



CONNECTICUT YANKEE ATOMIC POWER COMPANY

HADDAM NECK PLANT

362 INJUN HOLLOW ROAD • EAST HAMPTON, CT 06424-3099

December 24, 1997

Docket No. 50-213

CY-97-125

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)

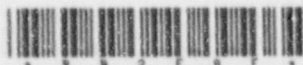
In a letter dated October 9, 1996,⁽¹⁾ the NRC requested that the Connecticut Yankee Atomic Power Company (CYAPCO) provide information on the Configuration Management Project (CMP) at the Haddam Neck Plant (HNP) within 120 days of receipt of the letter. In a letter dated February 6, 1997,⁽²⁾ CYAPCO provided an interim response. The purpose of this letter is to provide a status of CYAPCO's interim response.

Since the receipt of the NRC letter of October 9, 1996, CYAPCO submitted a letter dated December 5, 1996,⁽³⁾ 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.

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- (1) NRC Letter, from J. M. Taylor, 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) CYAPCO Letter B16187, from T. C. Feigenbaum, to the U. S. Nuclear Regulatory Commission, "NRC Request For Information Pursuant To 10CFR50.54(f)," dated February 6, 1997.
- (3) CYAPCO Letter B16003, from T. C. Feigenbaum, 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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Substantial progress has been made with respect to CYAPCO's 10CFR50.54(f) activities including completion of the licensing and design bases for the safe storage of spent fuel, updating the UFSAR, configuration management of major processes and identification of commitments. Resolution of outstanding issues, configuration management of the remaining minor processes, and completion of commitment verification remain. Attachment 1 provides an updated status of CYAPCO's responses to the request for information. Attachment 2 describes the process of defining the plant's defueled condition licensing and design bases.

It is expected that CYAPCO will issue its final 10CFR50.54(f) response in the third quarter of 1998.

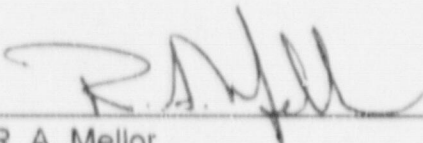
The following are CYAPCO's commitments made within this letter and attachments. Other statements within this letter are provided for information only.

CY-97-125-01 It is expected that CYAPCO will issue its final 10CFR50.54(f) response in the third quarter of 1998.

CY-97-125-02 A revision to the UFSAR will be docketed in January 1998.

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



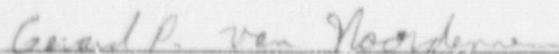
R. A. Mellor
Vice President - Operations and Decommissioning

Attachments

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

Subscribed and sworn to before me

this 24th day of December, 1997



Gerard P. van Noordennen

Date Commission Expires: 12/31/2002

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Attachment 1

Haddam Neck Plant

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

Interim Response Status

December 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.

Final Response

Items 3 and 4 of Attachment 2 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.

The following procedures have been implemented:

- ACP 1.2-2.42 - **10CFR50.59 Applicability Reviews and Safety Evaluations**¹
- ACP 1.2-2.41 - *Changes and Revisions to the Connecticut Yankee Updated Safety Analysis Report*
- ACP 1.2-2.84 - *Changes and Revisions to Licensing Basis and Design Basis (LB/DB) Document*

These procedures apply only to the HNP.

The revised program incorporates many of the suggested improvements of NEI 96-07, "Guidelines for 10CFR50.59 Safety Evaluations," and draft NUREG-1606, "Proposed Regulatory Guidelines Related to Implementation of 10CFR50.59." A review of the revised program was conducted by the NRC Staff, as noted in Inspection Report 50-213/97-03,⁽¹⁾ and the program was found to be acceptable.

With respect to 10 CFR 50, Appendix B, CYAPCO submitted the HNP-specific Quality Assurance Program (QAP) to the NRC on April 25, 1997.⁽²⁾ The NRC approved the QAP on October 14, 1997.⁽³⁾

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- (1) NRC Letter from H. J. Miller to T. C. Feigenbaum, "NRC Integrated Inspection Report No. 50-213/97-03, Notice of Violation and Exercise of Enforcement Discretion," dated October 9, 1997.
 - (2) CYAPCO Letter CY-97-046 from T. C. Feigenbaum to the U. S. Nuclear Regulatory Commission, "Proposed Revision 1 to the Quality Assurance Program," dated April 25, 1997.
 - (3) NRC Letter from M. B. Fairtile to T. C. Feigenbaum, "Approval Of Revision 1 To The Quality Assurance Program At The Haddam Neck Plant (TAC No. M98628)," dated October 14, 1997.

NRC Request For Information (b)

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

Interim Response

Items 1, 2 and 4 of Attachment 2 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 safe storage of spent fuel.

Operating, maintenance, and testing procedures have been reviewed to reflect the design bases requirements for the safe storage of spent fuel. Open issues have been identified and are being resolved.

