

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

REGION I

Report No. 50-387/79-29

Docket No. 50-387

License No. CPPR-101

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: August 7-9, 1979

Inspectors: H. H. Nicholas  
H. H. Nicholas, Reactor Inspector

9/7/79  
date

date

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

date  
9/14/79  
date

Inspection Summary:

Inspection on August 7-9, 1979 (Report No. 50-387/79-29)

Areas Inspected: Routine, unannounced inspection by a regional based inspector of the preoperational test program including test program requirements, test procedures and procedure reviews, test scheduling; integrated flush and reactor pressure vessel hydrostatic test; cooling and water systems; tours of the facility; and, followup on previous inspection items. The inspection involved 23.5 inspector-hours on site by one NRC regional based inspector.

Results: No items of noncompliance were identified.



## DETAILS

### 1. Persons Contacted

#### Pennsylvania Power and Light Company

Mr. H. Block, Senior Project Engineer  
Mr. J. Bradford, Quality Supervisor  
Mr. G. Burvis, NQA Engineer  
Mr. E. Carlson, Simulator Supervisor  
\*Mr. T. Clymer, Senior NQA Analyst  
\*Mr. J. Everett, Quality Engineer  
\*Mr. J. Graham, Assistant Superintendent of Plant  
\*Mr. J. Green, Resident NQA Engineer  
Mr. G. Kuczynski, Starting and Testing Field Engineer  
Mr. R. Shovlin, Assistant Project Director  
Mr. T. Yezerski, Starting and Testing Coordinator

#### Bechtel Power Corporation

\*Mr. E. Figard, Assistant ISG Supervisor  
Mr. J. O'Sullivan, Assistant Project Field Engineer  
Mr. G. Smith, ISG Supervisor

#### U. S. Nuclear Regulatory Commission

\*Mr. R. Gallo, Resident Reactor Inspector

The inspector also interviewed other licensee personnel during the course of the inspection.

\* denotes those present at the exit interview

### 2. Status of Previous Inspection Items

(Closed) Unresolved Item (387/79-13-01): Clarification of responsibilities for performance of quality verification activities. Procedure SP-13, Preoperational Testing Inspection Function, Revision 0, July 5, 1979, and procedure 8.2, Site Quality Assurance Function, Revision 7, July 5, 1979, addresses this item adequately. The inspector had no further questions at this time and this item is closed.

(Closed) Unresolved Item (387/79-13-02): Incorporate provisions for processing, issuing and dispositioning DRs issued to internal PP&L organizations. Procedure AD 00-055, Monitoring of Station Activities, Revision 0, February 27, 1979, addresses this item adequately. The inspector had no further questions at this time and this item is closed.



(Closed) Unresolved Item (387/79-13-03): Incorporate provisions for processing and dispositioning DRs issued to plant staff. Procedure 16.1, Completion of PP&L Deficiency Report, Revision 3, May 11, 1979, addresses this item adequately. The inspector had no further questions at this time and this item is closed.

(Closed) Unresolved Item (387/79-13-04): Revise procedure QL-OP-002 to incorporate items referenced in the report. The revised procedure QL-OP-002, Corrective Action System, Revision 1, June 6, 1979, adequately addresses this item. The inspector had no further questions at this time and this item is closed.

(Closed) Unresolved Item (387/79-13-06): Delineate the audit duties and responsibility of the supervising NQA engineer of operations. The revised procedure 19.0, Audits, Revision 2, April 20, 1979, adequately addresses this item. The inspector had no further questions at this time and this item is closed.

(Closed) Unresolved Item (387/79-13-07): Revise procedure AD-00-051 to be consistent with ANSI N45.2.6. The revised procedure AD-00-051, Training, Qualification and Certification of Inspection and Test Personnel, Revision 1, May 17, 1979, adequately addresses this item. The inspector had no further questions at this time and this item is closed.

### 3. Preoperational Test Program

#### a. Test Program Requirements

##### Discussion:

The inspector met with the Assistant Superintendent of Plant, the Assistant Project Director, and the Integrated Startup Group (ISG) supervisor and his staff, and held discussions in the following areas of test program requirements:

- Test program;
- Test organization;
- Test program administration; and,
- Test personnel manning, qualifications and training.

##### References:

- Final Safety Analysis Report;
- Regulatory Guide 1.68, Initial Test Programs for Water Cooled Nuclear Power Plants;
- Startup Administrative Manual;
- ANSI N18.1, Selection and Training of Nuclear Power Plant Personnel; and,
- Qualifications of Inspection, Examination and Testing Personnel for the Construction Phase of Nuclear Power Plants.

