

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

Region I

Report No. 50-311/79-26

Docket No. 50-311

License No. CPPR-53 Priority -- Category B1

Licensee: Public Service Electric and Gas Company

80 Park Place

Newark, New Jersey 07101

Facility Name: Salem Nuclear Generating Station, Unit 2

Inspection at: Hancocks Bridge, New Jersey

Inspection conducted: April 6, 9-12, 17-18 and 27, and May 11, 1979

Inspectors: G. Napuda

G. Napuda, Reactor Inspector

8/7/79
date signed

R. Markowski

R. Markowski, Reactor Inspector

8/7/79
date signed

Approved by: H. B. Kister

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

date signed
8/7/79
date signed

Inspection Summary:

Inspection on April 6, 9-12, 17-18 and 27, and May 11, 1979 (Report No. 50-311/79-26)

Areas Inspected: Routine, unannounced inspection by two regional based inspectors of previous inspection findings with respect to the Operational Quality Assurance Program for Salem Unit 2. The inspection involved 83.5 inspector-hours onsite by two regional based NRC inspectors.

Results: No items of noncompliance were identified.

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DETAILS

1. Persons Contacted

- A. DeSanctis, Office Administrator
- **B. Leap, Station QA Supervisor
- **H. Lowe, QA Engineer - RQA Group
- *D. Lyons, Station QA Specialist
- ***E. Meyer, Project Quality Assurance Engineer
- **H. Midura, Manager - Salem Generating Station
- W. Reuther, Supervisor - RQA Group
- E. Rozovsky, QA Engineer - EPD
- *R. Salvensen, Manager - Hope Creek Generating Station
- **J. Stillman, Station QA Engineer

The inspector also interviewed other licensee employees during the course of the inspection including Engineering, Maintenance, Office, Operations, Quality Assurance and Store Personnel.

Other NRC Personnel

- **L. Norrholm, Resident Reactor Inspector - Salem

*Denotes those present at the exit interview on April 18, 1979.

**Denotes those present at the exit interview on April 18, and 27, 1979.

***Denotes those present at the exit interview on May 11, 1979.

2. Licensee Action on Previous Inspection Findings

(Closed) Open Item (311/79-03-01): Interim Instructions on The Safety Classification of Items. Letter General Manager - Engineering/Manager - QA with copies to Vice President - Engineering and Construction, and General Manager - Electric Production, dated December 20, 1978 states that all questions on safety classification are to be referred to the appropriate "Sponsor Engineer". The letter is a general discussion on the effort to establish an improved "Material Equipment List" to replace the outdated PD-7 classification listing. The inspector further noted that a number of recently revised procedures now reference the MEL (Material Equipment List). The inspector stated that he had no further questions at this time and this item is closed.

(Closed) Open Item (311/79-03-02): QAI's 2-5 and 7-1 Not Consistent With FSAR Amendment 43, Section D.2.4. The inspector verified that with respect to procurement control functions, QAI 2-5, Operational QA Program Description, Revision 5 and QAI 7-1, Procurement Control Program, Revision 7 were consistent with Section D.2.4 of Amendment 43 to the FSAR.

This item is closed.

(Closed) Open Item (311/79-03-03): Procedure AP-19 Was Not Consistent With Certain Requirements of ANSI N45.2.2. The inspector verified that: SR-3, Receipt and Inspection of Safety Related QA Required Material, Revision 0 and AP-19, Procurement, Receiving, Storage, Issue, and Shipping of Spare Parts and Materials, Revision 3 now addressed the environmental requirements for receipt inspection areas; AP-19, Revision 3 required access control for level D storage areas; and, SR-7, Storage of Safety Related Materials, Revision 0 addresses the storage level descriptions of ANSI N45.2.2.

This item is closed.

(Closed) Open Item (311/79-03-04): Use of Food, Inspection of Storage Areas, Inspection of Items and Inspection of Handling Equipment Not Addressed by Procedures. The inspector verified that collectively: SR-7, Storage of Safety Related Materials, Revision 0; SR-8, Housekeeping Requirements for Storage Areas Housing Safety Related/QA Required Materials, Revision 0; and SR-10, Handling of Safety Related/QA Required Materials, Revision 0 addressed the requirements of ANSI N45.2.2 in the above subject areas.

