

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

Region I

Report No. 50-336/82-03

Docket No. 50-336

License No. DFR-65 Priority - Category C

Licensee: Northeast Nuclear Energy Company

P. O. Box 270

Hartford, Connecticut 06101

Facility Name: Millstone Nuclear Power Station, Unit No. 2

Inspection at: Waterford, Connecticut

Inspection conducted: January 11-15, 1982

Inspector: C. Petrone
C. Petrone, Reactor Inspector
Test Program Section

2/17/82
date signed

_____ date signed

_____ date signed

Approved by: L. Bettenhausen
L. Bettenhausen, Ph.D., Chief
Test Program Section

2/17/82
date signed

Inspection Summary:

Inspection on January 11-15, 1982 (Report 50-336/82-03)

Areas Inspected: Routine unannounced inspection by a region based inspector of Refueling operations, outage-related maintenance and backshift operations. The inspection involved 31 inspector hours onsite by one region based inspector.
Results: One item of noncompliance: Failure to follow a written instruction.

DETAILS

1. Persons Contacted

Northeast Nuclear Energy Company

- * E. Mroczka, Station Superintendent
- * J. Kelly, Unit 2 Superintendent
 - J. Parillo, Reactor Engineer
 - S. Scace, Operations Supervisor
- * J. Heg, Operations Assistant
- * P. Cassidy, Operations Technician
 - A. Mazzulli, Assistant Maintenance Supervisor
 - A. Weber, Shift Supervisor
 - R. Burnside, Shift Supervisor
 - D. Clark, Shift Supervisor
- * R. Spurr, Outage Coordinator
 - F. Donahue, Maintenance Foreman
- * J. Keenan, Unit 2 Maintenance Supervisor
- * J. Resetar Jr., Unit 2 Engineering
- * A. Cheatham, Radiological Services Supervisor

NRC

- * J. Shedlosky, Senior Resident Inspector
- * D. Lipinski, Resident Inspector

The inspector also contacted other licensee employees including; reactor operators, health physics technicians, maintenance and security personnel.

* denotes those present at the exit interview.

2. Maintenance

a. Auxiliary Feed Pump P-4

The inspector reviewed job order 282-144, and MP 2703A4, "Auxiliary Steam Generator Feed Pump Overhaul." The inspector witnessed portions of the pump overhaul and noted that:

- Maintenance was being performed by qualified personnel;
- Retest procedure was included;
- Tools and gages were properly calibrated;
- The system was tagged out;
- Quality control signoffs were included in the procedure and were being verified by a Quality Control Inspector;
- Housekeeping and cleanliness were satisfactory.

No items of noncompliance were identified.

b. Functional Testing of Snubbers

The inspector reviewed the results of the licensee's Technical Specification-related functional testing and inspection performed in accordance with SP 2733B, "Hydraulic Snubber Functional Test," and SP 2733A, "Hydraulic Snubber Inspection." The inspector noted that the lockup and bleed rates of the ten snubbers selected for functional testing were within the acceptance criteria of the functional test procedure. The inspector discussed these results with representatives of the maintenance department and with the responsible engineer. No items of noncompliance were identified.

3. Refueling Operations

a. Pre-Fuel Handling Activities

The inspector determined by direct observation and record review, that the following pre-fuel handling activities had been completed satisfactorily:

- Technical Specification requirements;
- Refueling equipment operation;
- Radiation monitor surveillance;
- Source Range Monitor (SRM) surveillance;
- Boron concentration; and
- Ventilation requirements.

b. Fuel Handling Activities

The inspector verified by direct observation and record review that fuel handling activities were being conducted in accordance with approved procedures and Technical Specification requirements. Items inspected included:

- Core monitoring during refueling;
- Boron concentration;
- Fuel insertion and removal;
- Control Element Assembly (CEA) shuffle;
- Fuel accountability;
- Refueling crew and control room staffing;
- A Senior Reactor Operator with no concurrent duties directly supervising all fuel handling;
- Reactor vessel water level above 23 feet;
- Communication maintained between refueling operators and the control room;
- Containment integrity established per Technical Specifications; and

- Shutdown cooling flow maintained greater than 3000 gpm.

With the exception of the items below, the inspector had no further questions.

(1) Inaudible SRM Count Rate

While observing CEA shuffle from the refueling machine on January 14, 1982, the inspector was unable to hear the source range neutron count as required by TS 3.9.2. The neutron count indication was audible over headphones worn by the refueling operator, but background noise obscured the neutron count being transmitted over the loudspeaker. Upon questioning, the licensee's representative stated they were in compliance with TS but agreed to investigate further. On January 15, the inspector observed that the loudspeaker volume had been increased significantly, allowing the neutron count to be clearly audible on the refueling machine.

The inspector had no further questions regarding this item.

(2) Housekeeping and Control of Loose Parts and Tools Near the Reactor Pool (Cavity) and Spent Fuel Pool

On January 14, the inspector observed that housekeeping in the immediate vicinity of the open Reactor Pool and Spent Fuel Pool was inadequate in that:

- White paper covering the walkways on the refueling machine was worn through, torn, and shredded in numerous places;
- Numerous pieces of discarded yellow tape were stuck on the walls, floor, and railings adjacent to the Reactor Pool;
- Herculite used to cover railings surrounding the Reactor Pool was torn in numerous places;
- Trash, including pieces of paper and a cotton glove, was floating in the Spent Fuel Pool.

The inspector reported this to licensee management personnel who said they would correct the problem.

On January 15, the inspector returned to the containment and noted there had been no significant improvement in housekeeping. The inspector also examined the licensee's actions to prevent dropping articles into the Reactor Cavity and Spent Fuel Pool and noted the following conditions:

- The tool control inventory list on the refueling machine had not been updated in two days. It indicated that the tool

used for In Core Instrumentation (ICI) removal was present, although it had been removed from the area. Numerous items including a pair of binoculars, vice grip pliers and a pipe wrench were present on the refueling machine, but were not indicated on the inventory list.

- Work was being performed on top of the pressurizer block house, approximately twenty feet above the reactor cavity water level and within several feet of the edge of the cavity. The workmen used tools without lanyards. They were observed tossing staging pipe clamps down to workmen on the lower level with little regard for the open reactor cavity.
- Work was being performed on the upper guide structure, (stored in the far end of the refueling pool) using tools without restraining or retrieving devices (lanyards). In some cases these tools were supplied with lanyards, which the mechanics failed to use. A pile of trash, including rubber gloves and rags, was allowed to accumulate on the edge of the reactor pool, rather than placing it in a trash container.
- Criterion V, Appendix B, 10 CFR 50, requires activities affecting quality to be prescribed by and accomplished in accordance with documented instructions. Instruction MP-2-4987, dated December 4, 1981, "Administration During (Millstone) Unit 2's Fourth Refuel Outage" requires that:
 - Managers of various departments monitor their activities to ensure that housekeeping is adequate;
 - Personnel working near the reactor pool use restraining or retrieving devices (lanyards) on tools or equipment; and
 - Personnel working on jobs over or near the reactor pool maintain a strict inventory of tools.

Failure to follow a documented instruction is an item of non-compliance (50-336/82-03-01).

Prior to leaving the reactor pool area the inspector noted that the tool control inventory list had been corrected.

4. Exit Interview

The inspector met with licensee representatives (see detail 1 for attendees) at the conclusion of the inspection on January 15, 1982. The inspector summarized the scope and findings of the inspection at that time. The inspector expressed his concern that management had permitted housekeeping

and tool control requirements to be ignored. The licensee representative stated that they would investigate and take appropriate corrective action.