

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

Region I

NOTICE

Report No. 78-34

DATE OF 26 OCT 1978  
REGION I HAS NOT OBTAINED PROPRIETARY  
CLEARANCE IN ACCORDANCE WITH 10 CFR 2790  
Category C

Docket No. 50-245

License No. DPR-21

Priority --

Category C

Licensee: Northeast Nuclear Energy Company

P. O. Box 270

Hartford, Connecticut 06101

Facility Name: Millstone Nuclear Power Station, Unit 1

Inspection at: Waterford, Connecticut

Inspection conducted: October 3-6, 1978

Inspectors: W. H. Baunack

W. H. Baunack, Reactor Inspector

10/25/78  
date signed

L. H. Bettenhausen  
L. H. Bettenhausen, Reactor Inspector

10/25/78  
date signed

Approved by: H. B. Kister  
H. B. Kister, Chief, Nuclear Support  
Section No. 2, RO&NS Branch

date signed  
10/25/78  
date signed

Inspection Summary:

Inspection on October 3-6, 1978 (Report No. 50-245/78-34)

Areas Inspected: Routine, unannounced inspection by regional based inspectors of administrative controls for surveillance procedures; surveillance testing; witnessing of surveillance tests; technician qualifications; and, facility tours. The inspection involved 30 inspector-hours onsite by two NRC regional based inspectors.

Results: Of the five areas inspected, no items of noncompliance were found in four areas; one apparent item of noncompliance was found in one area (Infraction - failure to perform a surveillance in accordance with procedural instructions).

## DETAILS

### 1. Persons Contacted

- D. Bergeron, Maintenance Engineer
- \*F. Dacimo, Quality Assurance Engineer
- \*E. Farrell, Superintendent, Unit 2
- R. Herbert, Superintendent, Unit 1
- R. Johnson, Assistant to Operations Supervisor
- J. Nowell, Shift Supervisor
- G. Papanic, Senior Engineer - General Physics
- \*P. Przekop, Engineering Supervisor
- \*W. Romberg, Operations Supervisor

The inspector also interviewed other licensee employees, including members of the Technical Staff, Reactor Operators, and General Office Personnel.

\* denotes those present at the exit interview.

### 2. Administrative Controls for Surveillance Procedures

The inspector performed an audit of the licensee's administrative controls by conducting a sampling review of the below listed administrative procedures with respect to the requirements of the Technical Specifications, Section 6, "Administrative Controls," ANSI N18.7 "Administrative Controls for Nuclear Power Plants" and Regulatory Guide 1.33 "Quality Assurance Program Requirements."

- ACP-QA-3.02, Station Procedures and Forms, Revision 5, June 12, 1978
- ACP-QA-3.03, Document Control, Revision 6, September 8, 1978
- ACP-QA-9.02, Plant Surveillance Program, Revision 4, April 27, 1978
- ACP-QA-9.02A, Unit 1 Surveillance Master Test Control List

No items of noncompliance were identified.

### 3. Surveillance Testing

- a. The inspector reviewed surveillance tests on a sampling basis to verify the following.
  - Tests required by Technical Specifications are available and covered by properly approved procedures.

- Test format and technical content are adequate and provide satisfactory testing of related systems or components.
  - Test results of selected tests are in conformance with Technical Specifications and procedure requirements have been reviewed by someone other than the tester or individual directing the test.
- b. The following surveillance tests were reviewed to verify the items identified above:
- SP 631.4, Control Rod Coupling Integrity, and Nuclear Instrumentation Discernible Response Verification, Revision 1, January 10, 1978. Data were reviewed for surveillances completed July 20, 1978 and December 8, 1976.
  - SP 776.1, Control Rod Drive Housing Support System Inspection, Revision 1, August 2, 1978. Data were reviewed for surveillances performed April 12, 1978 and November 28, 1976.
  - SP 661.4, Standby Liquid Control Pump Operational Readiness Test. Data were reviewed for five tests performed May 16, 1978 through September 15, 1978.
  - SP 830, Boron Concentration Determination, Revision 0, March 1, 1977. Data were reviewed for ten surveillances performed July 5, 1978 through September 29, 1978.
  - SP 625.4, Emergency Condensate Transfer Pump Operational Readiness Test, Revision 0, August 26, 1977. Data were reviewed for five tests performed November 16, 1977 through August 15, 1978.
  - SP 628.1, Integrated Simulated Automatic Actuation of FWCI, Core Spray, LPCI, Diesel and Gas Turbine Generators, Revision 1, April 5, 1978. Data were reviewed for test performed April 11, 1978.
  - SP 4138, Auto Blowdown Logic Test, Revision 0, October 17, 1977. Data were reviewed for four tests performed December 11, 1977 through July 6, 1978.
  - SP 626.2, Manual Operation of Relief Valves When Reactor is at Low Pressure, Revision 3, February 23, 1978. Performed April 14, 1978. (Data sheet for this surveillance could not be located at the time of the inspection. However, the shift supervisor's log book verified performance of the surveillance).

