

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

REGION I

Report No. 50-387/79-39

Docket No. 50-387

License No. CPPR-101

Priority --

Category B

Licensee: Pennsylvania Power and Light Company

Two North Ninth Street

Allentown, Pennsylvania 18101

Facility Name: Susquehanna Steam Electric Station, Unit 1

Inspection At: Berwick, Pennsylvania

Inspection Conducted: December 26-28, 1979

Inspectors: H. H. Nicholas

H. H. Nicholas, Reactor Inspector

D. V. Kehoe

D. V. Kehoe, Reactor Inspector

1/23/80
date

1/23/80
date

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

date
1/23/80
date

Inspection Summary:

Inspection on December 26-28, 1979 (Report No. 50-387/79-39)

Areas Inspected: Routine unannounced inspection by regional based inspectors of the preoperational test program including test program requirements, test program implementation, test procedures and procedure reviews, test scheduling, sequencing and witnessing; integrated flush and reactor pressure vessel hydrostatic test; emergency core cooling systems; tours of the facility; and followup on previous inspection items. The inspection involved 46.0 inspector-hours on site by two NRC regional based inspectors.

Results: No items of noncompliance were identified.

DETAILS

1. Persons Contacted

Pennsylvania Power and Light Company

- *Mr. S. Cantone, Plant Superintendent (Acting)
- Mr. P. Capotosto, NQA Project Engineer
- Mr. G. Carlson, Simulator Supervisor
- Mr. S. Denson, Project Construction Manager
- *Mr. J. Everett, ISG Quality Engineer
- *Mr. R. Featenby, Assistant Project Director
- *Mr. E. Figard, Assistant ISG Supervisor
- *Mr. E. Gorski, Quality Supervisor (Acting)
- *Mr. J. Green, Resident NQA Engineer
- Mr. G. Kuczynski, Starting and Testing Field Engineer

Bechtel Power Corporation

- *Mr. P. Drucker, LQA Engineer
- Mr. J. Khandhar, NQA Engineer
- Mr. K. Matty, ISG Startup Engineer
- *Mr. T. Minor, PF Engineer
- *Mr. W. Mourer, Superintendent
- *Mr. J. O'Sullivan, APF Engineer
- *Mr. K. Stout, PFQC Engineer

General Electric Corporation

Mr. R. Weiss, Welding Supervisor

U.S. Nuclear Regulatory Commission

- *Mr. R. Gallo, Senior Resident Reactor Inspector
- *Mr. G. Rhoads, Resident Reactor Inspector

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

*denotes those present at the exit interview.

2. Preoperational Test Program

a. Test Program Director

Discussion:

The inspector met with the acting Plant Superintendent, the Assistant Project Director, the Project Construction Manager, and the Assistant Integrated Startup Group Supervisor, and discussed the following:

- Organizational changes in management;
- Construction delays;
- System turnovers;
- Test program direction;
- Test program requirements;
- Test program implementation;
- Test procedure availability and review; and,
- Resident and project inspectors roles and responsibilities.

References:

- Final Safety Analysis Report;
- Regulatory Guide 1.68, Initial Test Program for Water Cooled Nuclear Power Plants;
- Startup Administrative Manual; and,
- Startup Technical Manual.

Findings:

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

b. Test Program Requirements

Discussion:

The inspector met with the Assistant ISG Supervisor and conducted discussions on the following items:

- Preoperational Test Program;
- Test Organization;
- Test Program Administration;
- Document Control;

- Design Changes and Modifications;
- Plant and Preventive Maintenance;
- Equipment Protection and Cleanliness;
- Test and Measurement Equipment; and,
- Training.

References:

- Regulatory Guide 1.68, Initial Test Program for Water Cooled Nuclear Power Plants;
- Final Safety Analysis Report;
- Startup Administrative Manual;
- Startup Technical Manual;
- ANSI N18.1, Selection and Training of Nuclear Power Plant Personnel; and,
- ANSI N45.2.6, Qualifications of Inspection, Examination and Testing Personnel for the Construction Phase of Nuclear Power Plants.

Findings:

As a result of the discussion with the licensee's representative, and a review of the referenced documents, no discrepancies were noted at this time. Specific items discussed will be inspected for implementation into the preoperational test program on subsequent inspections.

c. Test Program Implementation

Discussion:

The inspector met with the Assistant ISG Supervisor, the Assistant Project Director and the Project Construction Manager, and held preliminary discussions on the implementation of the test program and its requirements. The following items were addressed in the preliminary discussions:

- Test program verification;
- Test organization and personnel qualifications;
- Test program administration;

- Document control;
- Design changes, modifications and retesting;
- Plant maintenance during preoperational testing;
- Equipment protection, cleanliness and chemistry controls;
- Test and measurement equipment; and,
- Training.

