

U. S. NUCLEAR REGULATORY COMMISSION

Region I

Report Nos. 50-245/82-19
50-336/82-22

Docket Nos. 50-245
50-336

License Nos. DPR-21
DPR-65

Category C
C

Licensee: Northeast Nuclear Energy Company
Millstone Nuclear Power Station
Waterford, Connecticut

Facility Name: Millstone Nuclear Power Station, Units 1 and 2

Inspection At: Waterford, Connecticut

Inspection Conducted: September 27 - October 1, 1982

Inspectors: *W.H. Caphton for* 11/2/82
G. Meyer, Reactor Inspector date signed

W.H. Caphton for 11/2/82
P. Bissett, Reactor Inspector date signed

Approved By: *W.H. Caphton* 11/2/82
D. L. Caphton, Chief, Management Programs date signed
Section, DETP

Inspection Summary:

Inspection conducted on September 27 - October 1, 1982; Combined Inspection Report 50-245/82-19; 50-336/82-22

Areas Inspected: Routine, unannounced safety inspection by two region based reactor inspectors of licensee action on previous inspection findings, maintenance, and measuring and test equipment. There were 71 hours of inspection onsite.

Results: Violation - None.

DETAILS

1. Persons Contacted

J. Beauchamp	Lead Quality Control (QC) Engineer, Unit 1
R. Cikatz	Lead QC Engineer, Unit 2
F. Dacimo	Quality Services Supervisor
R. Herbert	Superintendent, Unit 1
E. Hernandez	PMMS Planner, Unit 1
J. Keenan	Maintenance Supervisor, Unit 2
D. Kross	Instrumentation & Controls (I&C) Supervisor, Unit 2
*E. Mroczka	Station Superintendent
V. Papadopoli	Supervisor, Quality Assurance (QA)
*R. Petersen	Assistant Maintenance Supervisor, Unit 1
W. Romberg	Operations Supervisor, Unit 1
J. Stansbury	PMMS Planner, Unit 2
*F. Teeple	I&C Supervisor, Unit 1
*W. Varney	Maintenance Supervisor, Unit 1
A. Weber	Shift Supervisor, Unit 2

USNRC

*D. Lipinski	Resident Inspector
T. Shedlosky	Senior Resident Inspector

*denotes those present at exit interview.

2. Licensee Action on Previous Inspection Findings

(Closed) Inspector Followup Item (245/82-10-01; 336/82-14-01).
Timeliness of job order documentation closeouts. A licensee representative stated that increased management attention has been directed toward closing out job order documentation packages from prior years. The

inspector reviewed the Unit 2 Job Order Status dated October 1, 1982 and concluded that there had been a large reduction in outstanding documentation packages. Further, the licensee representative stated that job order closeouts are being tracked to ensure that documentation packages are completed and reviewed in a timely manner. Specifically, the station quality assurance department is maintaining a listing of overdue documentation packages, i.e., those job orders open more than four weeks after the successful retest of the job order work, as logged in the control room job order log. The inspector reviewed licensee memo MP-S-3477 dated October 1, 1982 which documented station management's agreement to utilize a Work Package Review Cycle based on a four week period after retests to complete documentation and review of job orders, to extend this review cycle to Nonconformance Reports (NCR's), and to incorporate it into a station administrative control procedure (ACP). Based on the above actions, this item is closed.

3. Maintenance

a. Requirements

The requirements governing the conduct of safety-related maintenance are specified in the following documents:

- 10 CFR 50, Appendix B; Quality Assurance Criteria
- Technical Specifications, Section 6; Administrative Controls
- Regulatory Guide 1.33, Rev. 2/ANSI N18.7-1976; Quality Assurance Program Requirements
- Regulatory Guide 1.37/ANSI N45.2.1-1973; Cleaning Requirements
- Regulatory Guide 1.39/ANSI N45.2.3-1973; Housekeeping Requirements
- Regulatory Guide 1.58, Rev. 1/ANSI N45.2.601978; Qualification of Inspection, Examination, and Test Personnel

b. Program Review

The above documents specify that the program for conducting maintenance achieve the following:

- Administrative controls are established.
- Program responsibilities are designated.
- Procedures for performing the work with suitable inspection points are established.

