U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-388/84-03

Docket No. 50-388

License No. CPPR-102 Priority - Category B

Licensee: Pennsylvania Power and Light Company

2 North Ninth Street

Allentown, Pennsylvania 18101

Facility Name: Susquehanna Steam Electric Station, Unit 2

Inspection At: Salem Township, Pennsylvania

Inspection Conducted: January 9-13, 1984

Inspectors: J. Prell for
George Napuda
Lead Reactor Engineer
2/16/84
date

J. Prell
James Prell
Reactor Engineer
2/16/84
date

Approved by: J. Prell for
A. T. Gody, Chief
Management Programs
Section, DETP
2/16/84
date

Inspection Summary: Inspection on January 9-13, 1984 (Report No. 50-388/84-03)

Areas Inspected: Routine unannounced inspection of Preoperational Testing QA; Preoperational Test Records; and QA for the Startup Test Program. The inspection involved 70 inspector hours on site by two region based inspectors.

Results: No violations or deviations were identified.

DETAILS

1. Persons Contacted

Pennsylvania Power And Light (PP&L)

*R. A. Beckley	General Supervisor-Quality Control (QC)
*M. R. Buring	Health Physics Supervisor
J. Businski	Supervisor-Quality Control Engineering
*S. L. Denson	Assistant Manager Nuclear Quality Assurance (NQA-Operations)
E. J. Gorski	Supervisor-Quality Control
*H. W. Keiser	Plant Superintendent
W. Lowthert	Supervisor-Nuclear Instructor
*W. E. Morrissey	Health Physics Specialist-Rad Waste
*L. D. O'Neil	Supervisor of Maintenance
*R. J. Prego	Quality Assurance (QA) Supervisor
*D. J. Thompson	Assistant Superintendent of Plant
*J. T. Todd	Compliance Engineer
G. Ward	Manager-Nuclear Training

U.S. Nuclear Regulatory Commission

*L. P. Plisco	Resident Inspector

*Denotes those present at the exit meeting of January 13, 1984.

The inspectors also interviewed other licensee administrative, engineering, QA/QC, and technical personnel.

2. Preoperational Testing Quality Assurance

The Quality Assurance (QA) Program relating to preoperational testing of Susquehanna Steam Electric Station (SSES), Unit 2, was reviewed to determine whether the program provided controls over the conduct of preoperational testing and related activities, was developed consistent with SSES's Final Safety Analysis Report (FSAR) commitments and regulatory requirements, and was being properly implemented.

2.1 References

-- Susquehanna Steam Electric Station (SSES) Final Safety Analysis Report (FSAR)

-- ANSI/ASME N45.2.6-1978, Qualifications of Inspection, Examination, and Testing Personnel for Nuclear Power Plants

-- 10CFR50, Appendix B

-- ANS-3.2/ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants

2.2 Documents Reviewed

The inspectors reviewed the following implementing procedures and reports (audits included checklists, corrective actions, and field notes):

-- TP1.4, Motor Testing, Revision 6,

-- P258.1A, Preoperational/Reactor Protection Systems, Revision 0,

-- P283.3A, Preoperational/Main Steam MSIV Leakage Control System, Revision 0,

-- P245.1A, Preoperational/Feedwater System, Revision 0,

-- Thirty four preoperational QC inspection reports conducted in 1983,

-- QCP-04, The Control and Processing of Nonconformance Reports, Revision 0,

-- QCP-10, Training, Qualification and Certification of Inspection, Examination and Testing Personnel, Revision 1,

-- NQAP-11.1, Quality Control Program, Revision 1,

-- Quality Control Inspection Checklist (QCIC) #GT-1, Preoperational/Acceptance Test Implementation, Revision 1,

-- OCIC #SC-2, Final Installation Inspection of Raceway, Revision 0

-- OCIC #SC-3, Installation Inspection of Electric Cables, Revision 0

-- OCIC Index, January 7, 1984,

-- PL NQA Audit #0-83-18, SSES Welding Program,

-- PL NQA Audit #0-83-25, Maintenance Activities, and

PL NQA Audit #0-83-15, Corrective Action.

2.3 Scope of Inspection

The inspectors interviewed appropriate personnel to determine whether they were knowledgeable of and had satisfactorily implemented the program requirements in their respective areas of responsibilites.

The inspectors also reviewed the documents listed in paragraph 2.2 to verify the following:

-- Requirements have been established and procedures or checklists developed for the QA/QC organization to review and monitor preoperational testing activities,

-- Formal controls exist to assure that (1) notification of responsible individuals or groups occurs when significant deficiencies are identified during inspections, (2) responsibilities were assigned in writing for assuring that corrective actions are taken for deficiencies identified during inspections, and (3) requirements were established for reinspection of deficient areas,

-- The QA/QC organization responsible for inspecting the preoperational test program was audited and that corrective actions were taken with respect to identified deficiencies, and

-- Minimum educational, experience or qualification and training requirements have been met by key QA/QC personnel.

