

U.S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT

Region I

Report No. 50-213/80-26

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: December 16, 1980 - January 18, 1981

Inspectors: *John T. McCann for*  
H. Smith, Senior Resident Inspector

*March 19, 1981*  
date signed

\_\_\_\_\_  
date signed

\_\_\_\_\_  
date signed

Approved by: *R. R. Keimig*  
R. R. Keimig, Acting Chief, Reactor Projects  
Section No. 1B, Projects Branch No. 1, DRPI

*3-19-81*  
date signed

Inspection Summary:

Inspection on December 16, 1980-January 18, 1981 Report No. 50-213/80-26)

Areas Inspected: Routine, unannounced inspection of plant operators including: tours of the facility; log and record review; licensee action on previous inspection findings; operating events; and plant security. The inspection involved 51 inspector-hours by the resident inspector.

Results: Of the five areas inspected, no items of noncompliance were found in four areas; one apparent item of noncompliance was found in the remaining area (failure to properly search personnel admitted to the protected area - Paragraph 6).

## DETAILS

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

G. H. Bouchard, Maintenance Supervisor  
N. A. Burnette, Technical Assistant  
T. W. Campbell, Instrument and Control Supervisor  
H. E. Clow, Health Physics Supervisor  
J. H. Ferguson, Station Services Superintendent  
R. L. Gracie, Operations Assistant  
R. H. Graves, Station Superintendent  
G. R. Hallberg, Security Supervisor  
J. M. Levine, Operations Supervisor  
R. L. Text, Engineering Supervisor

During the course of the inspection, other licensee staff and operating personnel were also interviewed.

2. Licensee Action on Previous Inspection Findings

(Closed) Follow Item (213/80-02-01): On a routine basis the inspector has reviewed the logsheets required by NOP 2.2-2-C, "Steady State Operation and Surveillance". The logsheets were legible, realistic limits had been established for the data being logged, and out of specification entries had been properly annotated. Licensee action on this item is considered to be satisfactory.

(Closed) Unresolved Item (213/80-07-02): The inspector reviewed Revision 4 (major) of PM 9.5-42-C, "Motor Control Centers". The changes made to this procedure ensure that the shift supervisor has adequate control of safety related equipment removed from service for motor control center preventive maintenance. This item is considered resolved.

(Closed) Unresolved Item (213/80-08-04): The licensee has originated plant procedures which are written in the format of the Technical Specifications and are titled Administrative Technical Specifications. These procedures are kept in the front of the Technical Specification binders. The administrative Technical Specification supplements, and in certain cases imposes additional or more stringent requirements than those of the NRC approved Technical Specifications. The inspector reviewed these procedures. None were found which reduced the NRC approved Technical Specification requirements. This item is considered resolved.

(Closed) Follow Items (213/79-MR-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12; and 79-PR-01 and 02): These items, 1979 licensee report reviews, have been reviewed by the inspector and are administratively closed.

### 3. Operating Events

For the events noted below the inspector determined that the licensee had made the proper reports to the NRC and had adequately advised the NRC of the circumstances of the transient. Additionally, the inspector reviewed applicable plant parameters, determined facility status, and reviewed the licensee's corrective actions taken or planned.

- a. Plant trip January 4, 1981. At the time of the plant trip, condenser tube cleaning operations were in progress. The "D" circulating water pump was shut down and the "D" condenser waterbox was open for tube cleaning. The plant was at about 66 percent power. The abnormal condenser cooling water alignment caused condensate level problems, which caused condensate pump cavitation, and resulted in a trip of both feed pumps from low suction pressure. The feed pumps were restarted but once again tripped. Two steam generator low level alarms were received and the operator manually tripped the plant. The trip occurred at 6:47 p.m. All systems functioned normally after the trip. Proper condenser level was restored, the feed and condensate systems were returned to a normal lineup and the reactor was taken critical at 9:41 p.m. The unit was synchronized at 2:50 a.m. on January 5, 1981. Reports were made to the NRC on the Emergency Notification System telephone as required.
- b. Stack monitor alarm January 7, 1981. At approximately 9:05 a.m., on January 7, the stack monitor alarmed and showed an increase from a background level of about 150 cpm to a level of about 5000 cpm. Reactor coolant sampling was in progress and was stopped. Portable air samplers in the Primary Auxiliary Building, the back-up stack sampler and stack grab samples showed no increase in activity. Outside portable air samples showed no activity above normal. The NRC was notified on the Emergency Notification System telephone at about 9:30 a.m., that a possible release had occurred. It was subsequently determined that the installed stack monitor detector had failed. The detector was replaced and calibrated. Stack monitor indication returned to a normal background reading of about 150 cpm.

The inspector had no further questions on either of the above events.

### 4. Review of Plant Operation - Plant Tours

- 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
- Yard Areas

b. The following observations/determinations were made:

- Radiation protection controls. Step-off pads, storage and disposal of protective clothing and control of high radiation areas were observed for adequacy in all areas toured. No unsatisfactory conditions were observed.
- Monitoring instrumentation. The inspector verified that selected instruments were functioning properly and that the displayed parameters were within Technical Specification limits.
- 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.
- Valve positions. The inspector verified that selected valves were in a position or condition required by the Technical Specifications. No unsatisfactory conditions were identified.
- Plant housekeeping. Housekeeping material was observed in all areas toured, including control of flammable material. No unsatisfactory conditions were identified.
- Fluid leaks. All areas toured were examined for evidence of excessive fluid leaks. None were found.
- Piping vibrations. All areas toured were examined for evidence of excessive piping vibration. None were indicated.
- 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. Unacceptable conditions identified in this area are discussed in paragraph 6 of the Report Details.

- c. No unacceptable conditions were identified on plant tours, except as noted above.

5. 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;
  - Tag Log; and
  - Control Room Operating Log.
- d. No unacceptable conditions were identified in this area.

THIS PAGE, CONTAINING 10 CFR 2.790 INFORMATION, NOT FOR  
PUBLIC DISCLOSURE, IS INTENTIONALLY LEFT BLANK.

7. 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.