



CONNECTICUT YANKEE ATOMIC POWER COMPANY

HADDAM NECK PLANT

362 INJUN HOLLOW ROAD • EAST HAMPTON, CT 06424-3009

February 6, 1997

Docket No. 50-213
B16187

Re: 10CFR50.54(f)

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Haddam Neck Plant
NRC Request For Information Pursuant To 10CFR50.54(f)

In a letter dated October 9, 1996,⁽¹⁾ the NRC requested that the Connecticut Yankee Atomic Power Company (CYAPCO) provide information on the Configuration Management Project (CMP) at the Haddam Neck Plant (HNP) within 120 days of the receipt of the letter. The purpose of this letter is to provide CYAPCO's interim response.

Since the receipt of the NRC letter, CYAPCO submitted a letter dated December 5, 1996,⁽²⁾ that informed the NRC that the Board of Directors of CYAPCO had decided to permanently cease operations at the HNP and that the fuel had been permanently removed from the reactor.

Due to this change in the plant status, CYAPCO is in the process of defining the plant licensing and design bases and modifying the CMP activities for the defueled condition.

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- (1) J. M. Taylor (NRC) letter to B. D. Kenyon, "Request For Information Pursuant to 10 CFR 50.54(f) Regarding Adequacy And Availability Of Design Basis Information," dated October 9, 1996.
 - (2) T. C. Feigenbaum letter to the U. S. Nuclear Regulatory Commission, "Certifications Of Permanent Cessation Of Power Operation And That Fuel Has Been Permanently Removed From The Reactor," dated December 5, 1996.

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Prior to the December 5, 1996 letter, CYAPCO had provided the NRC with a description and a status of the CMP effort in letters dated May 30, 1996,⁽³⁾ June 28, 1996⁽⁴⁾ and September 13, 1996.⁽⁵⁾ In addition, on December 4, 1996, the Haddam Neck Enforcement Conference was held at the Millstone Site Training Center. At this Enforcement Conference the common causes for the apparent violations stemming from recent inspections on design and licensing basis issues were discussed. CYAPCO provided the NRC with the corrective actions for each apparent violation as well as the corrective actions for the common cause, programmatic and organizational issues. In a letter dated December 20, 1996,⁽⁶⁾ the NRC docketed this information.

This letter is an interim response to the NRC request of October 9, 1996. CYAPCO has taken the following actions to assure fuel safety while the actions described in this letter are taken. In a letter dated October 23, 1996,⁽⁷⁾ CYAPCO discussed what corrective actions were undertaken prior to defueling the reactor. These corrective actions continue to be implemented. The HNF Normal, Abnormal and Emergency Procedures were reviewed to assure that the concerns of spent fuel storage are adequately addressed. The service water system, which provides cooling to the spent fuel pool heat exchangers, underwent a through inservice inspection to verify the piping integrity during normal operating and seismic conditions. In addition, the NRC recently reviewed and approved the configuration of the spent fuel building by the issuance of spent fuel pool rerack License Amendment No. 188.⁽⁸⁾ Finally, as discussed in NRC Inspection Report 50-213/96-13,⁽⁹⁾ the NRC reviewed CYAPCO's defueling activities.

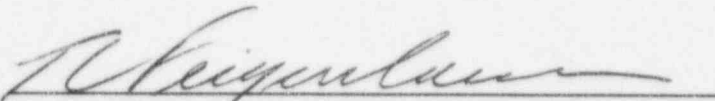
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- (3) T. C. Feigenbaum letter to the U. S. Nuclear Regulatory Commission, "Reply to Request for Additional Information," dated May 30, 1996.
 - (4) T. C. Feigenbaum letter to the U. S. Nuclear Regulatory Commission, "Supplement to Request for Additional Information Pursuant to 10 CFR 50.54(f)," dated June 28, 1996.
 - (5) T. C. Feigenbaum letter to the U. S. Nuclear Regulatory Commission, "Reply to Request for Additional Information," dated September 13, 1996.
 - (6) NRC letter from J. F. Rogge to T. C. Feigenbaum, "Haddam Neck Enforcement Conference," dated December 20, 1996.
 - (7) T. C. Feigenbaum letter to the U. S. Nuclear Regulatory Commission, "Readiness To Commence With Mode 6," dated October 23, 1996.
 - (8) NRC letter from J. F. Rogge to R. E. Busch, "Issuance Of Amendment (TAC No. M91976)," dated January 22, 1996.
 - (9) NRC letter from J. F. Rogge to T. C. Feigenbaum, "NRC Integrated Inspection Report 50-213/96-13," dated February 4, 1997.

