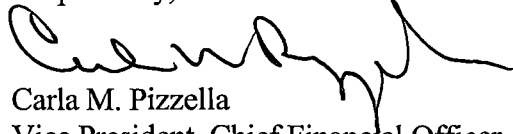
In Attachment 1, YAEC provides the attached Decommissioning Funding Assurance Status Report for the Yankee Nuclear Power Station ISFSI to comply with 10 CFR 50.75(f)(1) and (2) and 10 CFR 50.82(a)(8)(v) and (vi).

This letter contains no regulatory commitments.

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If you have any questions regarding this letter, please do not hesitate to contact me at  
(860) 267-6426 x304.

Respectfully,



Carla M. Pizzella  
Vice President, Chief Financial Officer, and Treasurer

**Attachment:**

1. Decommissioning Funding Status Report for the Yankee Nuclear Power Station Independent Spent Fuel Storage Installation (Status as of 12/31/2017)

**References:**

1. A. C. Kadak (YAEC) letter to USNRC, "Permanent Cessation of Power Operations at the Yankee Nuclear Power Station," BYR-92-024, dated February 26, 1992
2. USNRC letter to Yankee Atomic Power Company, "Yankee Nuclear Power Station - Release of Land from Part 50 License," dated August 10, 2007

cc: D. Lew, Acting NRC Region I Administrator  
R. Powell, Chief, Decommissioning Branch, NRC, Region 1  
J. Nguyen, NRC Project Manager  
J. Giarrusso, Planning, Preparedness & Nuclear Section Chief, MEMA  
J. Cope-Flanagan, Assistant General Counsel, MDPU  
J. Rogers, Commonwealth of Massachusetts Office of the Attorney General

ATTACHMENT 1 TO BYR 2018-005

DECOMMISSIONING FUNDING STATUS REPORT FOR THE  
YANKEE NUCLEAR POWER STATION  
INDEPENDENT SPENT FUEL STORAGE INSTALLATION  
(STATUS AS OF 12/31/2017)

**Attachment 1 to BYR 2018-005  
Decommissioning Funding Status Report for the  
Yankee Nuclear Power Station Independent Spent Fuel Storage Installation  
(Status as of 12/31/2017)**

10 CFR Requirement	Response	Comment
<b>10 CFR 50.75(f)(1) and (2) Requirements</b>		
1. The amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75 (b) and (c)	~\$9.1 million (in 2017 dollars)	<p>10 CFR 50.75(c) provides the calculation basis for determining minimum amounts of funding required to demonstrate reasonable assurance of funds for decommissioning. However, the methodology does not take into consideration work that has already been completed. In 1993, YAEC commenced decommissioning the power plant. On August 10, 2007, the NRC released most of the formerly licensed land for unrestricted use, shrinking the licensed land to the Independent Fuel Storage Installation (ISFSI). Thus, the only decommissioning activities and decommissioning funding requirements that remain are those associated with the decommissioning of the Yankee Nuclear Power Station ISFSI, which is currently scheduled to occur after the Department of Energy (DOE) removes the irradiated fuel and Greater than Class C (GTCC) waste.</p> <p>On December 14, 2015, Yankee Atomic Electric Company (YAEC) provided a three-year update to the decommissioning funding plan for the Yankee Nuclear Power Station ISFSI in accordance with 10 CFR 72.30(c) that included a revised Decommissioning Cost Estimate (DCE) for the Yankee Nuclear Power Station ISFSI.</p>
2. The amount accumulated at the end of the calendar year preceding the date of the report for items included in 10 CFR 50.75 (e)(1)(i)	~\$14.8 million (as of 12/31/2017)	YAEC has established an account within its Nuclear Decommissioning Trust (NDT) entitled "ISFSI Radiological Decom" that segregates the funds for radiological decommissioning of the ISFSI from the larger balance of funds for ongoing management of irradiated fuel and GTCC waste held in the NDT. This market balance only reflects the funds in the segregated account for radiological decommissioning of the ISFSI.
3. Schedule of the annual amounts remaining to be collected Including amounts beyond those required in 10 CFR 50.75(e)(1)(i)  # Years to collect	\$0  N/A	No additional comments.

