

U. S. NUCLEAR REGULATORY COMMISSION
Region I

Report No. 82-41

Docket No. 50-387

License No. NPF-14 Priority -- Category B

Licensee: Pennsylvania Power and Light Company

2 North Ninth Street

Allentown, Pennsylvania 18101

Facility Name: Susquehanna Steam Electric Station, Unit 1

Inspection At: Berwick, Pennsylvania

Inspection Conducted: November 5-10, 1982

Inspectors: Lewis Narrow 11/24/82
L. Narrow, Reactor Inspector date

Approved By: J. P. Durr 11/24/82
J. P. Durr, Chief, Material and Processes date
Section, EPB

Inspection Summary: Inspection on November 5-10, 1982 (Inspection Report No. 50-387/82-4)

Areas Inspected: A routine unannounced inspection by one region-based inspector of the status of outstanding items concerning pipe hangers and restraints. The inspection involved 16 hours on site by one inspector.

Results: No violations were identified.

DETAILS

1. Persons Contacted

Pennsylvania Power and Light Company (PP&L)

*F. Eisenhuth, Senior Compliance Engineer
*J. Fritzen, Resident Engineer
*E. Gorski, QC Supervisor
*J. Green, Operations QA Supervisor
*H. W. Keiser, Superintendent, SSES
R. Lengel, Power Production Engineer, Maintenance
T. Newman, QA Engineer, Construction

Bechtel Power Corporation (Bechtel)

K. Buchannen, Lead Hanger Engineer
B. Mukherjee, Plant Design Group Supervisor
J. E. O'Sullivan, Assistant Project Field Engineer

*Denotes persons attending exit interview.

2. Violations Resolved

(Closed) Violation (82-31-01): Inadequate installation of small bore pipe anchors in accordance with Detail 600; SPA600; and SPA 1312. Installation inadequacies included:

- a. Use of SA 307 bolts when SPA 600 and SPA 1312 specified SA 325.
- b. Bolt shoulder prevents positive torquing of nut to preload pipe clamp bolts.
- c. Fabrication tolerances prevent positive frictional contact between pipe clamp and pipe.

The inspector reviewed the following records:

- . NCR 82-728 which identified lack of positive frictional contact between clamp and pipe. Its disposition required re-inspection of all anchors installed using Detail 600, SPA 600 and SPA 1312 clamps and corrective action in accordance with FCR P-4066.
- . Work Authorization's S-25267 and S-25352 for performance of re-inspections and of rework where necessary.
- . OQA records of reinspection and rework as well as selected OQA inspection reports.

The inspector visually examined selected pipe supports and verified that washers had been installed to allow proper torquing of the nuts in order to pre-load the bolts. Shims had been installed to provide a positive contact between the clamp and pipe. The inspector also reviewed engineering justification for use of SA 307 bolts and determined that they were adequate for the loads imposed on the pipe supports.

(Closed) Violation (82-31-03): Failure to control and distribute revised drawings. The inspector discussed this failure and corrective actions taken with licensee and A/E personnel and reviewed the procedures identified below.

Field Procedure FP-P-20 has been revised to provide detailed administrative controls for handling and issue of revised drawings and retrieval/voiding of earlier drawings. In addition, FP-G-4 and FP-P-22 have added requirements that drawings which have been revised for cancellation shall be stamped cancelled and shall be processed and distributed the same as regular revisions.

(Closed) Violation (82-31-06): Inadequate reinspection of pipe supports.

Discussion with licensee personnel established that the inspection criteria provided was inadequate. The QC supervisor had requested clarification in several areas. Reinspection was started prior to receipt of revised criteria. A complete reinspection was later performed as discussed earlier.

(Closed) Violations (82-34-01, 82-34-02): Cutting of large pipe clamp flanges without engineering authorization or inspection; and lack of clearance between pipe clamp flanges and snubber bodies.

The licensee inspected 100% of the size 3, 10, 35 and 100; 20% of size 1; and 10% of size $\frac{1}{4}$ and $\frac{1}{2}$ snubbers for those deficiencies. Inspection results were provided to the A/E for evaluation and to provide requirements for rework.

The inspector examined NCR 82-820; WA S 25938 and S 26046; and QC inspection reports of the rework. NCR 82-820 had initially required inspection of 100% of size 35 snubbers and 10% of the remaining sizes. Because of deficiencies found during inspection of the size 3, 10 and 100 snubbers, 100% of these sizes were also inspected.

The inspector also performed a visual inspection of selected snubber clamps which had been reworked.

3. Unresolved Items Resolved

(Closed) Unresolved Item (82-31-02): Engineering justifications for use of shims in order to provide positive contact between pipe clamps and pipe.

Review of engineering justification for use of shims confirmed their adequacy. FCR P-4066 and its revision in accordance with NCR 82-952 which had been reviewed and approved by PP&L engineering provide an acceptable means of insuring positive frictional contact between the clamps and the pipe.

(Closed) Unresolved Items (82-31-04 and 82-31-05): Lack of a requirement for dimensional inspection of shop fabricated items on QC instructions for installation inspections and QC verification of such dimensions.

Specification M-213, Rev. 11 is being revised (Addendum 2) to require dimensional inspection of prefabricated vendor components including approved modifications. The reinspection program described above has verified the dimensions for installed hangers.

(Closed) Unresolved Item (82-31-07): Adequacy of installed clamp with trimmed flange ends. This item is discussed above with item 82-34-01.

(Closed) Unresolved Item (82-31-08): Pipe supports attached to containment wall with adjacent supports attached to floor. Review of the Bechtel data concerning these supports had determined that this arrangement was acceptable.

(Closed) Unresolved Item (82-31-09): Movement of snubber in a transverse direction. The load imposed due to the maximum lateral movement of the pipe support was not sufficient to impair its intended functions.

4. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection on November 10, 1982. In addition, Mr. G. G. Rhoads, the NRC Resident Inspector was present. The inspector summarized the scope and findings of the inspection.