

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

DOCKET/REPORT NOS: 50-245/93-29
50-336/93-24
50-423/93-26

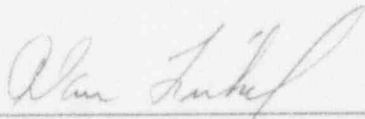
LICENSE NOS: DPR-21
DPR-65
NPF-49


LICENSEE: Northeast Nuclear Energy Company
P. O. Box 270
Hartford, Connecticut 06141-0270

FACILITY NAME: Millstone Nuclear Power Plant, Units 1, 2 and 3

INSPECTION AT: Waterford, Connecticut

INSPECTION DATES: December 13-17, 1993

INSPECTOR: 
Alan Finkel, Senior Reactor Engineer
Systems Section, EB, DRS
12/23/93
Date

APPROVED BY: 
for Plackeel Eapen, Chief
Systems Section, EB, DRS
1/5/94
Date

Inspection Summary: Inspection from December 13-17, 1993 (Inspection Report Nos. 50-245/93-29, 50-336/93-24 and 50-423/93-26).

Areas Inspected: This was an announced safety inspection by one region-based inspector to review the procurement program and the implementing documents associated with this program. The major areas of the procurement program that the inspector reviewed were the Procurement Program Plan, Audit Program and Reports, Approved Supplier Program and Reports, Procurement Training Program for Procurement Engineering, Receiving, Receiving Inspection and Warehouse personnel, and Warehouse Storage and Stock Control Programs.

Results: No safety issues were identified during this inspection. The Procurement Program was implemented as described in site procedures and complied with NUQAR, Revision 16, approved by the NRC on October 7, 1993. The Procurement Engineering staff has been trained on program requirements with increased training in the areas of parts/materials dedication, root-cause analysis and parts dedication. An approved Vendor Supplier List is issued and maintained current. Warehouse personnel have received training for their task assignments which has improved the storage and cleanliness of items in the warehouse areas. Quality Assurance audits of the procurement program were performed as defined in their Procurement Program Plan. Audit findings are tracked in a site tracking system that is monitored by management. A review of Procurement open findings indicate that they are being resolved in a timely manner.

DETAILS

1.0 INSPECTION SCOPE (38701)¹

The inspector evaluated the implementation of the procurement program for the Millstone site as described in the documentation listed in Attachment 2 of this report. In addition, the inspector reviewed the site Procurement Program for compliance with the Millstone Northeast Utilities Quality Assurance Topical Report (NUQAR); ANSI N45.2.2-1972, "Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage and Handling of Items for Water-Cooled Nuclear Power Plants;" ANSI N45.2.3-1973, "Housekeeping Requirements for Water-Cooled Nuclear Power Plants;" ANSI N45.2.13-1976, "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants;" and 10 CFR 21, "Reporting of Defects and Noncompliance."

1.2 Procurement Program

The Millstone site procurement program is described in Nuclear Engineering and Operations Procedure (NEO) 6.01, "Material, Equipment, and Parts Lists for In-Service Nuclear Generation Facilities." This procedure describes the Millstone site program for the procurement and accountability of site procured items (except Nuclear Fuel) including off-site equipment repair and calibration services for use at this site. During this inspection, the inspector used Procedure NEO 6.01 and the documents listed in Attachment 2 to review and evaluate the implementation and effectiveness of the site procurement program. The following elements of the site procurement program were inspected by the inspector:

- Procurement Engineering
- Warehouse Storage and Stock Control
- Supplier Audit Program
- Quality Procurement Audits
- Nuclear Records Retention

1.3 Procurement Engineering

The Procurement Engineering (PE) organization is responsible for ensuring that replacement parts and materials are evaluated so that the use of these replacement items does not degrade the operation or function of the original design safety systems or equipment. The PE requirements for using commercial grade items are described as when a replacement part or material can no longer be purchased from a supplier qualified to the requirements of 10 CFR 50, Appendix B. The Millstone site program for parts and material dedication is described in Procedure NEO 6.11, "Commercial Grade Items." To determine the acceptability of a commercial grade item, the PE completes an engineering evaluation form

¹The parenthetical notation following the paragraph title denotes the NRC inspection procedure that was used by the inspector in conducting this inspection. The procedure title is "Procedure Program."