This item is closed.

(Closed) Open Item (311/79-03-05): Procedure AP-21 Not Consistent With ANSI N45.2.2 Requirements for the Marking of Stainless Steel Surfaces. The inspector verified that letter General Manager - Licensing and Environmental/NRR, dated March 6, 1979, modified the applicant's implementation of ANSI N45.2.2. The inspector further verified that AP-21 Cleanliness and Housekeeping, Revision 1 is consistent with the submitted FSAR change and additionally incorporated extra precautions for the cleaning of marked stainless steel.

This item is closed.

(Closed) Open Item (311/79-03-06): Classification of Stored Items and "Shelf Life" Control. The inspector toured the storage area and examined items at random. Each of the examined items had been reclassified and was in the proper storage environment as indicated by the inspection/status tags. The inspector noted that the items had been cleaned of dust and many were wrapped in plastic coverings. The applicant stated that to the best of their knowledge, all stored items had been examined, reclassified and properly stored. Additionally, the inspector verified that SR-7, Storage of Safety Related Materials, Revision 0 addressed "Shelf Life" control.

This item is closed.

(Closed) Open Item (311/79-03-07): Review Frequency of Engineering Department Directives. The inspector verified that Engineering Department Operating Procedure, Revision 5 establishes a finite review time frame for Engineering Department Directives.

This item is closed.

(Closed) Open Item (311/79-03-08): Procedures to Specify How to Document Unsatisfactory Results Associated with Work Inspections. The inspector verified that Procedure Q-2, Quality Assurance Inspection Program, Revision 2 and Performance Manual Section 3.4.5.7, Revision 9 addressed the specific subject requirements.

This item is closed; however, a finding is discussed further in Paragraph 3.

(Closed) Open Item (311/79-03-09): Documenting the Results of Housekeeping Inspections. The inspector verified that AP-21, Cleanliness and Housekeeping, Revision 1 specifies that a log of housekeeping inspections shall be maintained by the Safety Supervisor and the Senior Performance Supervisor-HP/Chemistry, as applicable, and that all adverse findings will be reported to the Maintenance Engineer via a "Work Order".

This item is closed.

(Closed) Open Item (311/79-03-10): Clarification of Zone Designations With Respect to Cleanliness Requirements. The inspector verified that AP-21, Cleanliness and Housekeeping, Revision 1 defines site buildings/areas utilizing the zone designations of ANSI N45.2.3 and incorporates the restriction list into Attachment 2 to the procedure.

This item is closed.

(Closed) Open Item (311/79-03-11): Establish Procedures Describing the Control of Maintenance Department Measuring and Test Equipment. The inspector verified the following procedures collectively addressed the responsibilities, storage and control of mechanical and electrical test and measurement equipment: A-8, Calibration Program-Mechanical, Revision 2; A-9, Calibration Program, Revision 6; AP-22, Calibration of Measuring and Test Equipment. Revision 4; and SR-9, Calibration Program-Mechanical, Revision 0.

This item is closed.

(Closed) Open Item (311/79-03-12): Establish Departmental Implementing Procedures for Record Control. The inspector verified that the

following procedures detailed the controls for compiling, identifying and transmitting records for processing/storage: A-13, Records Routing and Microfilm Procedure, Revision 0; OQI-6, QA Records Program, Revision 0; and Performance Department Manual Sections 3.3.5, 4.5.9 and 5.2.8, 9 and 10, Revision 9.

This item is closed.

(Closed) Open Item (311/79-03-14): Storage of Non-Duplicate Records. The inspector toured the Technical Document Room and did not note any non-duplicate records stored at that location. The inspector reviewed the transmittal sheet that the applicant indicated was used to transfer all non-duplicate records to the UE&C Records Storage Facility, and selected radiographs No. 13 Charging Pump CVC Suction West (June 12, 1977) and No. 15 Service Water 13 Valve Closed (June 14, 1977) as samples. The inspector then verified that these particular radiographs were stored in the UE&C vault and noted that they were stored among other non-duplicate records that appeared to be the records listed on the aforementioned transmittal sheet.