- Preventive maintenance schedules are established.
- Control of special processes is established.
- Equipment control methods are established.
- Records of the maintenance performed are maintained.

The licensee maintains a common system of administrative control procedures (ACP's) for the two units, although separate organizations at each unit perform the maintenance work.

The inspectors reviewed the following procedures to verify that the licensee maintains an administrative system to meet the above requirements:

ACP-QA-1.02, Organization and Responsibilities

ACP-QA-2.01, QA Program Boundary

ACP-QA-2.02, Performing Category 1 Work

ACP-QA-2.02A, Installation Inspections

ACP-QA-2.02B, Retests

ACP-QA-2.04, Control of Work By Outside Construction on Inservice Systems

ACP-QA-2.05B, Control of Combustible Materials, Flammable Liquids, Compressed Gases, and Ignition Sources

ACP-QA-2.06A, Station Tagging

ACP-QA-2.06B, Station Bypass/Jumper Control

ACP-QA-2.07, Control of Special Processes

ACP-QA-2.08, Preventive Maintenance

ACP-QA-4.01, Plant Housekeeping

ACP-QA-4.07, Control of Weld Material

ACP-QA-5.01, Non-Conforming Materials and Parts

Northeast Utilities Welding Manual (AP 701, 702, and 703)

c. Implementation

The inspector reviewed the following areas to verify compliance with the licensee's maintenance program requirements:

Unit 1

- Five Job Order (J.O.) packages for work completed in 1982, including the inspection plan and acceptance tests (J.O.'s 182-015, -020, -084, -088, and -147)
- Eight Job Order (J.O.) packages for work approved for the current, in progress outage, including inspection plan and acceptance tests (J.O.'s 182-202, -218, -243, -268, -278, -301, -316, and -334)
- Visual verification of temporary weld repair under J.O. 182-084 and tracking of the permanent repair under Non-conformance Report (NCR) 182-014
- Visual observation of valve repair under J.O. 182-243 and pipe welding under J.O. 182-334
- Preventive Maintenance Index
- Preventive Maintenance (PM) cover sheets for five weeks (weeks 15 to 19 of 1982) of electrical PM's and three weeks (weeks 27 to 29) of mechanical PM's
- Welder's Performance History and Qualification Record for five welders
- Weld History Cards for twelve welding jobs
- Material, Equipment, and Parts List, March 9, 1978
- Seven maintenance procedures (MP's -711.1, -711.3 -712.1, -716.1, -717.1, -720.7, and -743.2)
- Tagging orders written for five of the reviewed Job Orders
- Inspector qualification records for three Quality Control (QC) inspectors

Unit 2

- Seven Job Order (J.O.) packages, including inspection plan/report, Material Receipt Inspection Report (MRIR), Retest/Acceptance Test, and Cleanliness and Housekeeping requirements (J.O.'s 282-147, -259, -326, -355, -567, -598B, and -598C)

- Welding records and requirements for above J.O.'s
- Ten maintenance procedures
- Tag Log entries for above J.O.'s
- Four non-conformance reports (NCR)
- Plant Design Change Request (PDCR) 2-115-81 for interface with J.O. 282-326

d. Findings

- (1) The inspector identified no violations.
- (2) During review of completed Unit 1 job orders, the inspector found two job orders (182-020 and 182-147) where station tagging was checked as being required, but no tags had been used. Instead of tags, "operator assigned" was recorded. The Operations Supervisor, Unit 1 stated that the practice of using an assigned operator instead of the formal tagging system was very infrequently utilized on maintenance jobs of short duration. By assigning an operator to the job, the operator could ensure the equipment was safe to work on without completely disabling a safety system (e.g., removal of heat exchanger covers on diesel generator for periodic inspection). The inspector stated that while retention of safety system operability was a desirable goal, it appeared that this practice had little administrative/procedural control for the conditions under which it was permissible and the manner in which it was to be performed. Further, the inspector noted that the licensee has committed to independently verify the correct condition of safety systems after maintenance work, and that the verification is being implemented by means of the tagging system. Therefore, on "operator assigned" jobs with no tags, it appears that verification may not be performed. A licensee representative stated that the practice of assigning operators instead of using safety tags would be evaluated and the permissible conditions (if any), proper manner, and independent verification would be formally clarified.

