

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-213/82-14

Docket No. 50-213

License No. DPR-61 Priority -- Category C

Licensee: Connecticut Yankee Atomic Power Company

P. O. Box 270

Hartford, Connecticut 06101

Facility Name: Haddam Neck Plant

Inspection At: Haddam, Connecticut

Inspection conducted: June 10-July 14, 1982

Inspectors:

J. E. Bings for
T. H. Smith, Senior Resident Inspector

9/7/82
date signed

Approved by:

T. C. Elsasser
T. C. Elsasser, Chief, Reactor Projects
Section 1B, Division of Resident and
Project Inspection

9/7/82
date signed

Inspection Summary: Inspection on June 10-July 14, 1982 (Report No. 50-213/82-14)

Areas Inspected: Routine inspections by the resident inspector of plant operations including tours of the facility; log and record review; maintenance; surveillance; Licensee Event Reports; review of periodic and special reports and TMI Action Plan items. The inspection involved 70 hours by the resident NRC inspector.

Results: One violation was identified: (failure to use approved procedures to perform safety related maintenance, paragraph 7.)

DETAILS

1. Persons Contacted

The below listed technical and supervisory personnel were among those contacted:

G. H. Bouchard, Maintenance Supervisor
R. E. Brown, Operations Supervisor
N. A. Burnett, Operating Assistant
T. W. Campbell, Instrument and Control Supervisor
H. E. Clow, Health Physics Supervisor
J. H. Ferguson, Unit Supervisor
R. L. Gracie, Operations Assistant
R. H. Graves, Station Superintendent
G. R. Hallberg, Security Supervisor
D. J. Ray, Engineering Supervisor
R. Z. Test, Station Services Superintendent

Other licensee staff and operating personnel were also interviewed during the course of the inspection.

2. Review of Plant Operation - Plant Inspections

a. During the course of the inspection, the inspector conducted multiple tours of the following plant areas:

- Control Room
- Primary Auxiliary Building
- Vital Switchgear Room
- Diesel Generator Rooms
- Turbine Building
- Intake Building
- Control Point
- Security Building
- Terry Turbine Building (AFW)
- Yard Areas

b. The following observations/determinations were made:

- Radiation protection controls. The inspector reviewed or observed the following: Radiation Work Permits (RWP) in use, personnel compliance with RWP's, routine radiation surveys, posting of radiation and high radiation areas and use of protective clothing and personal monitoring devices. During one tour, the inspector noted that the door to the upper level of the boron recovery system room was not locked. This is a posted high radiation area which was normally kept locked. A review of area radiation surveys indicated that radiation levels were less than the levels which require a locked access. Additionally, the licensee stated that the door would remain

unlocked as long as radiation levels in the area permitted. No unsatisfactory conditions were identified.

- Monitoring instrumentation. Control room instruments were observed for proper operation, correlation between channels and that the displayed parameters were within technical specification limits. No unsatisfactory conditions were identified.
- Equipment lineups. The inspector verified that selected valves and breakers were in a position or condition required by the technical specifications.
- Control room annunciators. Lighted annunciators were discussed with control room operators to verify that the reasons for them were understood and corrective action, if required, was being taken. On average, only one or two annunciators were lighted on each control room visit.
- Plant housekeeping controls. Plant housekeeping controls were observed including control and storage of flammable material, control of potential safety hazards and licensee action to control the spread of surface and airborne contamination. No unsatisfactory conditions were identified.
- Fluid leaks, piping vibrations. All areas toured were examined for evidence of fluid leaks and piping vibrations. None were found.
- Fire protection/prevention. The inspector examined the condition of selected pieces of fire fighting equipment. No unsatisfactory conditions were identified. Combustible materials were being controlled and were not found near vital areas. Selected cable penetrations were examined and fire barriers were found intact. Cable trays were clear of debris.
- Control room manning. The inspector verified that control room manning requirements of the technical specifications were being met.
- Security. During the inspection, observations were made of plant security including adequacy of physical barriers, access control, vehicle control, and searches. No unacceptable conditions were identified.

3. Review of Periodic and Special Reports

Upon receipt, periodic and special reports submitted by the licensee pursuant to Technical Specification 6.9.1 were reviewed by the inspector.

This review included the following considerations; the report includes the information required to be reported by NRC requirements; planned corrective action is adequate for resolution of identified problems; determination whether any information in the report should be classified as an abnormal occurrence; and the validity of reported information. Within the scope of the above, the following periodic reports were reviewed by the inspector:

-- Monthly Operating Report 82-5 for the month of May 1982.