NRC Request For Information (c)

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

Interim Response

Item 4 of Attachment 2 provides the detailed description of the process used to define the plant licensing and design bases for the safe storage of spent fuel. The licensing and design bases for the safe storage of spent fuel have been compiled and open issues associated with the review are being resolved. Any required operability reviews have been performed and all required systems are operable.

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.

Final Response

These processes are now controlled by the following procedures:

- ACP 1.2-2.82 - *Operability Determinations*
- ACP 1.2-16.5 - *Adverse Condition Resolution Program*
- ACP 1.2-2.44 - *10CFR50.72, 10CFR50.73 and 10CFR50.9(b) Reportability Determinations and Licensee Event Report Processing*
- ADM 1.1-150 - *Preparation of Licensee Event Reports*

These procedures apply only to the HNP.

An independent third-party review of the Corrective Action program has been completed.

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

The Nuclear Oversight organization is monitoring the implementation of activities related to completion of the licensing and design bases and configuration management. Nuclear Oversight has developed 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 focuses on the integration of hardware, design bases, processes, and programmatic corrective actions.

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Attachment 2

Haddam Neck Plant

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

Defueled Condition Licensing And Design Bases Definition Process

December 1997

The objective of CYAPCO's 10CFR50.54(f) program is to provide assurance that the HNP will be decommissioned in accordance with the terms and conditions of the operating license, NRC regulations and the UFSAR. Management and Nuclear Oversight will review and verify the following areas to ensure that the objective is met:

1. Licensing Commitments
2. Revised Accident Analyses
3. Updated Final Safety Analysis Report (UFSAR)
4. Spent Fuel Storage Licensing and Design Bases Reviews

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

1. Licensing Commitments

Licensing commitment activities are divided into the following two work activities:

1. Commitments have been 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 have been characterized in the database by source document, date, system, program and other attributes to assist in the determination of applicability in the defueled condition to assure continuing implementation. Over 13,500 licensing commitments from docketed correspondence have been identified.

This task has been completed.

2. Approximately 2,000 of the over 13,500 commitments have been identified as applicable to the defueled condition. They 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 under Licensing Department Instruction LDI 2.02 - *De-fueled Condition Commitment Screening* and by identifying procedure steps to be protected at the next revision of the implementing procedures, as required. Future commitments are identified, managed and dispositioned under Licensing Department Instruction LDI 2.01 - **Regulatory Commitments**1.

Verification of these remaining commitments is underway.

2. Revised Accident Analyses

The UFSAR Chapter 15 accident analyses activities verified important plant parameters. The area is divided into the following work activities:

1. Key parameters associated with the redefined accident analyses assumptions and inputs, and the structures, systems, components and programs required to support the safe storage of spent fuel have been identified and documented.
2. The parameters are being verified by reviewing each parameter against associated calculations, UFSAR sections surveillance procedures, setpoint control documents and other documentation with respect to the safe storage of spent fuel.

The Chapter 15 accident analyses has been revised for the defueled configuration and will be included in the upcoming revision to the UFSAR.

3. Updated Final Safety Analysis Report (UFSAR)

The UFSAR has been 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 resulting revision reflects those systems recategorized for the defueled condition to date, as well as correction of known deficiencies associated with the defueled condition. The recategorization process is a continuing process and the UFSAR will be periodically updated to reflect any changes.

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

A revision to the UFSAR will be docketed in January 1998. This schedule is well ahead of the required two year interval to docket a revision to the UFSAR. The last revision to the UFSAR was submitted on July 1, 1996⁽¹⁾.

(1) CYAPCO Letter B15762 from T. C. Feigenbaum to the U. S. Nuclear Regulatory Commission, "Revision 9 to the Updated Final Safety Analysis Report", dated July 1, 1996.

4. Spent Fuel Storage Licensing And Design Bases Reviews

For structures, systems, components and programs required to support the safe storage of spent fuel, the licensing and design bases has been identified and are being verified. As part of this review new calculations have been developed for the spent fuel pool heatup rates and for the UFSAR Chapter 15 accident analyses. The licensing basis identification included 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 included 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 is performed through reviews of operating, maintenance, and surveillance procedures and walkdowns. This effort is focused on maintaining the integrity of the spent fuel. The following approach has been established and completed:

- Review the basic calculations for the hydraulics, structures, electrical distribution and instrumentation needed for the safe storage of spent fuel.
- Review docketed correspondence to establish the licensing and design basis for the safe storage of spent fuel.
- Reconcile the design basis with the UFSAR, operating, maintenance and surveillance procedures, and Technical Specifications.
- Perform walkdowns to verify expected configurations.
- Document the licensing and design basis for the safe storage of spent fuel.

The Licensing Basis and Design Basis Document is controlled by procedure ACP 1.2-2.84 - *Changes and Revisions to Licensing Basis and Design Basis (LB/DB) Document*.

The licensing and design bases reviews and documentation have been completed. An independent third-party review has been performed of the licensing and design bases documentation. Open issues from the verification activities and the third-party review are being resolved.