This item (245/82-19-01) is unresolved pending licensee action and subsequent NRC:RI review.

4. Measuring and Test Equipment

a. Requirements

The requirements governing the control of measuring and test equipment on safety-related work are specified in the following documents:

- 10 CFR 50, Appendix B, Quality Assurance Criteria
- Technical Specifications, Section 6; Administrative Controls
- Regulatory Guide 1.33, Rev. 2/ANSI N18.7-1976; Quality Assurance Program Requirements

b. Program Review

The above documents specify that the control and calibration of measuring and test equipment achieve the following:

- Test equipment shall be calibrated at specified frequencies.
- Calibrations shall be traceable to the National Bureau of Standards.
- Test equipment shall be controlled in an acceptable manner, including use of calibration stickers, a master equipment list and scheduling of recalibrations.
- Accountability of test equipment and its usage shall be maintained.
- The validity of previous equipment usage shall be evaluated when test equipment is found to be out of calibration.

The inspector reviewed procedure ACP-QA-9.04, Control and Calibration of Measuring and Test Equipment, to verify that the licensee's administrative program for measuring and test equipment meets the above requirements.

c. Implementation

The inspector reviewed the following areas to verify compliance with the licensee's test equipment program:

Maintenance Department, Unit 1

- Instrument Calibration List, September 20, 1982
- Three pieces of test equipment (QA MPE 27, QA 1516, and QA 1517)
- Three equipment files, including custody control record, calibration record, and calibration data for the above equipment

Instrumentation & Controls (I&C) Department, Units 1 and 2:

- Instrument Calibration List, September 29, 1982
- Two calibration procedures (IC 1101A and IC 1101H)
- Five pieces of test equipment (QA-360, -682, -720, -904, and -1301) in storeroom and their equipment files
- Five equipment files for test equipment (QA-224, -445, -603, -908, and -990) missing from their assigned storeroom position

Quality Assurance/Quality Control Department:

- Instrument Non-conformance Report (INCR) Log for previous twelve months
- Six INCR's

d. Findings

- (1) The inspector verified no violations.
- (2) When a test instrument is checked for calibration and found to be out of calibration, an INCR is written to document the action needed to return the instrument to proper calibration and any action needed due to usage of the instrument in an out of calibration condition. Typically, in such cases a statement on the INCR is checked for "Conduct a review of equipment calibrated using this instrument as a standard or of usage since last acceptable calibration." Further, on each INCR, the department head signs that he has "reviewed other equipment calibrated with this instrument as necessary" and Quality Control signs for "Corrective action verified/INCR closed."

The inspector requested to see the reviews performed for completed INCR's 415 and 420. The inspector was informed that the reviews had been performed, but that no documentation of the reviews existed. The inspector was informed that when reviews are completed, the reviewer initials the INCR.

The inspector noted that INCR 420 has no initials for completion of the review. Further, the inspector stated that regardless of whether or not the reviewer initials the INCR, without documentation of the review there is currently no basis for department head certification or Quality Control verification of completed corrective action on INCR's.

The inspector stated that the review of INCR's should be revised, including some documentation of the review of other equipment calibrated with the affected instrument, to provide a more meaningful management review and Quality Control verification.

This item (245/82-19-02; 336/82-22-01) is unresolved pending licensee action and subsequent NRC:RI review.

5. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable, deviations or violations. Two unresolved items were identified during this inspection and are detailed in paragraphs 3.d.2 and 4.d.2.

6. Management Meetings

Licensee management was informed of the scope and purpose of the inspection at an entrance interview conducted on September 27, 1982. The findings of the inspection were periodically discussed with licensee representatives during the course of the inspection. An exit interview was conducted on October 1, 1982, (see paragraph 1 for attendees) at which time the findings of the inspection were presented.