4. Shift Logs and Operating Records

a. The inspector reviewed selected operating logs and records against the requirements of the following procedures:

- ADM 1.1-5, Control Room Operating Log;
- QA 1.2-14.1, Bypass and Jumper Control;
- ADM 1.1-43, Control Room Area Limits for Control Operators;
- NOP 2.2-2, Steady State Operation and Surveillance;
- ADM 1.1-44, Shift Relief and Turnover;
- QA 1.2-2,4, Housekeeping Requirements;
- QA 1.2-16.1, Plant Information Reports; and
- QA 1.2-14.2, Equipment Control.

b. Shift logs and operating records were reviewed to verify that:

- Control Room log sheet entries are filled out and initialed;
- Auxiliary log sheets are filled out and initialed;
- Control Room Log entries involving abnormal conditions provide sufficient detail to communicate equipment status, lockout status, correction and restoration;
- Operating Orders do not conflict with Technical Specifications;
- Plant Information Reports confirm there are no violations of Technical Specification requirements; and
- Logs and records are maintained in accordance with Technical Specifications and the procedures noted above.

c. The following operating logs and records were reviewed:

- NOP 2.2-2, Log sheets which consist of Control Room, Part 1 and 2, Primary Side Surveillance Form, Secondary Side Surveillance Form, and Radiation Monitoring System Daily Log.
- Shift Turnover Sheets.
- Jumper Log. All active entries were reviewed.
- Tag Log. All active entries were reviewed.
- Control Room Operating Log.

d. No unsatisfactory conditions were identified.

5. Licensee Event Reports (LER's)

The following LER's were reviewed to verify that the details of the event were clearly reported, including the accuracy of the description of the cause and the adequacy of the corrective action. The inspector determined whether further information was required, and whether there were generic implications. The inspector also verified that the reporting requirements of Technical Specifications and Station Administrative and Operating Procedures had been met, that appropriate corrective action had been taken and that the continued operation of the facility was conducted within Technical Specification limits.

82-05 Containment recirculation fan damper failure. The bypass damper on one containment recirculation fan would not respond to control signals. Investigation revealed that a portion of the control linkage had become disconnected. The linkage was reconnected and the damper was successfully tested. Similar linkage on the other fans was checked to ensure all connections were tight.

6. Surveillance Activities

The inspector observed technical specification required surveillance testing of selected components and verified that: testing was performed using approved procedures; the procedures were sufficiently detailed to assure performance of a satisfactory surveillance; test instrumentation was calibrated and in use; technical specification requirements were satisfied prior to the removal of the system from service; the test was performed by qualified personnel; and test results satisfied technical specification and test procedure requirements or identified deficiencies were reviewed and resolved by appropriate management personnel. The inspector witnessed performance of:

- SUR 5.2-24, "Safeguards Equipment Timer Test," dated January 28, 1982.

No unsatisfactory conditions were identified.

7. Plant Maintenance

During the inspection period, the inspector observed various maintenance and problem investigation activities. The inspector reviewed these activities to verify compliance with regulatory requirements, including those stated in the Technical Specifications; compliance with the administrative and maintenance procedures; compliance with applicable codes and standards; required QA/QC involvement; proper use of safety tags; proper equipment alignment and use of jumpers; personnel qualifications; radiological controls for worker protection; fire protection; retest requirements and reportability as required by Technical Specifications. The following activities were included during this review:

- WP 3274. Check of "A" Auxiliary Feed Pump terry turbine overspeed trip set point.

The inspector witnessed the test of the "A" auxiliary feed pump terry turbine overspeed trip set point. The test was being performed to satisfy an insurance company requirement. In order to perform the test, the licensee disconnected the terry turbine from the pump. Control of the air operated steam admission valve was not sufficiently sensitive to increase the speed of the uncoupled turbine slowly enough to get an accurate speed reading when the overspeed mechanism tripped. The test was unsuccessful. The inspector noted during the test that an approved procedure was not being used to conduct the test as required by procedure QA 1.2-5.1 paragraph 6.2.5.1.2. This is a violation (213/82-14-01). In addition, the inspector informed the licensee that procedure M8.5-40, "Maintenance of Steam Generator Auxiliary Feed Pumps", dated January 28, 1982, prohibits running the terry turbine uncoupled from the pump, as turbine bearing cooling water is supplied by the pump discharge.

8. TMI Action Plan Items

- a. Item I.C.6 Guidance on Procedures for Verifying Correct Performance of Operation Activities

1) Requirement

It is required that licensees' procedures be reviewed and revised, as necessary, to assure that an effective system of verifying the correct performance of operating activities is provided as a means of reducing human errors and improving the quality of normal operations. This requirement included the provision that for the return-to-service of equipment important to safety, that a second qualified operator should verify proper system alignment.

2) Inspection Findings

Initially the licensee took exception to the requirement that a second qualified operator should verify proper system alignment

for the return-to-service of equipment important to safety. The licensee has since revised that position, and has committed to institute a system to satisfy the requirement as stated. This area will be reviewed in a subsequent NRC inspection.

9. Exit Interview

At periodic intervals during the course of the inspection, meetings were held with senior licensee management personnel to discuss inspection scope and findings.