This item is closed, however, the vault is discussed further in Paragraph 4.

(Closed) Open Item (311/79-03-15): Distribution of Departmental Documents. The inspector verified that issued Procedure AP-12, Document Control, Revision 4 identified the specific documents controlled by that procedure. The inspector also verified that AP-3, Station Documentation, Revision 9 addressed the control of those procedures not listed in AP-12 (e.g. the sponsor/department controls the distribution of their procedures).

This item is closed.

(Closed) Open Item (311/79-03-16): Establish the Authorities and Duties of the Electric Production QA Engineer in Writing. The inspector verified that Procedure EPDN 1.1, Revision 0, addresses the subject and meets the minimum requirements of an implementing procedure.

This item is closed.

(Closed) Open Item (311/79-03-17): FSAR Ammendment 43, Description of Performance of Audit/Surveillance of Contractors and Revision of Applicable Implementing Procedures to be Consistant with that Description. The inspector verified that a letter Manager-QA/General Manager-Licensing and Environment, dated February 6, 1979, requested a revision to pages 30 and 35 of FSAR Amendment 43, Appendix D. The inspector verified that QAI 2-5, Operational QA Program Description, Revision 5 and AP-17, Operational Quality Assurance Program, Revision 5 were consistent with the proposed FSAR change and with each other.

This item is closed.

(Closed) Open Item (311/79-03-18): Current Station Organization is Consistent with the Description in FSAR Amendment 43, However, Implementing Procedures Are Out of Date in this Respect. The inspector verified that with respect to the subject of station organization, the following procedures are consistent with the FSAR description: AP-2, Station Organization, Revision 2; A-1, Maintenance Department Organization, Revision 2; Performance Department Manual Section 2.1, Revision 9; and AP-17, Operational Quality Assurance Program, Revision 5.

This item is closed.

(Closed) Open Item (311/79-03-19): Definition of the Review/Approval Cycle for OQI's. The inspector verified that OQI-1, Operational Quality Instruction Program, Revision 0 defines the final approval authority for OQI's and that approval cycle was compatible with the FSAR organizational description.

This item is closed.

(Closed) Open Item (311/79-03-20): Implementing Procedures Not Consistent With FSAR Amendment 43 With Respect to the Assignment of Inspection Duties.

The inspector verified that the following procedures assigned inspection duties consistent with the QA Program description in FSAR Amendment 43; AP-17, Operational Quality Assurance Program, Revision 5; AP-25, Control of Station Repair and Maintenance, Revision 1; Q-2, Quality Assurance Inspection Program, Revision 2; and Performance Department Manual Section 3.4.5, Revision 9.

This item is closed, however, the inspector identified a finding that is discussed further in Paragraph 3.

(Closed) Open Item (311/79-03-21): Revise Procedure to Assure Independency of Outside Auditor(s). The inspector reviewed procedures QAI 18-3, Audit of PSE&G QA Program by Outside Agents/Auditors, Revision 6 and QAI 18-4, NRC Inspection of PSE&G QA Program, Revision 2. The first procedure did establish the requirement for outside auditor(s) independency. The second procedure detailed interfacing with the NRC.

This item is closed.

(Closed) Open Item (311/79-03-22): Procedure to Describe Three Levels of Quality Verification Activities. The inspector verified that QAP-2, Quality Program, Revision 9 describes the three levels of quality verification to be inspection/test, surveillance and audit activities.

This item is closed, however, the inspector identified a finding that is discussed in Paragraph 3.

(Closed) Open Item (311/79-03-23): Revise QAI's 18-2 and 3 so that they are consistent with QAI 1-1 and FSAR Amendment 43. The inspector verified that the following procedures are consistent with FSAR Amendment 43 and each other: QAI 1-1, PSE&G Quality Assurance Department, Revision 2; QAI 18-1, Audits by the Quality Assurance Department, Revision 7; QAI 18-2, Audit Plans and Checklists, Revision 9; QAI 18-3, Audit of PSE&G QA Program by Outside Agents/Auditors, Revision 6.

This item is closed.

