U.S. NUCLEAR REGULATORY COMMISSION REGION I

Report No. 50-213/83-24

Docket No. 50-213

License No. DPR-61

Category C

Licensee: Connecticut Yankee Atomic Power Company

Post Office Box 270 Hartford, Connecticut

Facility Name: Connecticut Yankee Plant

Inspection At: Haddam and Hartford, Connecticut

Inspection Conducted: October 3, 4, 6, and 7, 1983

Inspectors:

G. W. Meyer

Reactor Engineer

2-1-84

Approved by: All Carolitas

D. L. Caphton, Chief

Management Programs Section, DETP

date

Inspection Summary:

Inspection on October 3, 4, 6, and 7, 1983 (Report No. 50-213/83-24)

Areas Inspected: Routine, unannounced inspection by a region-based inspector of licensee actions on previous inspection findings and audit program. The inspection involved 24 hours including 8 hours at the corporate office.

Results: One violation was identified in the audit area (failure to audit corrective action systems - paragraph 2.a).

DETAILS

1. Persons Contacted

*G. Bouchard, Services Superintendent

F. Callaghan, Supervisor, Nuclear Safety Engineering, NUSCO

*G. Closius, Quality Assurance (QA) Supervisor

R. Harris, Director, Nuclear Engineering Department, NUSCO

M. Hornyak, QA Specialist, NUSCO

*F. Libby, Design and Operations QA Supervisor, NUSCO

*M. Sforza, Operations QA Engineer, NUSCO

USNRC

*P. Swetland, Senior Resident Inspector

*present at October 7, 1983, exit interview

Licensee Action on Previous Inspection Findings

a. Performance Appraisal Inspection

NRC Performance Appraisal Inspection 50-213/82-23 was completed on November 19, 1982, and reported on January 31, 1983, by the Performance Appraisal Section (PAS). The Connecticut Yankee Atomic Power Company (CYAPCO) response to the inspection was documented in a letter to the NRC dated July 1, 1983. The following items represent findings from the PAS inspection.

(Open) Potential Enforcement Finding (Section 6, Item S). Failure to audit all actions taken to correct deficiencies. Technical Specification paragraph 6.5.2.8.c requires that an audit be performed to cover "The results of all actions taken to correct deficiencies occurring in facility equipment, structures, systems or method of operation that affect nuclear safety at least once per six months." The PAS inspection found that only Licensee Event Reports (LERs) and NRC Inspection Report findings were audited at this frequency, with nonconformance reports being audited once every two years. However, Plant Information Reports (PIRs), a plant administrative system for "reporting, investigating, documenting, and follow-up activities for plant problems," were not audi'ed at all. The CYAPCO response letter states that "deficiencies have been defined as those items identified in LERs or NRC inspection report findings."

The inspector reviewed procedure QA 1.2-16.1, Plant Information Report, Revision 10, and six completed PIRs (83-69, -76, -81, -82, -84, and -85). Based on this review, the inspector concurred with the PAS assessment that "One significant strength was identified in the area of corrective action system. The PIRs were found to be comprehensive, well reviewed, and effectively resolved." However, as a significant system used to "correct deficiencies occurring in

facility equipment, structures, systems, or method of operation that affect nuclear safety...," the PIRs should have been periodically audited to confirm the adequacy and completion of corrective actions. The inspector noted that PIRs can be closed out prior to completion of the corrective action (e.g., PIR 83-81 was closed after deciding to add mercury wetted relays in the control rod drive power supply to the periodic maintenance list and PIR 83-82 was closed after adding the seals on reactor coolant pump #1 to the 1984 outage work list). Further, the inspector found no basis or general industry precedent for defining "deficiencies" to be only LERs and NRC inspection report findings. Accordingly, the failure to audit "the results of all actions taken to correct deficiencies" per Technical Specification 6.5.2.8.c is a violation (213/83-24-01).

(Closed) Potential Enforcement Finding (Section 3, Item 5). Failure to audit the audit program. Technical Specification paragraph 6.5.2.8.d requires that an audit be performed to encompass "the performance of all activities required by the Quality Assurance Program to meet the criteria of Appendix 'B', 10 CFR 50, at least once per two years." The PAS inspection found that although the licensee intended the annual joint utility audit to review the adequacy of the audit program, a review of the joint utility assessments of May 1981, and June 1982, showed that no review had been performed on the Northeast Utility Service Company (NUSCO) quality assurance audit program. This oversight represents a violation of the Technical Specification audit requirements. The CYAPCO response stated that the NUSCO QA audit program will be reviewed by the joint utility audit beginning in 1983. The inspector reviewed the Report for the Combined Utility Assessment of NUSCO QA Program dated June 14, 1983, and found that it adequately reviewed the audit program. Accordingly, based on the satisfactory corrective action on this item, no notice of violation will be issued or additional written response required.

This finding is closed.

(Closed) Potential Enforcement Finding (Section 3, Item 2.a). Failure to audit operational activities. The license is committed to ANSI N18.7-1976, quality assurance program requirements, which requires, in paragraph 4.5, that "audits shall include...observation of performance of operating...activities." The PAS inspection concluded that although the audit program covered the records aspect of operational activities, there were no observations of the operational activities. The CYAPCO response stated that future operational audits would include observations, beginning with the audit planned for June 1983.

The inspector reviewed audit A60198 issued July 20, 1983, which included thirty hours of operational observations, primarily on a plant heatup evolution. In addition, the inspector reviewed six 1982 and eight 1983 Monitor Reports, which included observation of plant activities.