2.4 Findings

The QC group has the responsibility for monitoring (surveillance) and inspecting activities during preoperational testing. The QC inspections and surveillances recorded in the logs indicated an adequate overview effort. The reviewed QC reports provided evidence that these QC activities were extensive in nature and that nonconformance reports were processed in accordance with established procedures. Also, the qualifications, training, and certifications of nine QC inspectors were satisfactory with respect to their assigned responsibilities. Individuals interviewed were found to be knowledgeable about their duties and responsibilties.

Plant audits are conducted by an onsite audit group with assistance as needed from another group located at the corporate offices. The qualifications, training and certifications of six auditors were verified. The Pre-Operational Test Program is not specifically audited. The inspectors however verified that QA auditors do include pre-operations activites as part of their audit checklist during routine audits of functional areas (audits listed in paragraph 2.2). Audits were conducted as scheduled, with little or no delay, and audit findings were followed up. QA followup of audit findings appeared weak. Recent INPO and Cooperative Management audits arrived at a similar conclusion. The QA supervisor provided various documents that indicated acceptable action to correct this weakness was being initiated.

This is an unresolved item awaiting implemention of a stronger QA follow-up program and subsequent NRC inspection (50-388/84-03-01).

3. QA for the Startup Test Program

A review of SSES's QA Program for Operations was conducted to determine how it would apply to the startup and power ascension test program.

3.1 References

-- Susquehanna Steam Electric Station (SSES) Final Safety Analysis Report (FSAR)

-- ANS-3.2/ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants

-- 10CFR50, Appendix B

-- ANSI/ASME N45.2.23-1978, Qualifications of Quality Assurance Program Audit Personnel for Nuclear Power Plants

3.2 Documents Reviewed

The inspectors reviewed the following procedures:

-- NDI-QA-8.1.1, Performance of Quality Assurance Audits and Surveillance Activities, Revision 1,

-- NQAP-10.1, Certification of Quality Assurance Auditors, Revision 1,

-- NQAP-9.1, Audits, Revision 5,

-- QCP-20, Inspection of Maintenance, Modifications and Testing Activities, Revision 0,

-- QCP-21, Establishing Inspection Points, Revision 0,

-- QCP-50, Quality Control Checklists, Revision 0,

-- NQAP-7.2, Quality Assurance Action Request, Revision 1,

-- NQAP-10.2, Indoctrination and Orientation, Revision 1,

-- NQAP-10.3, Training Requests and Documentation, Revision 0

-- NQAP-10.4, Qualification, Training and Certification of Personnel Performing Surveillance Functions, Revision 1,

-- NQAP-11.2, Receiving Inspection, Revision 2, and

-- NQAP-12.1, NQA Surveillance of Operating Plant Activities, Revision 1.

3.3 Scope of Inspection

The inspectors reviewed the instructions and procedures listed in paragraphs 2.2 and 3.2 to verify that a program was established by the onsite QA/QC organization to provide surveillance of startup test activities and to perform audits during startup testing to confirm conformance to administrative controls for testing, test commitments, and other safety related activities. Appropriate personnel responsible for implementation of the program were interviewed to determine if they were knowledgeable of their duties and responsibilites relating to program requirements.

3.4 Findings

The program included plans for conducting audits, surveillance, and corrective action followup during startup test activities. The licensee intends to utilize operations qualified QA personnel for surveillance of startup activities and review of test results. Only former operators or QA personnel who have successfully completed reactor operator training (minus the exam for an NRC license) will be used for these activities. These plans and the ongoing review of test procedures by QA personnel indicates this phase of QA overview is in readiness for implementation.

An onsite QA/QC reorganization will be made prior to loading fuel. The QA manager stated that the realignments will enable his department to better address two unit operations. Most QA/QC procedures are being revised, with a majority already in draft form.

No violations were identified.

4. Preoperational Test Records

A review of SSES's program for records control was conducted to ascertain if their program was in accordance with FSAR commitments and regulatory requirements and if the controls for records generated during the preoperational test program were adequately implemented.

4.1 References

-- Section 6, Technical Specifications

-- SSES Final Safety Analysis Report

-- ANS-3.2 /ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants

-- ANSI N45.2.9-1974, Requirements for Collection, Storage, and Maintenance of Quality Assurance Records for Nuclear Power Plants

4.2 Program Review

The licensee has applied applicable portions of the QA Program for Operations to records associated with preoperational test activities. This program area was previously reviewed by the NRC and is discussed in IE Inspection Report 50-387/82-09.

4.3 Findings

The inspectors verfied that the operations records system was implemented for preoperational test activities. This was accomplished through request retrieval, and a review of documents listed in foregoing paragraphs of this report.

No violations were identified.

5. Unresolved Items

Unresolved items are matters about which more information is require in order to ascertain whether they are acceptable items, items of non-compliance, or deviations. The unresolved item identified during the inspection is discussed in paragraph 2.

6. Management

Licensee management was informed of the scope and purpose of the inspection at an entrance interview on January 9, 1984. The findings of the inspection were periodically discussed with licensee representatives during the course of the inspection. An exit interview was conducted at the site on January 13, 1984, at which time the findings of the inspection were presented to licensee management (see paragraph 1 for attendees).

At no time during this inspection was written material provided to the licensee by the inspectors.