

U.S. NUCLEAR REGULATORY COMMISSION
REGION I


DOCKET/REPORT NOS: 50-272/94-09
50-311/94-09
50-354/94-07

LICENSEE: Public Service Electric and Gas Company

FACILITIES: Salem, Units 1 and 2 and
Hope Creek Nuclear Generating Station
Hancocks Bridge, New Jersey 08038

DATES: June 6-10, 1994

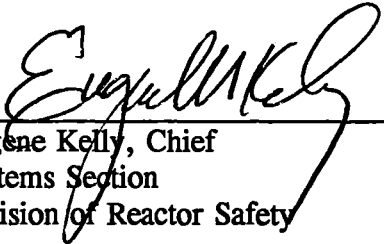
INSPECTOR:



Alan Finkel, Sr. Reactor Engineer
Systems Section
Division of Reactor Safety

June 17, 1994
Date

APPROVED BY:



Eugene Kelly, Chief
Systems Section
Division of Reactor Safety

6/17/94
Date

Inspection Summary: Inspection from June 6-10, 1994 (Inspection Report Nos. 50-272/94-09; 50-311/94-09; and 50-354/94-07).

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: The Procurement Program has been implemented as described in Site Procedure NC.NA-AP.ZZ-0019 (Q), "Procurement of Materials and Services." The Procurement Engineering staff has been trained on program requirements, with additional training in the areas of parts/materials procurement, 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. The inspector's review of procurement open audit findings indicate that they were resolved in a timely manner.

DETAILS

1.0 INSPECTION SCOPE (38701)¹

The inspector evaluated the performance of the procurement program for the Salem and Hope Creek site using the documentation listed in Attachment 2 of this report. In addition, the inspector reviewed the site Procurement Program for compliance with the Quality Assurance Program; ANSI N45.2.2-1978, "Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Water-Cooled Nuclear Power Plants;" ANSI N45.2.3-1976, "Housekeeping Requirements for Water-Cooled Nuclear Power Plants;" ANSI N45.2.13-1978, "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 licensee's site procurement program is described in Procedure NC. NA-AP.ZZ-0019 (Q), "Procurement of Materials and Services." This procedure describes the licensee's program for the procurement and accountability of site procured items (except nuclear fuel), including offsite equipment repair and calibration services for use at this site. During this inspection, the inspector used Procedure NC.NA-AP.ZZ-0019(Q) 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; and
- 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 do 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 licensee's site program for parts and material dedication is described in Technical Standard ND.DE-TS.ZZ-5414 (Q), "Commercial Grade Item Dedication Evaluation." To determine the acceptability of a commercial grade item, the PE

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 "Procurement Program."

completes an engineering evaluation form 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:

- DP-94-852 - Helical Compression Spring;
- DP-94-846 - Fisher Controls;
- DP-94-843 - ALCO Banjo Bolt for Diesel Injector Pump; and
- DP-94-838 - Fisher Controls Stem Valve Actuator.

In each of the above commercial grade dedication packages reviewed, the inspector verified that the supporting documentation was complete and adequate to justify the specific item. The inspector also verified that the engineering selection considered system loading requirements as part of their dedication package data. The inspector only reviewed the procurement dedication process associated with the above four selected components, and did not evaluate the licensee's entire dedication program.

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. However, the inspector identified several stored parts missing port and connector plugs. The licensee took immediate action to protect unplugged equipment ports. An inspection of various storage area levels by the inspector indicated that missing connector and port protection was not a widespread condition within the level B storage facility. The licensee has planned a QC audit of this area during July 1994, and the capping of stored equipment will be included in the upcoming audit. In discussions with receiving inspection personnel, the inspector determined they 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 also understood the storage requirements for these materials. The inspector's review of the quality material compliance (QMC) personnel training history and records indicated that training for 1994 has been maintained as scheduled. The inspector also verified that receiving inspection test equipment was traceable to an approved standards laboratory. The inspector reviewed five POs that were in the process of being inspected by quality material compliance receiving inspection personnel. The inspector noted that connectors, inspection ports, and threaded ends of bolts were protected before leaving the receiving inspection area. Shelf life requirements, if applicable, were marked on the item tags per the requirements of the licensee's "Shelf Life" Procedure NC.DE-TS.ZZ-5429 (Q).