Attachment 1 provides CYAPCO's interim responses to the request for information. Attachment 2 describes the ongoing process of defining the plant's defueled condition licensing and design bases. Attachment 3 provides detailed discussions of CMP activities. Attachment 4 provides the schedule of CMP activities.

If the NRC staff should have any questions or comments, please contact Mr. G. P. van Noordennen at (860) 267-3938.

Very truly yours,

CONNECTICUT YANKEE ATOMIC POWER COMPANY

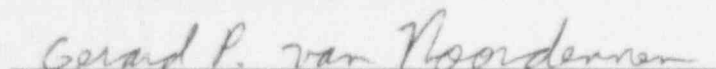


T. C. Feigenbaum
Executive Vice President and
Chief Nuclear Officer

cc: H. J. Miller, NRC Region I Administrator
M. B. Fairtile, NRC Project Manager, Haddam Neck Plant
W. J. Raymond, NRC Senior Resident Inspector, Haddam Neck Plant
K. T. A. McCarthy, Director, CT DEP Monitoring and Radiation Division

Subscribed and sworn to before me

this 6th day of February, 1997



Date Commission Expires: 12/31/97

Attachment 1

Haddam Neck Plant

Interim Responses To NRC's Request For Information

February 6, 1997

NRC Request For Information (a)

Description of engineering design and configuration control processes, including those that implement 10 CFR 50.59, 10 CFR 50.71(e), and Appendix B to 10 CFR Part 50.

Interim Response

Presently the 10 CFR 50.59 process is controlled by Nuclear Group Procedures NGP 3.12 ("Safety Evaluations") and NGP 8.06 ("Safety Evaluations for Station Procedures") and the 10 CFR 50.71(e) process is controlled by Nuclear Group Procedure NGP 4.03 ("Changes And Revisions To Final Safety Analysis Reports"). These procedures apply to both the HNP and the three Millstone Units. However, CYAPCO is in the process of developing separate procedures that take into account the defueled condition of the HNP, and these new procedures are scheduled to be approved and implemented by the end of the first quarter of 1997.

With respect to 10 CFR 50, Appendix B, CYAPCO will continue to apply the Quality Assurance (QA) Program in the defueled condition. Any revision to the QA Program, necessary to reflect the defueled condition, will be submitted for NRC review by the end of the third quarter of 1997.

Attachment 2, Items 3, 4 and 5 provide the detailed description of the ongoing process of defining the plant licensing and design bases for the defueled condition, determining configuration control and implementing 10CFR50.59.

NRC Request For Information (b)

Rationale for concluding that design bases requirements are translated into operating, maintenance, and testing procedures.

Interim Response

The design bases requirements for the defueled condition are currently being translated into operating, maintenance, and testing procedures. Upon completing the process of defining the plant defueled condition licensing and design bases and modifying the CMP, CYAPCO will provide the rationale for reaching such a conclusion by the end of the fourth quarter of 1997.

Attachment 2, Items 1, 2 and 3 provide the detailed description of the ongoing process of identifying applicable licensing commitments, developing the defueled accident analyses, developing the defueled Technical Specifications and defining the plant licensing and design bases for the defueled condition.

NRC Request For Information (c)

Rationale for concluding that systems, structures, and component configuration and performance are consistent with the design bases.

Interim Response

The systems, structures, and component configuration and performance are currently being evaluated for the defueled condition. Upon completing the process of defining the plant defueled condition licensing and design bases for each applicable structure, system and component and modifying the CMP, CYAPCO will provide the rationale for reaching such a conclusion by the end of the fourth quarter of 1997.