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10 CFR Requirement	Response	Comment
<p>4. The assumptions used regarding escalation of the decommissioning cost estimate, rates of earnings on decommissioning funds, and rates of other factors used in funding projections are:</p> <p>Annual escalation rate</p> <p>Annual after-tax earnings rate on decommissioning trust funds</p> <p>Other factors assumed</p>	<p>2.5%</p> <p>4.0%</p> <p>None</p>	<p>No additional comments.</p>
<p>5. Any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(ii)(A)</p>	<p>Yes</p>	<p>YAEC may collect funds through its power contracts and amendatory agreements under FERC regulation. The power contracts and the amendatory agreements specify the obligations of the purchasers for the costs of YAEC, including decommissioning costs. Such contracts have been filed with FERC.</p>
<p>6. Any modifications to a licensee's current method of providing financial assurance occurring since the last submitted report.</p>	<p>None</p>	<p>No additional comments.</p>
<p>7. Any material changes to trust agreements.</p>	<p>None</p>	<p>No additional comments.</p>

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Decommissioning Funding Status Report for the  
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(Status as of 12/31/2017)**

10 CFR Requirement	Response	Comment
<b>10 CFR 50.82(a)(8)(v) (A) through (D) Requirements</b>		
<p>1. The amount spent on decommissioning, both:</p> <p>Cumulative</p> <p>and</p> <p>Over the previous calendar year</p>	<p>\$0 (Refer to Comment)</p> <p>\$0</p>	<p>In 1993, YAEC commenced decommissioning the power plant. On August 10, 2007, the NRC released most of the formerly licensed land for unrestricted use, shrinking the licensed land to the ISFSI. The only decommissioning activities that remain are those associated with the decommissioning of the Yankee Nuclear Power Station ISFSI, which is currently scheduled to occur after the DOE removes the irradiated fuel and GTCC waste.</p> <p>10 CFR 50.82(a)(8)(v) became effective on December 17, 2012. At that time, the only areas that were within the control of the Operating License No. DPR-3 were those associated with the Yankee Nuclear Power Station ISFSI. Thus, YAEC is only presenting the information associated with the decommissioning of the areas that remain within the control of Operating License No. DPR-3.</p> <p>Presently, YAEC is storing irradiated fuel and GTCC waste on site until it is removed by the DOE. Decommissioning of the Yankee Nuclear Power Station ISFSI is currently scheduled to be completed in calendar year 2035, after the DOE removes the irradiated fuel and GTCC waste. Thus, the cumulative cost spent on decommissioning the Yankee Nuclear Power Station ISFSI is \$0, and the amount spent in calendar year 2017 is \$0.</p>
<p>2. The remaining balance of any decommissioning funds.</p>	<p>~\$14.8 million (as of 12/31/2017)</p>	<p>YAEC has established an account within its NDT entitled "ISFSI Radiological Decom" that segregates the funds for radiological decommissioning of the ISFSI from the larger balance of funds for ongoing management of irradiated fuel and GTCC waste held in the NDT. This market balance only reflects the funds in the segregated account for radiological decommissioning of the ISFSI.</p>

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10 CFR Requirement	Response	Comment
<p>The amount provided by other financial assurance methods being relied upon</p>	<p>\$0</p>	<p>As of December 31, 2017, YAEC's NDT account entitled "ISFSI Radiological Decom" has a balance more than sufficient to cover the estimated cost of the remaining radiological decommissioning of the ISFSI. However, if in the future, the balance in the account is not fully funded to cover the estimated cost of the remaining radiological decommissioning of the ISFSI, the Company has several methods of obtaining additional funds, if required, to cover projected costs.</p> <p>First, YAEC may collect funds through its power contracts and amendatory agreements under FERC regulation. The power contracts and the amendatory agreements specify the obligations of the purchasers for the costs of YAEC, including decommissioning. Pursuant to these power contracts, YAEC has the ongoing ability to seek collections from its purchasers for additional funds that may be required to cover these costs.</p> <p>Second, YAEC has received proceeds from the successful litigation of the first three phases of its breach of contract damages claims against the DOE for failure to begin the removal of spent nuclear fuel (SNF) and GTCC waste from the site in 1998. YAEC will continue to file claims against the DOE as long as the DOE continues to breach its contract obligations related to SNF and GTCC waste. To that end, in 2017, the Company filed a fourth round of claims (the Phase IV case) against the DOE seeking damages for the years 2013 - 2016. The Company cannot predict the timing or the amount it may ultimately be awarded.</p> <p>A YAEC FERC filing approved in June, 2013, implemented a fifteen year funding mechanism. Until the 2013 FERC filing, the Company had employed a "full funding" assumption in developing funding requirements. The fifteen year funding mechanism was put in place to incorporate the potential for the receipt of future DOE breach of contract damages as a source of funding as discussed below. If future damage recovery does not occur, the Company has the ability to apply to FERC for more funding, if necessary. The approved FERC filing also requires YAEC to provide an informational filing regarding the adequacy of funding if five years pass without receipt of damage awards from litigation with the DOE.</p>