1.5 Supplier Audit Program

The Salem/Hope Creek site Supplier Audit program is described in Procedure ND.QA-AP.ZZ-0008(Q), "Supplier Source Surveillance Program (SSSP)." This procedure describes the requirements for planning and conducting supplier audits, establishing the Approved Supplier List (ASL), and initiation and followup of issued corrective action findings identified during an audit. The Engineering and Procurement (EP) organization is responsible for establishing, implementing, and maintaining the Salem/Hope Creek site SSSP program. The 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 maintained as a computer-based program, is updated on a regularly scheduled timeframe, and that updated information is added on a daily basis, if required. The licensee performs both an annual and a triennial inspection of their suppliers based on site procedure requirements. The EP 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 14 safety-related POs and verified that the suppliers listed on the POs were on the approved Supplier Source Surveillance listing. The inspector also verified, in reviewing the June 1994 Class 1 Supplier listing, that the list was updated by EP personnel during the month of May 1994.

1.6 Quality Procurement Audits

An Engineering and Procurement (EP) audit of the Salem/Hope Creek site Nuclear Procurement and Material Management (NPMM) program is scheduled to start in July 1994. The last audit (1992) in this area was based on a different organization structure than the present, therefore, the inspector's review of the audit findings was devoted to determine if items identified in the 1992 audit were adequately resolved and closed in a timely manner. The 1992 audit results were closed in a timely manner, with no safety significant findings identified.

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 their purchase orders.

The Salem/Hope Creek Level B site warehouse has been updated to a state-of-the-art area. Identification and distribution of parts and materials in the warehouse are controlled and distributed by a conveyer belt distribution system. Coded materials are delivered to their assigned warehouse areas by this system, thus keeping personnel handling to a minimum. Both receiving and receiving inspection areas were clean, and staffed with well trained personnel.

1.7 Nuclear Records Retention

Nuclear records are maintained in accordance with the requirements described in NC.VP-PO.ZZ-0010(Q), "Operational Quality Assurance Program." This document describes the requirements for collecting, filing, storage, and 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. 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 Salem/Hope Creek site is implemented, as described in their Technical Specifications and NC.VP-PO.ZZ-0010(Q), "Operational Quality Assurance Program." The procurement engineering evaluations, in support of the site procurement program, were well defined and documented. The procurement quality assurance program, in support of the procurement program, is defined and documented in various site procedures. The licensee has installed a state-of-the-art Level B warehouse facility, which provides minimum personnel handling. Training of both procurement engineering and warehouse personnel is proceeding on schedule with training programs for their personnel documented.

3.0 MANAGEMENT MEETINGS

Licensee management was informed of the scope and purpose of the inspection at an entrance meeting conducted on June 6, 1994. Findings 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 June 10, 1994, and summarized the preliminary findings as described in this report.

Enclosures:

1. Attachment 1
2. Attachment 2

ATTACHMENT 1

Persons Contacted

Public Service Electric and Gas Company

- * G. Englert, Nuclear Engineering Standards Manager
- * D. Freeman, Principle Engineer
- * M. Gray, Licensing Engineer
- * D. Perkins, Manager Quality Assurance and Procurement
- * M. Rosenzweig, Manager Nuclear Purchasing
- * G. Sayer, Procurement Administrator
- * M. Skedlock, Manager Nuclear Procurement and Materials Management

United States Nuclear Regulatory Commission

T. Fish, Resident Inspector
C. Marschall, Senior Resident Inspector
J. Schoppy, Resident Inspector

- * 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 Assurance staff.

ATTACHMENT 2
Documentation Reviewed

Procurement Documents

NC.NA-AP.ZZ-0019 (Q), Procurement of Materials and Services
NC.VP-PO.ZZ-0010 (Q), Operational Quality Assurance Program
NC.DE-TS.ZZ-5429 (Q), Shelf Life Determination
ND.DE-TS.ZZ-5414 (Q), Commercial Grade Item Dedication Evaluation
ND.QA-AP.ZZ-0008 (Q), Supplier Source Surveillance Program
DE-AP.ZZ-0027 (Q), Determination of Equivalent Replacements for Alternative Spare Parts
DE-TS.ZZ-5428 (Q), Inventory Storage Level

Training Documents

NC.TQ-TP.ZZ-0101 (Z), Qualification Process
NC.TA-TP.ZZ-0902 (Z), Engineering Support Personnel Training

Purchase Orders

DP-94-852, Helical Compression Spring
DP-94-846, Fisher Controls
DP-94-843, ALCO Banjo Bolt for Diesel Injector Pump
DP-94-838, Fisher Controls Stem Valve Actuator

Miscellaneous Documents

ANSI N45.2.2-1978, Quality Assurance Requirements for Packaging, Shipping, Receiving,
Storage, and Handling of Items for Water-Cooled Nuclear Power Plants
ANSI N45.2.3-1976, Housekeeping Requirements for Water-Cooled Nuclear Power Plants
ANSI N45.2.13-1978, Quality Assurance Requirements for Control of Procurement of Items
and Services for Nuclear Power Plants
10 CFR 21, Reporting of Defects and Noncompliance