Attachment 2, Item 3 provides the detailed description of defining the plant licensing and design bases for the defueled condition.

NRC Request For Information (d)

Processes for identification of problems and implementation of corrective actions, including actions to determine the extent of problems, action to prevent recurrence, and reporting to the NRC.

Interim Response

CYAPCO had provided the NRC with a description and a status of the CMP effort in letters dated May 30, 1996,⁽¹⁾ June 28, 1996⁽²⁾ and September 13, 1996.⁽³⁾ In addition, on December 4, 1996, the Haddam Neck Enforcement Conference was held at the Millstone Site Training Center. At this Enforcement Conference improvements to the corrective action program were discussed. In a letter dated December 20, 1996,⁽⁴⁾ the NRC docketed this information. It is CYAPCO's goal to implement improvements to the HNP corrective action program to reflect the best practices in the industry.

Upon completing the improvement efforts, CYAPCO, by the end of the second quarter of 1997, will have in place revised processes for identification of problems and implementation of corrective actions, including actions to determine the extent of problems, action to prevent recurrence, and reporting to the NRC.

In addition, CYAPCO will utilize an independent third-party to review the effectiveness of the revised corrective action program.

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- (1) T. C. Feigenbaum letter to the U. S. Nuclear Regulatory Commission, "Reply to Request for Additional Information," dated May 30, 1996.
 - (2) T. C. Feigenbaum letter to the U. S. Nuclear Regulatory Commission, "Supplement to Request for Additional Information Pursuant to 10 CFR 50.54(f)," dated June 28, 1996.
 - (3) T. C. Feigenbaum letter to the U. S. Nuclear Regulatory Commission, "Reply to Request for Additional Information," dated September 13, 1996.
 - (4) NRC letter from J. F. Rogge to T. C. Feigenbaum, "Haddam Neck Enforcement Conference," dated December 20, 1996.

NRC Request For Information (e)

The overall effectiveness of your current processes and programs in concluding that the configuration of your plant is consistent with the design bases.

Interim Response

Upon completing the effort defined by CYAPCO's responses to NRC Request For Information Items (a) through (d), CYAPCO, by the end of the fourth quarter of 1997, will discuss overall effectiveness of CYAPCO's revised processes and programs in assuring that the configuration of the HNP is consistent with the defueled condition licensing and design bases.

Attachment 2, Item 6 provides the detailed description of the oversight process. As described, oversight will monitor the ongoing decommissioning activities and focus on the integration of hardware, design bases, and programmatic corrective actions.

Attachment 2

Haddam Neck Plant

Configuration Management Project

Defueled Condition Licensing And Design Bases Definition Process

February 6, 1997

The objective of the CMP is to provide reasonable assurance that the HNP will be decommissioned in accordance with the terms and conditions of the operating license, NRC regulations and the UFSAR. The CMP and oversight will review and verify the following areas to ensure that the objective is met:

1. Licensing Commitments
2. UFSAR Chapter 15 and Defueled Technical Specifications
3. Defueled Condition Licensing and Design Bases Reviews
4. Updated Final Safety Analysis Report (UFSAR)
5. Updating of Processes and Procedures
6. Oversight

Individual work scopes and schedules have been identified for each area and are discussed below.

1. Licensing Commitments

The licensing commitments activities will identify the relevant licensing commitments and verify that they are being implemented appropriately and document those that are not applicable to the defueled condition. In addition, this activity will provide assurance that the appropriate program checks and balances exist to ensure future commitments are implemented. The area is divided into the following two work activities:

1. Commitments will be identified from correspondence to and from the NRC and placed into a database. The correspondence includes LERs, docketed letters by CYAPCO, and letters from the NRC to CYAPCO. The commitments are being characterized in the database by source document, date, system, program and other attributes to assist in the determination of applicability in the defueled condition, the verification of present implementation and/or to assure continuing implementation.
2. The commitments applicable to the defueled condition that are of an ongoing nature, will be verified to be implemented by reviews of design documentation, and plant procedures, programs or processes. The future implementation of these commitments is assured by recording the commitments in the database and by identifying procedure steps to be protected at the next revision of the implementing procedures, as required.