that considers such areas as traceability, shelf life application, safety function, equipment qualification (EQ) and seismic requirements, and materials. To determine if the Procurement Engineers were performing evaluations on the items approved for dedication, the inspector selected the following approved commercial grade dedication packages for review:

- MPS-93-0156 - Temperature Sensor
- MP1-93-0180 - Electrical Fuses
- MPS-93-0204 - 15A 400V Transistor
- MP2-93-0113 - 1" Ball Valve

In each of the above commercial grade dedication packages reviewed, the inspector verified that the supporting documentation was complete and complied with the requirements of Millstone Procedure NEO 6.11. The inspector also verified that the engineering selection of the part loading requirements, in the above dedication packages, complied with the item location within the system.

The inspector also reviewed the Procurement Engineering program for the investigation of "Counterfeit Parts." During the dedication process of a horizontal centrifugal pump bearing part listed as a "Maximum" Bearing (Report No.PM-1300) and a Westinghouse breaker Part No. EHB3100 (Report No.PM-1291), the PE suspected from the appearance of the items that they may be counterfeit. An investigation was performed with the results indicating that the items were not counterfeit; however, both items were manufactured by an approved licensed third party company which accounted for the appearance difference for the original item. The inspector verified that the requirements of Procedures NEO 5.05, "Design Reviews," NEO 6.11, "Commercial Grade Items," and NEO 6.12, "Evaluation of a Replacement Item," were implemented by the PE during its evaluations of the suspected counterfeit items. The inspector's review of the results of the PE documentation confirmed that the items were not counterfeit.

1.4 Warehouse Storage and Stock Control

During a tour of the warehouse and receiving areas, the inspector noted that (1) the area was clean, (2) parts and materials were protected, (3) shelf life requirements were identified, and (4) cabinets for storing hazardous materials were located throughout the areas. Both the receiving and receiving inspection personnel were knowledgeable of the purchase order (PO) program requirements for receiving and storage. Warehouse personnel have had training for handling chemical-based materials and they understood the storage requirements for these materials. The inspector's review of the Quality Service Department (QSD) receiving inspection personnel training history and records indicated that their scheduled 1993 training has been completed. The inspector also verified that required test equipment, gage blocks and other equipment used as laboratory standards were traceable to an approved standards laboratory. The inspector selected five POs that were in the process of being inspected by

receiving inspection personnel. The inspector noted that connectors, inspection ports and threaded ends of bolts were protected before leaving the receiving inspection area. The shelf life requirements were marked on the item tags per the requirements of Procedure NEO 6.14, "Shelf Life."

1.5 Supplier Audit Program

The Millstone site Supplier Audit program is described in Procedure NEO-3.14, "Performance Based Supplier Audits." This procedure describes the requirements for planning and conducting supplier audits, establishing the Approved Supplier List (ASL), and initiation and follow-up of issued corrective action findings identified during an audit. The Procurement Vendor Services (PVS) organization is responsible for establishing, implementing and maintaining the Millstone site ASL program. The PVS Supplier Audit Program consists of a combination of licensee's scheduled supplier audits and audits that are received as part of the licensee's participation in the industry-wide utility program called NUPIC. The inspector verified that the approved supplier listing, which is a computer-based program, is maintained on a regularly scheduled time frame and that updated information can be added to the ASL on a daily basis, if required. The licensee performs both an annual and a triennial inspection based on site requirements. The PVS audit personnel are certified in accordance with the requirements of Regulatory Guide 1.146 (August 1980), "Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants," which endorses ANSI N45.2.23-1978. The inspector selected ten safety-related POs and verified that the suppliers listed on the POs were on the Approved Supplier List. The inspector also verified that the ASL was being updated by PVS personnel.

1.6 Quality Procurement Audits

A Quality Service Department (QSD) audit (No. A60524) of the Millstone site Material Control program was completed on July 13, 1993. The audit was performed in the following areas:

- Replacement Item Evaluations
- Testing of Commercial Grade Items
- Nuclear Production Materials Periodic Storage Inspection Program

The audit report had three findings and three recommendations. The findings were addressed by the responsible organization in a timely manner with positive actions taken to correct the findings. The inspector's tour of the warehouse area, as described in paragraph 1.4, concurred with the audit team's findings, in that the warehouse areas were clean and well maintained. Also, parts and materials were stored and protected as required by the purchase orders.

