



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

March 2, 2021  
BYR 2021-008  
10 CFR 50.4  
10 CFR 50.82(a)(8)(vii)

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

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

72-0031

Subject: Funding Status Report for Managing Irradiated Fuel and GTCC Waste

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 Plant 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 that utilized to support the Independent Spent Fuel Storage Installation (ISFSI) (Reference 2). Presently, YAEC is storing irradiated fuel and Greater than Class C (GTCC) waste on site until the Department of Energy (DOE) satisfies its contractual obligations to take title and possession of the spent fuel and GTCC waste and remove them from the site.

In Attachment 1, YAEC provides the attached Funding Status Report for Managing Irradiated Fuel and GTCC Waste at the Yankee Nuclear Power Plant ISFSI to comply with 10 CFR 50.82(a)(8)(vii).

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 (508) 612-3322.

Respectfully,



Timothy Conry  
Treasurer

**Attachment:**

1. Funding Status Report for Managing Irradiated Fuel and GTCC Waste at the Yankee Nuclear Power Plant Independent Spent Fuel Storage Installation (Status as of 12/31/2020)

**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, NRC Region I Administrator  
A. Dimitriadis, Chief, Decommissioning Branch, NRC, Region 1  
J. McKirgan, Chief, Division of Fuel Management, Storage and Transportation Licensing Branch  
K. Cederberg, Planning, Preparedness & Nuclear Section Chief, MEMA

ATTACHMENT 1 TO BYR 2021-008

FUNDING STATUS REPORT FOR THE MANAGING OF IRRADIATED FUEL AND GTCC WASTE  
AT THE YANKEE NUCLEAR POWER PLANT  
INDEPENDENT SPENT FUEL STORAGE INSTALLATION  
(STATUS AS OF 12/31/2020)

**Attachment 1 to BYR 2021-008**  
**Funding Status Report for the Managing of Irradiated Fuel and GTCC Waste at the**  
**Yankee Nuclear Power Plant Independent Spent Fuel Storage Installation**  
**(Status as of 12/31/2020)**

10 CFR Requirement	Response	Comment
<b>10 CFR 50.82(a)(8)(vii) Requirements</b>		
1. The amount of funds accumulated to cover the cost of managing the irradiated fuel.	~\$142.2 million (as of 12/31/2020)	Yankee Atomic Electric Company (YAEC) has established an account within its Nuclear Decommissioning Trust (NDT) entitled, "ISFSI Radiological Decom," that segregates the funds for decommissioning of the Yankee Nuclear Power Plant Independent Spent Fuel Storage Installation (ISFSI) from the larger balance of funds for ongoing management of irradiated fuel and Greater than Class C (GTCC) waste held in the NDT. The market balance represented here as of December 31, 2020 excludes the funds set-aside for decommissioning the ISFSI.
2. The projected cost of managing irradiated fuel until title to the fuel and possession of the fuel is transferred to the Secretary of Energy.	~\$171.0 million (2020 – 2039*) (In 2020 dollars)	<p>The current cost estimate for management of spent fuel and Greater than Class C (GTCC) waste was filed with the Federal Energy Regulatory Commission (FERC) on September 23, 2019 and accepted by FERC for filing on November 7, 2019, with an effective date of December 1, 2019.</p> <p>* Currently, the irradiated fuel and GTCC waste are scheduled to be removed from the site by 2037, with decommissioning, license termination, and business closure occurring after that time period.</p>
3. If the funds accumulated do not cover the projected cost, a plan to obtain additional funds to cover the cost.	See Comment	<p>The Company has several methods of obtaining additional funds 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 the ongoing costs of managing irradiated fuel and GTCC waste. 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 four 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.</p>

**Attachment 1 to BYR 2021-008**  
**Funding Status Report for the Managing of Irradiated Fuel and GTCC Waste at the**  
**Yankee Nuclear Power Plant Independent Spent Fuel Storage Installation**  
**(Status as of 12/31/2020)**

10 CFR Requirement	Response	Comment
		<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. If future damage recovery does not occur, the Company may 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> <p>Third, YAEC expects to utilize the investment return on Decommissioning Trust assets to offset future costs. The current assumed rate of investment return, after fees and taxes is 4.0%.</p>