References:

- Final Safety Analysis Report;
- Startup Administrative Manual;
- Quality Assurance Manual;
- Startup Technical Manual;
- System Description Manual;
- Regulatory Guide 1.68, Initial Test Programs for Water Cooled Nuclear Power Plants;
- ANSI N18.1, Selection and Training of Nuclear Power Plant Personnel, and,
- ANSI N45.2.6, Qualifications of Inspection, Examination and Testing Personnel for the Construction Phase of Nuclear Power Plants.

Findings:

As a result of reviews of references and discussions with the licensee's representatives, no discrepancies were noted in these preliminary discussions of the preoperational test program implementation, and the inspector had no further questions in this area at this time.

The items in this area will be followed up in detail on subsequent inspections.

d. Test Procedures

The inspector met with the Assistant ISG Supervisor and the Assistant Starting and Testing Coordinator and discussed the following items:

- Preoperational test procedures;
- Acceptance test procedures;
- Test procedure review;
- Test procedure approval;
- Test scheduling;
- Test sequencing;
- Test witnessing;
- The receipt of draft copies of procedures as soon as possible; and,
- The receipt of approved copies of procedures at least sixty (60) days prior to their intended use.

References:

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

The inspector received the following procedures for review:

- A 9.1 Revision 2, Approved November 30, 1979 River Water Makeup System
- A 10.1 Revision 2, Approved November 29, 1979 Screens and Screen Wash System
- A 22.1 Revision 2, Approved December 5, 1979 Makeup Demineralizer System
- TP 3.21 Revision 0, Approved December 12, 1979 Standby Liquid Control Flush
- TP 3.28 Revision 0, Approved May 1, 1979 Demineralized Water System Flush

--TP 3.45 Revision 0, Approved December 11, 1979 Condensate Demineralizer Flush

--P 2.1 Revision 0, Draft Copy 125 Volt DC System

--P 88.1 Revision 0, Draft Copy 250 Volt DC System

--A 3.1 Revision 0, Draft Copy 13.8 KV System

Findings:

The inspector expressed concern for receiving procedures in a timely manner to provide for adequate review and NRC comments.

The licensee's representatives stated that the draft and/or approved copies of procedures would be provided in a timely manner to permit adequate NRC review and comments. Test schedules and test sequencing charts would also be provided to assure timely NRC preparation for witnessing of the tests to be conducted by the licensee.

As a result of these discussions and review of the referenced documents, the inspector noted no discrepancies and had no further questions regarding these items at this time.

3. Integrated Flush and RPV Hydrostatic Test

Discussion:

The inspector met with the ISG Startup Engineer and discussed the following items concerning the system integrated flush and the reactor pressure vessel hydrostatic test:

- Test procedures;
- Test sequencing;
- Test witnessing;
- Flush Path and boundaries;
- Hydrostatic test boundaries;
- Time frame for testing; and,
- Preparations being made and status.

References:

- TP 3.26, Integrated Flush;
- FCI-M169, Reactor Vessel and Associated Piping Hydrostatic Test; and,
- System and Component diagrams and drawings.

Findings:

As a result of discussions with the ISC Startup Engineer and review of the referenced documents, no discrepancies were noted at this time.

Review of these items will continue during subsequent inspections as approved procedures and diagrams are received.

The inspector had no further questions in this area at this time.

4. Plant Tours

The inspectors made several tours of the entire facility during the course of the inspection. The tours included the primary containment drywell, observation of the flooded suppression pool, reactor building, turbine building, refueling floor, spent fuel pool, control structure, control room, remote shutdown panel outside of control room, administration building, the spray pond, ESS pumphouse, cooling towers and basins, and the simulator and training center.

The inspectors observed work in progress, housekeeping, cleanliness controls, storage and protection of components, piping and systems. During a walk-through of emergency core cooling systems (ECCS), an inspection of the HPCI and RCIC turbines revealed exposed governor valve stems and linkages that had accumulated dirt and foreign matter on precision surfaces. An inspection of some of the reactor pressure vessel penetrations revealed the stub end of the CRD return line penetration to be uncovered on the dry well side. The inspector brought these items to the attention of the licensee's representatives. All discrepancies and items of concern found during the course of the inspection, were corrected and verified by the inspector prior to the termination of the inspection.

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

5. Exit Interview

At the conclusion of the site inspection on December 28, 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.