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10 CFR Requirement	Response	Comment
		Third, YAEC expects to utilize the investment return on Decommissioning Trust assets as a funding source. The current assumed rate of investment return, after fees and taxes, is 4.0%.
4. An estimate of the costs to complete decommissioning, reflecting any difference between actual and estimated costs for work performed during the year.	~\$9.1 million (in 2017 dollars)	On December 14, 2015, YAEC provided a three-year update to the decommissioning funding plan in accordance with 10 CFR 72.30(c) that included a revised DCE for the Yankee Nuclear Power Station ISFSI.
5. The decommissioning criteria upon which the estimate is based	10 CFR 20.1402	The assumptions regarding the decommissioning cost estimate are provided in the DCE for the Yankee Nuclear Power Station ISFSI provided on December 14, 2015.
6. Any modifications occurring to a licensee's current method of providing financial assurance since the last submitted report.	None	No additional comment.
7. Any material changes to trust agreements or financial assurance contracts.	None	No additional comment



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<b>10 CFR 50.82(a)(8)(vi) Requirement</b>		
<p>1. Additional financial assurance required to cover the estimate cost of completion.</p>	<p>None</p>	<p>As of December 31, 2017, YAEC's NDT account entitled "ISFSI Radiological Decom" has a balance more than sufficient to cover the estimated cost of the remaining radiological decommissioning of the ISFSI. However, if in the future, the balance in the account is not fully funded to cover the estimated cost of the remaining radiological decommissioning of the ISFSI, the Company has several methods of obtaining additional funds, if required, to cover projected costs.</p> <p>First, YAEC may collect funds through its power contracts and amendatory agreements under FERC regulation. The power contracts and the amendatory agreements specify the obligations of the purchasers for the costs of YAEC, including decommissioning. Pursuant to these power contracts, YAEC has the ongoing ability to seek collections from its purchasers for additional funds that may be required to cover these costs.</p> <p>Second, YAEC has received proceeds from the successful litigation of the first three phases of its breach of contract damages claims against the DOE for failure to begin the removal of spent nuclear fuel (SNF) and GTCC waste from the site in 1998. YAEC will continue to file claims against the DOE as long as the DOE continues to breach its contract obligations related to SNF and GTCC waste. To that end, in 2017, the Company filed a fourth round of claims (the Phase IV case) against the DOE seeking damages for the years 2013 - 2016. The Company cannot predict the timing or the amount it may ultimately be awarded.</p> <p>A YAEC FERC filing approved in June, 2013, implemented a fifteen year funding mechanism. Until the 2013 FERC filing, the Company had employed a "full funding" assumption in developing funding requirements. The fifteen year funding mechanism was put in place to incorporate the potential for the receipt of future DOE breach of contract damages as a source of funding as discussed below. If future damage recovery does not occur, the Company has the ability to apply to FERC for more funding, if necessary. The approved FERC filing also requires YAEC to provide an informational filing regarding the adequacy of funding if five years pass without receipt of damage</p>

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		<p>awards from litigation with the DOE.</p> <p>Third, YAEC expects to utilize the investment return on Decommissioning Trust assets as a funding source. The current assumed rate of investment return, after fees and taxes, is 4.0%.</p>
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