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

Region I

Report Nos. 50-387/81-14
50-388/81-07

Docket Nos. 50-387
50-388

License Nos. CPPR-101
CPPR-102 Priority -- Category B

Licensee: Pennsylvania Power and Light Company
2 North Street
Allentown, Pennsylvania 18101

Facility Name: Susquehanna Steam Electric Station, Units 1 and 2

Inspection at: Berwick, Pennsylvania

Inspection conducted: July 6-10, 1981

Inspectors: S. D. Ebneter for R. J. Paolino, Reactor Inspector — 8/24/81 date signed

Approved by: S. D. Ebneter — 8/24/81
S. D. Ebneter, Chief, Plant Systems Section, DETI — date signed

Inspection Summary:
Combined Inspection of Units 1 and 2 on July 6-10, 1981 (Combined Report Nos. 50-387/81-14 and 50-388/81-07).
Areas Inspected: Routine, unannounced facility inspection by one regional based inspector of licensee work activities and documentation pertaining to the installation of safety related electrical/instrumentation components; review of previously identified items; facility inspection and interviews with craft personnel. The inspection involved 39 inspection hours on site by one regional based inspector.

8109280583 810831
PDR ADOCK 05000387
Q PDR

Results: Of the six areas inspected, no items of noncompliance were identified in 5 areas of inspection; one item of noncompliance was identified in the area of installed instrument components, (installed components not per certified vendor print).

DETAILS

1. Persons Contacted

Pennsylvania Power and Light

*R. Beckley, Resident NQAE
*J. Buczynski, NQA CSG
P. Capotosto, Site QAE
D. Casal, Resident Engineer
*S. Denson, Project Construction Manager
*R. Matthews, Analyst, NQA

Bechtel Power Corporation

A. Bisesti, Assistant Project Manager
G. Bell, Lead QAE
*G. Cranston, Resident Project Engineer
*G. Gelinas, Assistant Project FQAE
S. Hoffman, Resident Engineer (Mechanical)
E. Kleha, Assistant Field Engineer
C. Manley, Lead Cable Pulling Engineer
*W. Mourer, Project Superintendent
*J. O'Sullivan, Assistant Project Engineer
R. Rezek, Lead Instrument Engineer
*H. Lilligh, Project QAE
*A. Sherwood, QCE
S. Santopietro, Construction Engineer
R. Stiegerwald, Lead Equipment Separations Engineer
*K. Stout, Project Field QCE
P. Weisman, QCE

U.S. Nuclear Regulatory Commission

*G. Rhoads, Resident Inspector

*denotes personnel present at the exit meeting.

2. Facility Tour

The inspector observed work activities in progress, completed work and plant status in several areas of the plant during a general inspection of Units 1 and 2. The inspector examined work items for obvious defects or noncompliance with NRC requirements or licensee commitments. Particular note was taken regarding the presence of quality control inspectors and indication of quality control activities through visual evidence such as inspection records, material identifications, nonconformance and acceptance tags. In addition, the inspector interviewed craft and supervisory personnel encountered in the work areas.

No items of noncompliance were identified.

3. Status of Previously Identified Items

a. (Closed) CDR Item 387/388-79-00-01 pertaining to defective Raychem Co-Axial Cable (Q09). The inspector reviewed licensee correspondence PLA-347, nonconformance report no. 3447, MCAR 1-35 and audit no. CL(4) which documents the cable deficiency and disposition. The documentation indicates that the Q09 cable is not used in the containment and was limited to one production run. Disposition consists of replacing the damaged cable and/or splicing. The inspector had no further questions regarding this item. This item is closed.

b. (Closed) Unresolved Item 387/79-08-05 pertaining to the use of the CR120A relay in safety related equipment and/or in non-safety related areas in which a fire resulting from the flammable relay contact cover could affect safety related equipment. The inspector reviewed licensee response to QA action request no. H-81-02 dated May 29, 1981. The licensee states that the subject relays identified in IE Bulletin 78-01 are not applied at Susquehanna in areas that may have a potential for damaging safety related equipment and that the subject relay is not included in the spare relay inventory or on order. This item is closed.

