YANKEE ATOMIC ELECTRIC COMPANY

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United States Nuclear Regulatory Commission
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References: (a) License No. DPR-3 (Docket No. 50-29)
(b) Letter, USNRC to YAEC, dated October 3, 1990

Subject: Response to Inspection Report No. 50-29/90-81

Dear Sir:

Reference (b) documents a special maintenance team inspection led by Mr. D. Caphton from July 9 to July 20, 1990 and from August 6 to August 10, 1990 at the Yankee Nuclear Power Station, Rowe, Massachusetts. Reference (b) requested that we notify you of actions taken or planned in order to enhance our maintenance activities in the areas where weaknesses were identified and to resolve the identified unresolved item. Our responses are provided in Attachments A and B to this letter.

If you have any questions or desire additional information, please contact us.

Sincerely,

YANKEE ATOMIC ELECTRIC COMPANY

J. K. Thayer

J. K. Thayer
Vice President and Manager of Operations

JKT/gjt/WPP72/163

Attachments

cc: USNRC Region I
USNRC Resident Inspector, YNPS

A001
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ATTACHMENT A

Response to Identified Weaknesses*
(*As Stated in Appendix 2 of Reference (b),
"A Potential Problem or Condition Presented to the Licensee
for Evaluation and Corrective Action as Applicable")

Weakness A2.1

There was no formal program for self assessment of the maintenance process other than periodic type QA audits.

Yankee Nuclear Power Station (YNPS) Response

YNPS utilizes the corporate QA audit program as a means of assessing the maintenance process. This program utilizes Quality Assurance auditors from the corporate office and technical specialists from other nuclear power plants within New England. The technical specialist has a background in the area being audited (maintenance) and provides experience which might not otherwise exist in the corporate Quality Assurance audit group. This provides an assessment from a perspective of performance effectiveness as opposed to program compliance.

Maintenance has performed a self assessment of the maintenance programs at YNPS based on the Institute of Nuclear Power Operations (INPO) "Guideline for the Conduct of Maintenance at Nuclear Power Stations" (INPO 85-038). This self assessment was completed in July of 1988 with the results forwarded to INPO. Corrective action resulting from this assessment have been implemented.

The Quality Services Group (QSG) assigned to the site also provides an overview of maintenance effectiveness. This is accomplished in the form of inspections and surveillances. Inspections are performed for safety related activities with mandatory inspections required for certain critical items. QSG also reviews all maintenance requests generated by the site. Surveillances are performed in accordance with an annual plan which touches on activities such as planning, preventive maintenance, corrective actions and actual job performance. The results of these activities are discussed with plant supervision and recommendations for program enhancements are made. Also, the results of these activities by the Quality Assurance Department (QAD) are trended and provided to plant and corporate management for review.

YNPS feels that these programs have been effective in assessing the performance of maintenance at the site. In addition, the corporate Quality Assurance group will be requested to evaluate the need to perform selected assessments of specific maintenance functions based on the results of past audit results. This evaluation will be completed in 1991 and any additional assessments of maintenance will be scheduled during the 1992 time frame.

Weakness A2.2 - There is no formal backlog program

Yankee Nuclear Power Station Response

As noted in Reference (b), Section 5.7; "The maintenance work backlog was being controlled, prioritized and was manageable in size. Controls were not procedurialized and documented. In addition, an existing source of information regarding maintenance backlog performance was not being used. Other backlog administrative controls seen elsewhere were absent. YNPS has a goal of establishing monitoring techniques for key aspects of the maintenance program, such as backlog controls, in response to industry efforts to improve maintenance performance. The team viewed this to be a positive initiative."

As stated above, YNPS has been effectively controlling its backlog of maintenance requests, although the process by which it is done is not proceduralized and documented. YNPS will develop the necessary procedural guidance for a maintenance request backlog control program. This will be in place by June 30, 1991.

Weakness A2.3

The plant is developing a root cause analysis procedure, however, failure to have this procedure in place was viewed as a weakness.

Yankee Nuclear Power Station Response

As discussed in Reference (b), Section 3.5, YNPS is in the process of developing a formal root cause analysis procedure. The development is continuing and the procedure will be implemented by June 30, 1991.

Weakness A2.4

The licensee's deficiency identification process was functioning less than adequately.

Yankee Nuclear Power Station Response

YNPS has begun action to correct the identified weakness. Plant Procedure AP-0040; "Plant Inspection Program" has been revised and approved by the Plant Operational Review Committee (PORC). This procedure assigns areas of responsibilities to specific departments for documented inspections on a quarterly basis. The inspector is responsible for the initiation of corrective actions in a timely manner. The inspections area focused on four major areas: Housekeeping and Fire Protection, Industrial Safety, Material Conditions, and Radiological Controls.