- MP 717.4, Target Rock APR Valves Testing, Revision 2, August 2, 1978. Data were reviewed for the following valves currently installed on the steam lines.
    - S/N 129 Tested March 30, 1978
    - S/N 1 Tested March 31, 1978
    - S/N 168 Tested March 31, 1978
    - S/N 4 Tested March 31, 1978
    - S/N 128 Tested March 31, 1978
    - S/N 117 Tested March 31, 1978
  - SP 842, Condensate Demineralizer Anion Resin Calculation of Remaining Ion Exchange Capability, Revision 0, March 30, 1977. Data were reviewed for fourteen tests performed August 11, 1978 through September 28, 1978.
  - SP 632.4, Suppression Chamber Drywell Vacuum Breaker Exercise, Revision 3, February 23, 1978. Data were reviewed for five tests performed May 1, 1978 through September 1, 1978.
  - SP 646.8, Fifteen Minute Operational Check of STGS, Revision 1, April 20, 1978. Data were reviewed for five tests performed May 16, 1978 through September 19, 1978.
  - SP 623.8, Containment Isolation Valve Operability Demonstration, Revision 2, August 26, 1977. Data were reviewed for five tests performed August 7, 1977 through August 29, 1978.
  - SP 668.1, Operational Readiness Demonstration (Diesel Generator) Revision 3, August 2, 1978. Data were reviewed for ten tests performed June 13, 1978 through August 14, 1978.
- c. As a result of the above review, the following items were identified:
- (1) Documentation associated with SP 631.4, Control Rod Coupling Integrity and Nuclear Instrumentation Discernible Response Verification, completed on July 20, 1978, did not indicate that the surveillance requirements of Technical Specification 4.3.B.1 were performed. The procedural requirements of an additional procedure SP 690C, performed following the last refueling, did insure that the Technical Specification requirements were completed. However, the data sheet associated with this procedure also did not clearly indicate this. The licensee stated these procedures would be changed to insure that the completion of the Technical Specification required surveillance is clearly documented. These procedure changes will be reviewed during a future inspection.

- (2) During the inspector's review of the required daily recording of the boric acid solution temperature, it was noted that the required reviews performed on the Daily Surveillance Log are not being documented. The licensee stated that a revision would be made to the Daily Surveillance Log which will require sign-offs by the reviewers. This matter is unresolved pending the review by NRC:RI of the licensee's actions (245/78-34-01).
- (3) The acceptance criteria in procedure SP 625.4, Emergency Condensate Transfer Pump Operational Readiness Test, appears to be adequate with regard to pump flow requirements. However, acceptance criteria relating to pump discharge head has not been included in the procedure. Pump discharge head is logged and is adequate to meet Technical Specification requirements. The licensee stated acceptance criteria relating to pump discharge head would be included in the procedure. This procedure change will be reviewed during a future inspection.
- (4) During the review of SP 626.2, Manual Operation of Relief Valves When Reactor is at Low Pressure, the inspector noted that the manual operation of the relief valves at low pressure was an energy release to the torus. Consequently, the performance of the surveillance specified by Technical Specification 4.7.A.5 was required. Although the surveillance required by Technical Specification 4.7.5.A is routinely being performed, the licensee stated SP 626.2 would be revised to include performance of vacuum breaker surveillance following the relief valve surveillance. This matter is unresolved pending the review by NRC:RI of the licensee's action (245/78-34-02).
- (5) During the review of SP 623.8, Containment Isolation Valve Operability Demonstration, it was noted that Technical Specification Table 3.7.1 listed three containment isolation valves in the wrong positions and omitted power operated isolation valves FSD-9-75 A-D (one inch solenoid valves to oxygen analyzer) from the table. In addition, since the valves were not listed in the Technical Specification surveillance for these valves in accordance with Technical Specification 4.7.D.1.C was not documented. The licensee stated the surveillance would be documented for these valves, and that in a future Technical Specification change, a correction to Table 3.7.1 would be submitted. This matter is unresolved pending review by NRC:RI of the licensee's action (245/78-34-03).

- (6) Procedure SP 668.1, Operational Readiness Demonstration (Diesel Generator) requires that during surveillance testing the diesel generator be operated at full load as required by Technical Specification 4.9.A.1.a. Data reviewed for ten surveillances performed June 13, 1978 through August 14, 1978 showed that the engine appeared to be operated at less than full load during the surveillances (approximately 60% load). This is contrary to Technical Specification 6.8 which requires implementation of written procedures covering surveillance activities, and is considered to be an item of non-compliance at the Infraction level (245/78-34-04).

4. Inspector's Witnessing of Surveillance Tests

- a. The inspector witnessed the performance of surveillance testing of selected components to verify the following:
- Surveillance test procedure was available and in use.
  - Special test equipment required by procedure was calibrated and in use.
  - Test prerequisites were met.
  - The procedure was adequately detailed to assure performance of a satisfactory surveillance.
- b. The inspector witnessed the performance of:
- SP 1060, ISI Program Pump Vibration and Bearing Temperature Measurement, Revision 0, September 1, 1977. Tests performed on A and B Feedwater Pumps on October 4, 1978.
  - SP 631.2, Control Rod Exercise - Stuck Control Rods, Revision 2, August 26, 1977. Performed on October 5, 1978.

No items of noncompliance were identified.

5. Technician Qualifications

The inspector discussed the qualification records of 2 personnel having responsibility for surveillance testing of safety-related components and equipment to verify that the individual's experience level and training were in accordance with the guidelines of ANSI N18.1-1971, Section and Training of Nuclear Power Plant Personnel.

No unacceptable items were identified.



6. Facility Tour

On several occasions during the inspection, tours of the facility were conducted of the Reactor Building, Auxiliary Building, Turbine Building and Diesel and Gas Turbine Generator Rooms. During the tours, the inspector discussed plant operations and observed house-keeping, radiation control measures, monitoring instrumentation, and controls for Technical Specification compliance. In addition, the inspector observed control room operations on both day and evening shifts for control room manning and facility operation in accordance with Administrative and Technical Specification requirements.

No items of noncompliance were identified.

7. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items or items of noncompliance. Unresolved items identified during the inspection are discussed in Paragraph 3.

8. Exit Interview

The inspectors met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on October 6, 1978. The purpose, scope and findings of the inspection were summarized. These findings were also discussed in a subsequent telephone conversation with Mr. R. Herbert on October 11, 1978.