

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

Region I

Report No. 50-311/78-48

Docket No. 50-311

License No. CPPR-53 Priority -- Category C

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: November 29 - December 1, 1978

Inspectors: Thomas Foley  
T. Foley, Reactor Inspector

12/11/78  
date signed

J. C. Higgins  
J. C. Higgins, Reactor Inspector

12/12/78  
date signed

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

12/12/78  
date signed

Inspection Summary:

Inspection on November 29 - December 1, 1978 (Report No. 50-311/78-48)

Areas Inspected: Routine, unannounced inspection by regional based inspectors of preoperational testing of pipe supports, restraints, thermal expansion, and preservice inspection program. The inspection involved 30 inspector-hours on site by two NRC regional based inspectors.

Results: No items of noncompliance were identified.

790119 0261

## DETAILS

### 1. Persons Contacted

The below technical and supervisory personnel were contacted.

- \*F. Albert, Lead Engineer, UE&C
- R. Brandt, Senior Engineer
- D. Brown, Superintendent of Pipe Supports
- \*S. Chawaga, Project QC Engineer
- \*R. Evans, Assistant Manager QA
- \*R. Griffith, Senior Staff Engineer QA
- \*C. Johnson, Startup Engineer
- \*W. Kittle, Site QA Engineer
- \*R. Kirk, Senior Engineer
- \*E. Meyer, Project QA Engineer
- \*R. Phelps, Superintendent Field QC, UE&C
- \*D. Snyder, Project Engineer, UE&C
- \*P. String, QA/QC Coordinator
- \*D. Tauber, Site QA Engineer

The inspectors also talked with and interviewed several members of the QA and QC staffs and construction and test personnel.

UE&C - United Engineers and Constructors

\* denotes those present at the exit interview.

### 2. Licensee Action on Previous Inspection Findings

(Open) Inspector Follow Item (311/78-43-01): The licensee currently is meeting his commitments and requirements for the preservice inspection of pipe supports and restraints. However, further review will be required to determine the acceptability of the licensee's insulation removal practices during future inservice inspections. This item is reclassified as an Inspector Follow Item.

(Open) Unresolved Item (311/78-43-02): The licensee provided the inspector with a Public Service Electric and Gas Company (PSE&GC) letter to R. Griffith from K. Bass dated November 22, 1978, addressing insufficient thread engagement and hydraulic fluid leakage on steam generator (S/G) snubbers. Three S/G snubbers with insufficient thread engagement have been identified. Hydraulic connections will be retightened and piping flushed after the Hot Functional Test. The licensee has not yet corrected the extending bolt on the valve assembly on S/G -23Z snubber. This item therefore remains unresolved.

(Closed) Unresolved Item (311/78-19-03): The licensee provided the inspector with Deficiency Reports indicating that diagrams and drawings are being revised to reflect actual rated loads and that replacement of a few existing snubbers with correct snubbers of appropriate load ratings has taken place. The licensee stated that a review of all snubber load ratings with actual loads anticipated has taken place and all discrepancies have been resolved. This item is closed.

(Closed) Unresolved Item (311/78-29-06): The licensee stated that the Outstanding Items List has been used to adequately control reassembly of safety related hangers and supports after initial installation. The inspector made a thorough tour of the plant for unassembled hangers or pipe supports and identified none. A further review of the Outstanding Items List indicated that it was being used to track and resolve previously unassembled and then reassembled hangers that required further adjustment and inspection. Based on the use of the Outstanding Items List this item is considered closed.

### 3. Pipe Supports and Hangers

#### a. General

An inspection was conducted of a random sample of pipe supports, restraints, guides, and snubbers at normal operating temperature on the following systems: Safety Injection, Chemical Volume and Control, Residual Heat Removal, and Pressure Relief. The piping supports were verified against design drawings and "Reactor Coolant System Thermal Expansion Hot Functional Test Procedure" SUP 50.1 for correct thermal growth. The inspector

verified that interference due to thermal expansion was not occurring at normal operating temperature and that hot settings of snubbers, restraints, and hangers conformed with design drawing specifications.

The inspector reviewed completed data for SUP 50.1 and verified that the licensee had conducted a satisfactory review, evaluation, and disposition of problems encountered at normal operating temperature. Accuracy of SUP 50.1 data was verified by independent measurements on previously selected guides, hangers, and snubbers.

b. Discrepancy Control

The inspector questioned the method for controlling problems encountered that had a long term effect or which could not be resolved during the hot functional testing. The licensee stated that these items would be placed on the "Outstanding Items List" which will ensure that these problems are resolved. A review of the Outstanding Items List indicated that this method of tracking problems was in fact presently being used for the control of hangers and support problems of a long term nature. The inspector had no further questions at this time.

4. Piping System Vibration

The inspector reviewed PSE&GC Procedure "Vibratory Analysis of No. 23 Reciprocating Charging Pump Piping" dated November 16, 1978, and the results of water hammer data taken during the "Pressurizer Relief and Safety Valve Blowdown Test" (PR-072778). The inspector had no further questions on the procedures or data at this time.

5. Exit Interview

At the inspection's end the inspectors held a meeting (see Detail 1 for attendees) to discuss the inspection scope and findings.