The licensing commitment activities will be completed by the end of the second quarter of 1997.

2. Chapter 15 And Defueled Technical Specifications

The UFSAR Chapter 15 and Defueled Technical Specifications activities will verify important plant parameters. The area is divided into the following work activities:

1. Key parameters associated with the redefined accident analysis assumptions and inputs, Defueled Technical Specifications, and the structures, systems, components and programs required to support the defueled condition are being identified and documented.
2. The parameters are being verified by reviewing each parameter against associated calculations, UFSAR sections, Defueled Technical Specification sections, surveillance procedures, setpoint control documents and other documentation. The associated applicable documents are linked to the specific parameter. The linking assures that as documents or parameters are changed, the redefined accident analysis and other documents are reviewed for potential impact and updated as necessary.

The Chapter 15 accident analysis will be completed by the end of the first quarter of 1997. The Defueled Technical Specifications will be submitted for NRC approval by the end of the second quarter of 1997.

3. Defueled Condition Licensing And Design Bases Reviews

For structures, systems, components and programs required to support the defueled condition, the defueled condition licensing and design bases will be identified and verified. As part of this review new calculations are being developed for the spent fuel pool heatup rates and for the fuel handling accident dose assessments. The licensing basis identification includes reviews of correspondence commitments as well as licensing documents such as the UFSAR, Technical Specifications, Technical Requirements Manual, Safety Evaluation Reports, and Facility Description and Safety Analysis. The design basis identification includes reviews of design changes, Design Basis Document Packages, calculations, drawings, specifications, vendor information, etc. The verification of plant configuration with the license and design bases will be performed through reviews of operating, maintenance, and surveillance procedures and walkdowns of important attributes. The defueled condition licensing and design bases will be documented in a newly formatted Design Basis Document to be used for future reference.

In addition, CYAPCO will utilize an independent third-party to review the revised licensing and design bases which reflect the defueled condition.

The defueled condition licensing and design bases reviews and documentation will be completed by the end of the third quarter of 1997.

4. Updated Final Safety Analysis Report (UFSAR)

The UFSAR will be reviewed to correct deficiencies applicable to structures, systems, components and programs required to support the defueled condition licensing and design bases and decommissioning activities.

The Licensing Commitments, UFSAR Chapter 15 and Defueled Technical Specifications, and Defueled Condition Licensing and Design Bases Reviews will be compared against the UFSAR. Any changes will be identified and evaluated using the 10CFR50.59 safety evaluation process.

A revision to the UFSAR will be submitted by the end of the third quarter of 1997.

5. Updating of Processes and Procedures

The technical content and configuration control of processes and procedures will be addressed during the CMP process. The processes and procedures will be reviewed for the defueled condition and proper guidance and linkages will be added to assure that the defueled condition licensing and design bases, once identified and verified, are maintained. The review will include nonconformance reporting, 10CFR50.59 safety evaluations and setpoints.

The updating of processes and procedures will be completed in the second quarter of 1997 and implemented by the end of the third quarter of 1997.

6. Oversight

The Nuclear Safety and Oversight (NSO) organization will monitor implementation of activities related to decommissioning. Decommissioning will not occur until NSO concludes that the scope and quality of these efforts is sufficient to allow disassembly. NSO will develop a broad-based assessment plan to determine how activities will be reviewed, the scope of the reviews, and the schedule. The scope of these reviews will focus on the integration of hardware, design bases, and programmatic corrective actions.

Specifically, NSO will perform an assessment of the scope of the decommissioning effort to confirm that the initiatives planned will provide reasonable assurance that the plant will be decommissioned in accordance with its defueled condition licensing and design bases. Their assessment will also consider whether the safety significant degraded and non-conforming conditions and programmatic weaknesses have been resolved and whether there are provisions to maintain the defueled condition licensing and design bases during the decommissioning of the facility.