

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

Region I

Report No. 50-311/78-36

Docket No. 50-311

License No. CPPR-53 Priority -- Category B1

Licensee: Public Service Electric & 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: September 27 and 28, 1978

Inspectors: H. Nicholas
H. Nicholas, Reactor Inspector

10/3/78
date signed

T. McNatt
T. McNatt, Reactor Inspector

10-3-78
date signed

Approved by: for D.L. Capton, Chief, Nuclear Support Section
No. 1, RO&NS Branch

10/3/78
date signed

Inspection Summary:

Inspection on September 27 and 28, 1978 (Report No. 50-311/78-36)

Areas Inspected: Routine, unannounced inspection by regional based inspectors of the integrated hot functional test program status; preoperational test procedures for review, verification and witnessing; followup on previous unresolved and open items; and plant tour of the control room, turbine building, auxiliary building, penetration building, fuel handling areas, diesel generator room and containment. The inspection involved 29 inspector-hours onsite by two NRC regional based inspectors.

Results: No items of noncompliance were identified.

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DETAILS

1. Persons Contacted

Public Service Electric and Gas Company

- * Mr. S. Chawaga, Principal Staff Engineer - QAD
- Mr. J. Ciccone, Senior Construction Engineer
- * Mr. C. Johnson, Startup Engineer
- * Mr. A. Meyer, Site QA Engineer
- * Mr. E. Meyer, Project QA Head
- * Mr. D. McLaughlin, Senior Construction Engineer
- * Mr. P. String, Jr., QA/QC Coordinator
- Mr. G. Traylor, Startup Test Engineer

United Engineers and Constructors, Inc.

- Mr. J. Blair, QC Engineer
- Mr. S. Page, Lead Test Engineer
- * Mr. R. Phelps, Superintendent Field QC

USNRC

- * Mr. L. Norrholm, Resident Reactor Inspector
- * denotes those present at the exit interview.

2. Preoperational Test Procedures

a. Preoperational Test Procedure Review

The following procedure was reviewed for technical and administrative adequacy:

- SUP 30, Revision 0, Approved September 21, 1978. Energizing No. 2 Generator Main Bus and Associated Equipment.

The procedure was reviewed for the following:

- Management approval;
- Appropriate committee review;
- Procedure format;

- Test objectives;
- Prerequisites;
- Environmental conditions;
- Acceptance criteria;
- References;
- Initial conditions;
- Test objectives are met;
- Performance verification;
- Recording conduct of test;
- Restoration of system to normal after test;
- Evaluation of test data; and,
- Quality control verification.

Findings:

The inspector ascertained by review of the above procedure that it is consistent with regulatory requirements, guidance and licensee commitments. No discrepancies were noted in the review of this procedure.

b. Preoperational Test Procedure Verification

The following procedure was reviewed to verify that adequate testing is planned to satisfy regulatory guidance and licensee commitments:

- SUP 30, Revision 0, Approved September 21, 1978. Energizing No. 2 Generator Main Bus and Associated Equipment.

The inspector verified that the licensee had a procedure written, reviewed, and approved. Management approval was in accordance with established licensee procedures and test objectives were consistent with test titles.

Findings:

No discrepancies were noted in the review of this procedure and the inspector had no further questions at this time.

3. Integrated Hot Functional Test Program

a. Hot Functional Test Status

The primary objective of this inspection was to review and observe preparations for the Integrated Hot Functional Test. The inspector received and reviewed procedures and discussed the following areas with the Startup Engineer:

- Preparations for the Integrated Hot Functional Test;
- Procedure status and approval;
- Prerequisites and references;
- Procedure verification and results review; and,
- Test witnessing.

b. HFT Procedure Review

The following procedures were reviewed for technical and administrative adequacy:

- SUP 50.06, Revision 0, Approved September 26, 1978. Pressurizer Pressure and Level Control.
- SUP 50.08, Revision 0, Approved September 26, 1978. Steam Generator Safety Valve Test.
- SUP 50.16, Revision 0, Approved September 27, 1978. Safety Injection System Precritical Test.

Each procedure was reviewed for the following:

- Management approval;
- Appropriate committee review;
- Procedure format;

- Test objectives;
- Prerequisites;
- Environmental conditions;
- Acceptance criteria;
- References;
- Initial conditions;
- Test objectives are met;
- Performance verification;
- Recording conduct of test;
- Restoration of system to normal after test;
- Evaluation of test data; and,
- Quality control verification.

Findings:

The inspector ascertained by review of the above procedures that they are consistent with regulatory requirements, guidance and licensee commitments. No discrepancies were noted in the review of these procedures.

c. HFT Procedure Verification

The following procedures were reviewed to verify that adequate testing is planned to satisfy regulatory guidance and licensee commitments:

- SUP 50.01, Revision 0, Approved September 19, 1978. Reactor Coolant System Thermal Expansion.
- SUP 50.02, Revision 0, Approved September 19, 1978. Reactor Coolant System Leakage Test-Hot.

- SUP 50.03, Revision 0, Approved September 19, 1978.
Pressurizer Power Operated Relief Valve Test.
- SUP 50.05, Revision 0, Approved September 19, 1978.
Incore Thermocouple RTD Cross Calibration.
- SUP 50.06, Revision 0, Approved September 26, 1978.
Pressurizer Pressure and Level Control.
- SUP 50.08, Revision 0, Approved September 26, 1978.
Steam Generator Safety Valve Test.
- SUP 50.09A, Revision 0, Approved September 11, 1978.
Atmospheric Steam Dump Control-Hot.
- SUP 50.16, Revision 0, Approved September 27, 1978.
Safety Injection System Precritical Test.

The inspector verified that the licensee had a procedure written, reviewed, and approved. Management approval was in accordance with established licensee procedures and test objectives were consistent with test titles.

Findings:

No discrepancies were noted in the review of these procedures and the inspector had no further questions at this time.

4. Fuel Handling Areas

An inspection was conducted of the following areas:

- Fuel Receiving Area;
- Decon Area;
- Fuel Handling Area Control Center;
- Fuel Storage Area;
- Fuel Transfer Pit;
- Spent Fuel Pit; and,
- Fuel Skimmer, Filter-Pump Area.

The inspector observed preparations being made for receipt of new fuel and work in progress of modifications being made to spent fuel racks.

Findings:

Housekeeping cleanliness was in progress in all areas in preparation for receiving new fuel. Receipt of new fuel is scheduled for October 15, 1978 through January, 1979.

No discrepancies were noted and the inspector had no further questions at this time.

5. Plant Tour

The inspectors toured the control room, turbine building, auxiliary building, penetration building, fuel handling areas, diesel generator room and containment. The inspectors observed work activities in all areas and preparations being made for the integrated hot functional test. No inadequacies were identified.

6. Exit Interview

At the conclusion of the site inspection on September 28, 1978, an exit meeting was conducted with the licensee's senior site representatives (denoted in Paragraph 1). The findings were identified and previous unresolved items were discussed.