c. (Closed) Unresolved Item 387/79-23-01 and CDR Item 387/388-79-00-05 pertaining to damaged cable reported in Deficiency Report 0092, 0096 and MCAR 1-35. The inspector reviewed NCR Nos. 3581, 3887, 3992, 4036, 4085, 4130, 5027 which identify the cable deficiency and the disposition. In addition, the inspector reviewed the construction corrective action control document nos. PCLBC-3181, 6374 and 7743; licensee correspondence letter nos. PLA-383, 478 and 546; and licensee closeout letter no. PLI-12396 dated March 4, 1981.

The inspector determined the action taken by the licensee to be acceptable. This item is closed.

d. (Open) CDR Item 387/388-80-00-25; 80-00-20 pertaining to the undersized cable problem in MOV control circuits (DR-0138) and the results of the licensee engineering review of Power and Control Cable Applications recorded in the minutes of November 7, 14 and 21, 1980 meeting with the Architect Engineers at the home office in San Francisco which identifies a problem area in not verifying actual circuit lengths versus scheduled circuit lengths. The inspector reviewed the following documentation and the licensee's response no. PLB-13204 dated June 5, 1981 which concludes that the reports are inadequate in describing actual problem, causes and resolution. This item remains open.

4. Instrumentation (Components/System) -- Work Observations

The inspector observed work performance partially completed work and completed work, as appropriate, relative to the installation of instrument components associated with the HVAC damper control assembly as defined on certified vendor drawing nos. 13811-2 and 13811-3 for damper nos. HDM-17508A and B, respectively. Visual inspection of the installed control assembly for damper nos. HDM-17508A and B, located in the Unit 1 Reactor Building, elevation 779'-0", area 27 show that the component layout of the installed Damper Control Assembly does not conform to the certified drawing configuration. Discussions with licensee personnel and a review of the material receiving reports indicate that the Damper Control Assembly is not inspected when received on site except for visual damage and documentation. Construction quality control inspection reports indicate the installed Damper Control Assemblies were inspected and accepted on May 5, 1980 and turned over to the startup group on December 19, 1980. The inspector noted that the quality control inspection performed by field quality control personnel pertains only to the orientation of the installed Damper Control Assembly and not to the individual component location.

The inspector questioned the licensee on the adequacy of his quality assurance program which permits the installation of nonconforming material or fabricated assemblies in safety related systems.

The inspector informed the licensee that this was an item of noncompliance and an infraction of 10 CFR 50, Appendix B, Criteria VII which states, in part, that: "Measures shall be established to assure that purchased material, equipment --- conform to the procurement document. These measures shall include --- examination of products upon delivery. ---The effectiveness of control of quality shall be assessed --- at intervals consistent with importance, complexity --- of product or service." (387/81-14-01; 388/81-07-01)

5. Instrumentation (Component/Systems)-- Quality Record Review

During the review of quality records for the Damper Control Assembly, the inspector observed that the assumptions made for the seismic analysis of the regulator solenoid mount for the AMV series 12865 Damper Control Units did not take into account the condulet and metal flex cable attached to the solenoid valve. The solenoid valve is attached to the filter regulator by a 1/2 x 2 inch long pipe nipple. The regulator is attached to a mounting plate. The analysis assumes that the solenoid, regulator and pipe connector to be rigid. Construction personnel have experienced numerous problems in supporting the solenoid valve with the pipe connection.

Discussions with licensee and construction personnel indicate that a redesign of the assembly is in progress. A prototype unit in which both the filter regulator and the solenoid valve are bolted in place has been tested. Engineering is reviewing the results and intends to replace all units following approval.

This item is unresolved pending NRC review of licensee evaluation and resolution. (387/81-14-02; 388/81-07-02)

6. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items or items of noncompliance. Unresolved items identified during this inspection are discussed in Details, paragraph 5.

7. Exit Meeting

The inspector met with licensee and contractor representatives (denoted in paragraph 1) at the conclusion of the inspection on July 10, 1981. The inspector summarized the scope and findings of the inspection as described in this report.