The Millstone site warehouse is scheduled for a modification which will provide additional space for receiving inspection and warehouse storage areas.

1.7 Nuclear Records Retention

Nuclear records are maintained in accordance with the requirements described in NUQAR, Revision 16. This document describes the requirements for collecting, filing, storage, maintenance and deposition of records that are required to be maintained by the licensee's Technical Specification. The inspector reviewed the procurement records of the packages described in paragraph 1.3, which were closed in a timely manner. The data within the packages were signed, legible and complied with the program requirement for record documentation retention.

2.0 CONCLUSION

The inspector determined that the procurement program for the Millstone site is implemented as described in the Technical Specifications, NUQAP (Revision 16) and site procedures. The Procurement Engineering evaluations in support of the site procurement program are well defined and documented. The Quality and Assessment Services Department program, in support of the procurement program, is defined and documented. The licensee has made improvements in the warehouse facility, and the increased training of both procurement engineering and warehouse personnel is proceeding on schedule. No safety issues were identified during this inspection.

3.0 MANAGEMENT MEETINGS

Licensee management was informed of the scope and purpose of the inspection at an entrance meeting conducted on December 14, 1993. The findings of the inspection were periodically discussed with licensee personnel during the course of this inspection. The inspector met with the licensee representatives (denoted in Attachment 1) at the conclusion of the inspection on December 17, 1993. The inspector summarized the scope and findings of the inspection as described in this report.

ATTACHMENT 1

Persons Contacted

Northeast Nuclear Energy Company

- * M. Ahern, Manager, Design Engineering, Millstone Unit 2
- * R. Asafaylo, Manager, Procurement Engineering
- * L. Bigalbal, Licensing Engineering
- * A. Brucknen, Supervisor, Warehouse Services, Millstone
- * J. Coleman, Supervisor, Procurement Inspection Services
- * R. Griswold, Operational Material Control Supervisor
- * D. Harris, Licensing Engineer
- * F. Libby, Jr., Supervisor, Assessment Services
- * D. McCory, Manager, Procurement Quality Services
- * A. McKissick, Manager, Nuclear Products Materials
- * G. McNatt, Supervisor, Procurement Engineering
- * D. Miller, Jr., Senior Vice President

United States Nuclear Regulatory Commission

- * P. K. Eapen, Chief, Systems Section, EB

* Denotes those personnel present at the exit meeting held on December 17, 1993.

During the course of this inspection, the inspector contacted other members of the licensee's Technical, Maintenance, Engineering and Quality Services staff.

ATTACHMENT 2

Documentation Reviewed

Nuclear Engineering and Operations Procedures (NEO's)

- NEO-3.14, Performance Based Supplier Audits
- NEO-5.05, Design Reviews
- NEO-6.01, Material, Equipment, and Parts Lists for In-Service Nuclear Generation Facilities
- NEO-6.11, Commercial Grade Parts
- NEO-6.12, Evaluation of a Replacement Item
- NEO-6.14, Shelf Life

Licensee Documentation

- NUQAR, Northeast Utilities Quality Assurance Topical Report, Revision 16
- ANSI N45.2.2-1972, Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage and Handling of Items for Water-Cooled Nuclear Power Plants
- ANSI N45.2.3-1973, Housekeeping Requirements for Water-Cooled Nuclear Power Plants
- ANSI N45.2.13-1976, Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants
- 10 CFR 21, Reporting of Defects and Noncompliance
- Regulatory Guide 1.146 (1980), Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants, which endorses ANSI N45.2.23-1978

Miscellaneous Documents

- Commercial Grade Dedication Documents: MPS-93-0156-Temperature Sensor, MPS-93-0204-15A 400V Transistor, MP1-93-0180-Electrical Fuses, and MP2-93-0113-1" Ball Valve
- PM1291-Counterfeit Report- Westinghouse Breakers EHB3100
- PM1300-Counterfeit Report- Maximum Type Bearing
- Audit Report No. A60524, Millstone site Material Control Program
- ACP-QA-4.04, Instruction for Packaging, Shipping, Receiving, and Handling
- NCR-1-93-068, Maintenance Storage Not In Compliance With Site Requirements