This procedure also requires the Plant Superintendent or another member of upper plant management to accompany the inspectors as often as practical to ensure that management standards are adequately understood by other station managers and supervisors.

This procedure will be implemented no later than January 31, 1991.

Weakness A2.5

The team found that the licensee's trending program was in the process of being upgraded, however, at the time was not adequately described.

Yankee Nuclear Power Station Response

As discussed in Reference (b), Section 6.4; "The maintenance trending program was not described adequately (a current weakness); however, adequate trending was being conducted using informal methods."

As stated above, YNPS is performing adequate trending but, is in the process of upgrading and documenting the program. Upgrading and the documenting of the trending program is continuing, the lubricating oil analysis and vibration analysis portion has been incorporated in to the existing maintenance procedure, OP-5005. The remaining programs; thermography, station voltage regulator, diesel oil, battery intercell resistance will be incorporated into a formal program by December 31, 1991.

Weakness A2.6

YNPS walkdown inspections lack attention to facility and equipment details.

Yankee Nuclear Power Station Response

As stated in the response to weakness A2.4, YNPS has revise Procedure AP-0040; "Plant Inspection Program" which will be implemented by January 31, 1991.

Weakness A2.7

Several observations of deficiencies by the team indicated that deficiency identification and reporting by the Quality Services Department was weak.

Yankee Nuclear Power Station Response

During the course of the Maintenance Team Inspection (MTI) and immediately thereafter, an evaluation of the Quality Services Group's (QSG) involvement in the identification of plant material conditions and housekeeping shortcomings was performed. The results of this evaluation are consistent with the conclusions reached in reference (b), Section 6.3. Based on the results, the following corrective actions were initiated. QSG personnel assigned to the plant were reinstructed in program requirements. Strong emphasis was placed upon the level of items to be verified and the premise that regardless of severity they were to be reported and properly dispositioned. The frequency of Plant Material Condition Inspections will also be increased during 1991.

From a programmatic standpoint we do not feel additional enhancements are required. QA surveillance program guidelines are quite definitive as to plant material conditions warranting attention during the execution of all QSG

surveillances. QSG Guideline for Performance Based Surveillance Implementation includes attributes for the evaluation of plant material conditions, industrial safety, housekeeping practices, radiological practices and open system and component protection.

The QC Inspection Program also includes specifying QC Implementing Instructions (QCIIs) for plant material conditions and housekeeping verifications. These QCIIs are considered adequate guidance in the performance of these inspections.

QAD will continue to evaluate the effectiveness of these programs and their implementation and upgrade them where required.

Weakness A2.8

The team noted that while the YNPS system of maintaining equipment history cards was adequate this method could be strengthened by improving retrievability and including the historical records which are not on the cards.

Yankee Nuclear Power Station Response

As discussed in Reference (b), Section 5.3, the current program is functioning adequately but improvements would help in the retrievability of historical data which would aid in failure analysis investigations. Additionally, many of these areas have been identified by the Plant License Renewal (PLR) program personnel and improvements are underway. These improvements will continue through 1991 and 1992 with implementation consistent with the implementation of changes recommended by the PLR programs.

Weakness A2.9

The mechanical maintenance and test equipment had deficiencies in control of equipment. While a new procedure is already issued, some time will be required to assess implementation.

Yankee Nuclear Power Station Response

As discussed in Reference (b), Section 7.4, the Maintenance Department has already revised and implemented Procedure AP-5004, "Control of Maintenance Department Measuring and Test Equipment". Assessment of the implementation of the revised procedure will be accomplished during the annual audit of the maintenance programs by the corporate Quality Assurance Department during 1991.

ATTACHMENT B

Response to Unresolved Items
(*As Stated in Appendix 3 of Reference (b),
"Unresolved Items are Matters About Which More Information
is Required in Order to Determine Whether They are Acceptable
Items, Deviations or Violations")

Unresolved Item No. 50-029/90-81-01

The licensee committed to revise the design drawings to reflect specifications for gaskets and the as built configuration of the vapor containment blister enclosures that contain environmentally qualified cables and terminal blocks.

Yankee Nuclear Power Station Response

As discussed in Reference (b), Section 6.3, YNPS had committed to correct the blister enclosures which contain EQ cabling and terminal blocks prior to plant start up and to revise the design drawings to reflect specifications for gaskets and the as built configuration.

YNPS has corrected all the blister cover enclosures inside and outside of the vapor containment. This was accomplished prior to start up from the 1990 refueling outage. In addition, the design drawing, 9699-FV-4C, "Details of Vapor Container Electrical Terminal Boxes" has been revised to reflect the specification for the gaskets installed and the as built configuration.

Unresolved Item 50-029/90-81-01 is considered to be completed.