## Findings:

As a result of discussions with the licensee's representatives, and a review of the referenced documents, no discrepancies were noted, and the inspector had no further questions at this time.

b. Discussion Areas of Preoperational Testing

## Discussions:

The following areas and items were discussed with the ISG supervisor and his staff:

- Rotating machinery vibration;
- Remote shutdown panel;
- Automatic depressurization system;
- Jet pump instrumentation and power range reactor recirc flow units;
- Reactor pressure vessel internals vibration;
- Electrical system integrated test;
- RPS-MG sets;
- Primary containment atmospheric and liquid leak detection;
- Drywell floor seal pressure monitoring;
- Turbine and radwaste building cranes;
- MSIV leak collection;
- Nuclear boiler steam leak detection;
- Primary containment instrumentation;
- Turbine HP control (EHC system);
- 120 V AC power distribution;
- Condensate storage and transfer;
- Sealing water;
- Turbine exhaust hood sprays; and,
- Control rod manual control.

## References:

- Regulatory Guide 1.68, Initial Test Programs for Water Cooled Nuclear Power Plants;
- Final Safety Analysis Report;
- Preoperational and Acceptance Test Procedure List;
- Startup Administrative Manual; and,
- Diagrams, Prints and Procedures.

Findings:

As a result of the discussions with the ISG supervisor and his staff and review of the referenced documents, no concerns were identified except in the area of reactor pressure vessel internals vibration. The ISG supervisor agreed with the concern of the inspector and stated that a procedure covering the reactor pressure vessel internals vibration would be developed. This item will be inspected during a subsequent inspection and is designated as an item for inspector followup (387/79-29-01).

c. Test Procedures, Procedure Review and Test Scheduling

Discussion:

The inspector met with the Startup and Test Coordinator and his staff, and discussed the status of procedures, their review and approval, test scheduling and sequencing.

The following draft copies of procedures were received for NRC inspection:

- P30.1, Revision 0, Control Structure HV Systems
- TP 3.2, Revision 1, Instrument Air System Flush
- TP 3.8, Revision 0, Emergency Service Water System Flush
- TP 3.30, Revision 0, Condensate System Flush

Findings:

Based upon discussions with the Startup and Test Coordinator and his staff, and review of the licensee's procedure status, the inspector reiterated his concern for receiving procedures in adequate time for review and submittal of comments.

Having been assured of the availability and timeliness of procedures for inspection, the inspector had no further questions at this time.

d. Integrated Flush and RPV Hydrostatic Test

Discussion:

The inspector met with the ISG supervisor and his staff and discussed the system integrated flush and the reactor pressure vessel hydrostatic test. The discussion included items such as procedures, system diagrams, test witnessing and areas of responsibility of the integrated flush and the hydrostatic test.





References:

- TP 3.26, Revision 0, Integrated Flush
- FCI-M169, Revision B, Reactor Vessel and Associated Piping Hydrostatic Test
- Diagrams and Prints

Findings:

As a result of discussions with the ISG group and review of the referenced documents, no discrepancies were noted at this time. Review in this area will be continued during a subsequent inspection as approved procedures and diagrams are received.

The inspector had no further questions regarding these items at this time.

4. Cooling and Water Systems

Discussion:

The inspector interviewed licensee representatives, held discussions and inspected the following areas and items:

- Acid and Chlorine Building;
- Circulating and Service Water Pump House;
- Water Pretreatment System;
- Condensate Storage and Transfer;
- Refueling Water Storage; and,
- Fire System.

References:

- Final Safety Analysis Report;
- Startup Administrative Manual;
- Startup Technical Manual;
- System Description Manual; and,
- Prints, Drawings and Diagrams.

Findings:

As a result of the inspections of systems, areas, components and structures, review of referenced documents, and discussions with startup personnel, no discrepancies were noted and the inspector had no further questions at this time.

A review of these areas will continue during subsequent inspections.



5. Plant Tours

The inspector made several tours of the facility including the following areas:

- Turbine Building;
- Reactor Building;
- Control Structure;
- Acid and Chlorine Building;
- Circulating Water and Service Water Pump House;
- Water Pretreatment System;
- Condensate Storage and Transfer;
- Refueling Water Storage; and,
- Training Center and Simulator.

The inspector observed work in progress; systems turned over; housekeeping and cleanliness; and, controls for storage and protection of equipment, components, piping and systems.

No items of noncompliance were identified and no discrepancies were noted.

6. Exit Interview

At the conclusion of the site inspection on August 9, 1979, an exit meeting was conducted with the licensee's senior site representatives (denoted in paragraph 1). The findings were identified and previous inspection items were discussed.

