



CONNECTICUT YANKEE ATOMIC POWER COMPANY

HADDAM NECK PLANT

362 INJUN HOLLOW ROAD EAST HAMPTON, CT 06424-3099

March 14, 2022

CY-22-003

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

Connecticut Yankee Atomic Power Company
Haddam Neck Plant Independent Spent Fuel Storage Installation
NRC License No. DPR-61 (NRC Docket No. 50-213)

72-039

Subject: Decommissioning Funding Assurance Status Report

On December 5, 1996, Connecticut Yankee Atomic Power Company (CYAPCO) informed the NRC that the Board of Directors of CYAPCO had decided to permanently cease operations at the Haddam Neck 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 CYAPCO license to permanently withdraw CYAPCO's authority to operate the reactor. In 1996, CYAPCO commenced decommissioning the power plant. On November 26, 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 Haddam Neck Plant ISFSI, which will occur after the Department of Energy (DOE) removes the irradiated fuel and Greater than Class C (GTCC) waste.

In Attachment 1, CYAPCO provides the attached Decommissioning Funding Assurance Status Report for the Haddam Neck Plant 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
(508) 612-3322.

Respectfully,



Timothy Conry
Treasurer

Attachment:

1. Decommissioning Funding Status Report for the Haddam Neck Plant Independent Spent Fuel Storage Installation (Status as of 12/31/2021)

References:

1. CYAPCO letter to NRC, "Haddam Neck Plant Certifications of Permanent Cessation of Power Operation and that Fuel Has Been Permanently Removed from the Reactor Vessel," dated December 5, 1996
2. NRC letter to CYAPCO, "Haddam Neck Plant - Release of Land from Part 50 License," dated November 26, 2007

cc:

- D. Lew, NRC Region I Administrator
- A. Dimitriadis, Chief, Decommissioning Branch, NRC, Region I
- Y. Diaz-Sanabria, Chief, Division of Fuel Management, Storage and Transportation Licensing Branch
- J. Semancik, Director, CT DEEP, Radiation Division

ATTACHMENT 1 TO CY-22-003

DECOMMISSIONING FUNDING STATUS REPORT FOR THE
HADDAM NECK PLANT INDEPENDENT SPENT FUEL STORAGE INSTALLATION
(STATUS AS OF 12/31/2021)

Attachment 1 to CY-22-003
Decommissioning Funding Status Report for the
Haddam Neck Plant Independent Spent Fuel Storage Installation
(Status as of 12/31/2021)

10 CFR Requirement	Response	Comment
10 CFR 50.75(f)(1) and (2) Requirements		
1. The amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75 (b) and (c)	~\$6.9 million (in 2021 dollars)	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 commenced decommissioning the power plant. On November 26, 2007, the NRC released most of the formerly licensed land for unrestricted use, shrinking the licensed land to only those associated with the Haddam Neck Plant Independent Spent Fuel Storage Installation (ISFSI). Thus, the only decommissioning activities and decommissioning funding requirements that remain are those associated with the decommissioning of the Haddam Neck Plant ISFSI, which is currently scheduled to be occur after the Department of Energy (DOE) removes the irradiated fuel and Greater than Class C (GTCC) waste. On December 10, 2021, Connecticut Yankee Atomic Power Company (CYAPCO) provided a three-year update to the decommissioning funding plan for the Haddam Neck Plant ISFSI in accordance with 10 CFR 72.30(c) that included a revised Decommissioning Cost Estimate (DCE) for the Haddam Neck Plant ISFSI.
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)	~\$47.6 million (as of 12/31/2021)	CYAPCO 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)	\$0	No additional comments.
# Years to collect	N/A	

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Decommissioning Funding Status Report for the
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(Status as of 12/31/2021)**

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>CYAPCO 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 CYAPCO, 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>

**Attachment 1 to CY-22-003
Decommissioning Funding Status Report for the
Haddam Neck Plant Independent Spent Fuel Storage Installation
(Status as of 12/31/2021)**

10 CFR Requirement	Response	Comment
10 CFR 50.82(a)(8)(v) (A) through (D) Requirements		
<p>1. The amount spent on decommissioning, both:</p> <p style="padding-left: 40px;">Cumulative</p> <p style="padding-left: 40px;">and</p> <p style="padding-left: 40px;">Over the previous calendar year</p>	<p>\$0 (Refer to Comment)</p> <p>\$0</p>	<p>In 1996, CYAPCO commenced decommissioning the power plant. On November 26, 2007, the NRC released most of the formerly licensed land for unrestricted use, shrinking the licensed land to ISFSI only. The only decommissioning activities that remain are those associated with the decommissioning of the Haddam Neck Plant 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-61 were those associated with the Haddam Neck Plant ISFSI. Thus, CYAPCO is only presenting the information associated with the decommissioning of the areas that remain within the control of Operating License No. DPR-61.</p> <p>Presently, CYAPCO is storing irradiated fuel and GTCC waste on site until it is removed by the DOE. Decommissioning of the Haddam Neck Plant ISFSI is currently scheduled to be completed in calendar year 2038 after the DOE removes the irradiated fuel and GTCC waste. Thus, the cumulative cost spent on decommissioning the Haddam Neck Plant ISFSI is \$0, and the amount spent in calendar year 2021 is \$0.</p>
<p>2. The remaining balance of any decommissioning funds.</p>	<p>~\$47.6 million (as of 12/31/2021)</p>	<p>CYAPCO 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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<p>3. The amount provided by other financial assurance methods being relied upon</p>	<p>\$0.0 million</p>	<p>As of December 31, 2021, CYAPCO'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, CYAPCO 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 CYAPCO, including decommissioning. Pursuant to these power contracts, CYAPCO has the ongoing ability to seek collections from its purchasers for additional funds that may be required to cover these costs.</p> <p>Second, CYAPCO has received proceeds from the successful litigation of several 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. CYAPCO 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> <p>A CYAPCO 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 CYAPCO 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, CYAPCO 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.	~\$6.9 million (in 2021 dollars)	On December 10, 2021, CYAPCO 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 Haddam Neck Plant 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 Haddam Neck Plant ISFSI provided on December 10, 2021.
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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Decommissioning Funding Status Report for the
Haddam Neck Plant Independent Spent Fuel Storage Installation
(Status as of 12/31/2021)**

10 CFR 50.82(a)(8)(vi) Requirement		
1. Additional financial assurance required to cover the estimate cost of completion.	None	<p>As of December 31, 2021, CYAPCO'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, CYAPCO 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 CYAPCO, including decommissioning. Pursuant to these power contracts, CYAPCO has the ongoing ability to seek collections from its purchasers for additional funds that may be required to cover these costs.</p> <p>Second, CYAPCO has received proceeds from the successful litigation of several 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. CYAPCO 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> <p>A CYAPCO 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 CYAPCO 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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		Third, CYAPCO 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%.
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