Based on the above, the inspector concluded that although lack of observations of operational activities had been a weakness of the audit program, a violation in this area did not exist.

This finding is closed.

(Closed) Potential Enforcement Findings (Section 2, Item 2 and Section 4. Item 4) Failure to provide written bases for the determination of whether an unreviewed safety question exists. 10 CFR 50.59(b) requires "a written safety evaluation which provides the bases for the determination that the change, test, or experiment does not involve an unreviewed safety question." The PAS inspection found that the written safety evaluation provided the determination on unreviewed safety questions in a conclusion format and that the basis for that conclusion was often not included in the safety evaluation. Further, the safety evaluations were insufficient to permit the off site safety committee to perform its review, as required by the Technical Specification. The CYAPCO response letter stated that the basis for the safety evaluations were provided in the modification packages to which the safety evaluations applied. Further, the letter stated that the need for improved safety evaluation bases had been identified prior to the PAS inspection and that this had resulted in the issuance of Nuclear Engineering and Operations Procedure 3.12. Safety Evaluations, Revision O, issued subsequent to the inspection.

The inspector reviewed procedure 3.12 and seven safety evaluations performed on modification packages (PDCRs 538, 539, 541, 544, 547, 550, and 552) and found the resulting written bases for the unreviewed safety question to be complete and fully acceptable.

These findings are closed.

b. Other Findings

(Closed) Unresolved Item (213/79-20-04). Need to show routing of procurement documents in an administrative procedure. The inspector reviewed procedure QA-1.2-4.1, Procurement Document Review, Revision 9. This procedure included a discussion of the review and approval routing in section 6.1 and included a flow chart for purchase requisitions in attachment 8.4.

This item is closed.

(Closed) Unresolved Item (213/79-20-05). Need to update procedure master index. Internal audit A70063 had identified that some procedures had been revised and distributed but the master index did not show the revised procedure. The inspector reviewed the closeout of audit A70063 and the follow-up audit A700/8 which confirmed that proper action had been taken to ensure an up-to-date procedure master index existed.

This item is closed.

3. Audits

a. Reference

The requirements governing the performance of quality assurance audits of safety-related areas are specified in the following documents:

- -- 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants
- -- Technical Specifications, Section 6, Administrative Controls
- -- Regulatory Guide 1.33, Rev. 2/ANSI 18.7 1976; Quality Assurance Program Requirements
- -- Regulatory Guide 1.144, Rev. 1/ANSI N45.2.12; Auditing of Quality Assurance Program

b. Program Review

The above documents specify that audits achieve the following:

- -- The content of audit reports clearly defines the scope of the audit and the results.
- -- Audits are conducted by trained personnel not having direct responsibility in the area being audited.
- -- Frequency of audits is in conformance with Technical Specifications and the QA Program.
- -- Appropriate follow-up actions (including reaudit, if necessary) are being taken, are in progress or are being initiated.
- -- The audited organization's response to the audit findings is in writing, is timely, and adequately addresses the findings and recommendations.

The inspector reviewed the following procedures to verify that the licensee maintains an administration system to meet the above requirements.

NUSCO Quality Assurance (QA) Branch Procedures:

- -- 1.01, QA Branch Organization and Qualification of Personnel, Rev. 1
- -- 1.07, Training and Qualification of NQA Lead Auditors and Surveyors, Rev. 1
- -- 1.14, Conduct, Reporting, and Follow-up of Audits, Rev. 3

Nuclear Engineering and Operation Procedures:

- -- 2.16, QA Plant Audit Program, Rev. 0
- -- 3.01, Conduct and Format of Nuclear Review Board Audits, Rev. 0
- -- 3.07, Resolution of Audit Findings, Rev. 0

Site Procedures:

- -- QA 1.2-2.2, Quality Assurance Program Boundary, Rev. 3
- -- QA 1.2-10.4, Monitoring of QA Activities, Rev. 1
- -- QA 1.2-18.1, QA Audits, Rev. 11

c. Implementation

Although the plant QA staff used to perform audits of plant activities, the audit function has been phased out for site QA personnel and all audits are now performed by the Northeast Utilities Service Company (NUSCO) Quality Assurance Section.

The inspector reviewed the following areas to verify compliance with the audit program requirements.

- -- Organization chart of NUSCO QA section dated September 1, 1983
- -- Audit Schedule as of September 8, 1983
- -- Three reports for Nuclear Review Board (NRB) audits A20015, A20016, and A20017
- -- Four reports for plant audits (i.e., non-NRB audits) A60164, A60182, A60192, and A60198
- -- Connecticut Yankee Audit Matrix for 1982/1983
- -- Two Quarterly QA Department Activity Reports (periods ending March 31, 1983, and June 30, 1983)
- -- Report for the Combined Utility Assessment of the NUSCO QA Program dated June 14, 1983
- -- 1983 Management Review Report of Corrective Action
- -- Monitor Report Log Sheets for 1982 and 1983

d. Findings

- 1. The inspector concluded that the audit coverage of corrective action, as required by the Technical Specifications, was not adequate. This violation is discussed in Section 2.
- 2. The inspector identified no other violations.

4. Management Meetings

Licensee management was informed of the scope and purpose of the inspection at an entrance interview conducted on October 3, 1983. The findings of the inspection were periodically discussed with licensee representatives during the course of the inspection. During the exit interview conducted on October 7, 1983, at the site, the inspector summarized the findings of the inspection with management personnel (see paragraph 1).

At no time during this inspection was written material concerning the results of the inspection provided to the licensee by the inspector.