(Closed) Open Item (311/79-03-24): Revise Procedures to be Consistent with the FSAR and to Require Periodic Review of Audit Schedules. The inspector verified that QAI 1-1, Audits by the Quality Assurance Department, Revision 7 is consistent with FSAR Amendment 43, including job title and descriptions, and requires periodic review of audit schedules.

This item is closed.

3. Inspection System

FSAR Appendix D (Amendment 43), Paragraph 5.10 states in part, "Inspections shall be performed by personnel...other than those who performed the activity being inspected... Testing, repair and maintenance activities shall be inspected by qualified individuals other than those who performed or directly supervised the activity being inspected."

The inspector identified that AP-17, The Electric Production Department Quality Assurance Program at Salem Generating Station, Revision 5 (Issued April 26, 1979), Paragraph 10.4.7 states in part, "The SQAE's (Station Quality Assurance Engineer) inspections do not include the physical check of the work with tools, only visual observation of the work done or examination of documents. Physical checks shall be done by qualified individuals performing the work and their supervisors." The inspector further identified that implementing procedure Performance Department Manual (PDM), Paragraph 3.4.5.2, Revision 9, states in part, "It should be emphasized that 'inspection' here does not normally include the physical check of the work with tools, only the visual observation of the work done (or examination of documents). Physical check of the work with tools shall be done by individuals certified as Level I (AP-23)." The inspector also identified that implementing procedure Q-2, Quality Assurance Inspection Program, Revision 2 contained the same statement (Paragraph 2.1) as the PDM and added "the 'inspection' shall be performed by certified individuals other than those directly performing or supervising that work, as specified in the Standard ANSI N18.7.", while Paragraph 2.2 defined an inspector as "A member of the

Station Quality Assurance Department certified as Level II Verifier by the Manager-Quality Assurance." During discussions with the inspector, the applicant stated that their interpretation of 10 CFR 50, Appendix B, Criterion X and ANSI N18.7 independent inspection requirements was such that their designated inspector would at no time perform an actual physical inspection (e.g. "hands on") even in an appropriate situation as measuring a dimension with a micrometer.

The inspector stated that his interpretation, based on common practice in industry, was that when an inspection is required and the appropriate and practical method to verify the quality of that work operation was a physical act (other than visual), it had to be performed by the assigned inspector. The applicant acknowledged the inspector's comments. The inspector further stated that this matter would be referred to NRC management for resolution and no action was required of the applicant at this time. This item is open pending NRC management action (311/79-26-01).

4. Nonduplicate Record Storage

The inspector had certain reservations with respect to the UE&C records storage facility and its intended use as it is variously referred to as a "vault", "blockhouse", etc. Subsequent to the exit meeting on April 27, 1979, Mr. E. Schwalje, PSE&G QA Manager, telephoned Mr. H. Kister, NRC:RI on May 4, 1979 and further discussed this facility. On May 10, 1979, Mr. H. Kister and the inspector telephoned Messrs. R. Evans, E. Schwalje and F. Omohundro, PSE&G, and discussed the applicant's intention and position with respect to the records storage facility.

The applicant's representatives stated that the subject facility was considered to be a Document Building within the context of NFPA 232-1975, Protection of Records. The applicant further described the physical construction characteristics of this building and stated that necessary documents and knowledgeable personnel would be made available should the inspector desire to re-examine the structure.

The inspector re-examined the Document Building on May 11, 1979, in the company of PSE&G and UE&C personnel. During this re-examination the inspector utilized recent NRC guidance criteria for records storage facilities and UE&C Drawings 9443.01-699, 700, 701 (Three sheets) and 701-B, Revisions 4, 1, 2 and 0 respectively.

The inspector stated that no items of noncompliance were identified nor were there any further questions. The applicant acknowledged the inspector's statement.

5. Open Items

Open items are findings associated with the proposed QA Program's implementing procedures that the applicant intends to use upon receipt of the Operating License and activities deriving therefrom. An open item is discussed in Paragraph 3.

6. Exit Interview

The inspector met with the applicant representatives (denoted in Paragraph 1) on April 18, 27 and May 11, 1979. The purpose, scope and findings of this inspection, as stated in this report, were presented during these meetings.