

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-460/85-02
Docket No. 50-460
Construction Permit No. CPPR-134
Licensee: Washington Public Power Supply System (WPPSS)
3000 George Washington Way
Richland, Washington 99352
Facility Name: Washington Nuclear Project 1
Inspection at: WNP-1 Site, Richland, Washington
Inspection conducted: August 19-23, 1985

Inspector:

David B. Pereira

D. B. Pereira, Reactor Inspector

8/27/85

Date Signed

Approved By:

R. T. Dodds

R. T. Dodds, Chief, Reactor Projects Section 1

8/25/85

Date Signed

Summary:

Inspection on August 19-23, 1985 (Report No. 50-460-85-02)

Areas Inspected: Routine unannounced inspection by a regionally based inspector of the quality assurance program for extended construction delay and preservation program, including organization, audits, quality records, site tour of maintenance/storage areas, and site security. This inspection involved 36 hours onsite by one inspector. Inspection module 92050 was used for guidance.

Results: Of the areas inspected no violations or deviations were identified.

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DETAILS

1. Persons Contacted

a. Washington Public Power Supply System

- *R. W. Root, Program Director
- *C. R. Edwards, Manager, Project Quality Assurance
- *G. K. Dyekman, Manager, Design Engineering
- *C. B. Organ, Assistant Program Director, Engineering
- *W. D. Barney, Manager, Maintenance
- *W. F. David, Acting Assistant Program Director, Construction
- J. Kadinger, Maintenance

b. Bechtel Construction, Inc.

- *R. S. Shaw, Manager, Field Construction
- *C. K. Kasch, Engineer, Project Construction Quality Control
- G. Thompson, Supervisor, Procurement

*Denotes those attending the exit interview on August 23, 1985.

In addition to the individuals noted above, the inspector interviewed other members of the licensee's and contractor's staff.

2. Organization Structure and Quality Assurance (QA) Personnel

The inspector conducted an evaluation of the licensee's Quality Assurance program for the extended construction delay currently in progress. The WNP-1 Preliminary Safety Analysis Report (PSAR), Chapter 17 specifies that WNP-1 shall implement an overall Quality Assurance Program (QA Program) for the design, procurement, construction and operation of Supply System's Nuclear Project No. 1 (WNP-1) in accordance with the requirements of Appendix "B" of 10 CFR 50. Chapter 17.1 describes the licensee's organizational relationships within the Supply System and assigns the authorities and responsibilities for the administration and implementation of the Quality Assurance Program.

The inspector verified that the QA program's organizational relationships have been defined and that the authorities and responsibilities have been assigned in accordance with their PSAR, Chapter 17. The Project QA Manager's duty station has been at the site. The present Site Project QA personnel consists of only the Project QA Manager.

The inspector verified that the qualifications, responsibilities, and duties of QA personnel were as specified in WNP-1 PSAR. Quality Assurance Program procedure QAR-1, Rev. 3, dated December 31, 1982, defines the organizational relationships, provides the qualifications, responsibilities, and duties of QA personnel. The indoctrination/training program for QA personnel has been defined in QAR-1, Rev. 3 and the Manager, Construction Quality Assurance has the responsibility for QA personnel training.

PSAR Section 17.1 and QAR-1, Rev. 3 provides that the Director, Licensing and Assurance has the authority to provide remedial action in matters of significant conditions affecting quality or Nuclear Safety and Regulatory Programs.

No violations or deviations were identified in this area.

3. Audits/Surveillances

The inspector conducted an evaluation of the licensee's audit/surveillances program for the extended construction delay program. Quality Assurance Program Procedure QAR-18, Rev. 3, dated December 31, 1982 defines the requirements for a comprehensive system of audits. This procedure applies to both internal and external audits performed by the Supply System.

The inspector examined the records of three audits performed by the Supply System staff and one performed by Lumbermens Mutual Casualty Company (Kemper Group).

Audit Report No. 84-288, conducted on April 2 through 9, 1984, was a Corporate Supply System audit of the safety-related activities accomplished at WNP-1 during the extended construction delay. This audit was an evaluation of all applicable quality affecting activities implemented during the extended construction delay by the Supply System. The audit identified three Quality Finding Reports (QFRs), which were deficiencies in the indoctrination and training for several personnel; lack of approval of design sub-contractor registered professional engineer qualifications concerning four individuals; and lack of evidence to substantiate the accuracy of pressure gauges utilized on electrical penetration maintenance. These QFRs were closed at the time of this inspection. Review of the corrective actions for the QFRs taken by the licensee appeared to be responsive and adequate.

Audit Report No. 84-296, conducted on April 16 through 30, 1984, was the Corporate Management Audit of the Supply System ASME "N" Program. Seven deficiencies were identified during the audit, and only one was serious enough to warrant a Quality Finding Report (QFR). QFR No. 1 was labeled "failure to document the review of the 1982 Winter Addenda to the ASME Code". The remaining deficiencies were deviations from the requirements, however, they were minor and did not adversely effect the implementation of the ASME "N" Program. The deficiencies and the QFRs were closed at the time of this inspection. Review of the corrective actions for the QFRs and deficiencies taken by the licensee appeared to be responsive and adequate.

Audit Report No. 85-323, conducted on February 25 through March 1, 1985, was the corporate licensing and assurance audit of the ASME "N" Quality Assurance Program. The audit was conducted using the detailed checklists developed from the ASME "N" Manual. Each ASME "N" Manual section audited, included an evaluation of each paragraph in that section, which included examinations of procedures, documents, records, hardware, and interviews with personnel. Twenty deficiencies were identified during the audit, most of which were minor and have been corrected. Four QFRs

were written since they were deviations from the requirements of the ASME "N" Manual and required corrective action. Review of the corrective actions for the QFRs taken by the licensee appeared to be adequate and implemented.

An audit performed by the Lumbermens Mutual Casualty Company, conducted on March 25 through 29, 1985, was a management audit of the WNP-1 "N" program. The purpose of the audit was to evaluate the Supply System ASME "N" Quality Assurance Program Manual and its adequacy for its intended function. The audit determined eight findings and one observation which were closed at the time of this inspection. No QFRs were written and the corrective actions for the findings and observation taken by the licensee appeared to be adequate and implemented.

The inspector verified three of Supply System's audits and found that Supply System has audit procedures and checklists, that the scope and purpose of audits to be performed was clearly stated, and that surveillance and monitoring of activities was being performed routinely. The inspector verified that Supply System had a schedule in which to perform audits, a management review and assessment program, documentation of results of audits format, and a plan for management review and followup of corrective action as necessary.

The licensee appears to be fulfilling their commitment to conduct periodic internal audits of their organization.

No violations or deviations were identified in this area.

4. Corrective Action

The inspector examined the licensee's procedures established for identification and corrective of conditions adverse to quality. Procedure QAR-16, Revision 3, dated December 31, 1982, entitled "Corrective Action" defines the requirements for corrective action of conditions that are adverse to quality. These requirements include controls to ensure that the cause of adverse conditions is determined, reported, and corrected to preclude repetition.

No violations or deviations were identified in this area.

5. Document Control

The inspector established that the licensee has proper identification/ listing and control of the Quality Assurance instructions and procedures for use during the extended construction delay. Procedure QAR-6, Rev. 2, dated March 1, 1982, entitled "Document Control" defines the requirements for the control of documents, thus ensuring that only the latest approved and applicable documents are used for the prescribed activity.

The licensee has procedures for the control and retention of quality-related records, especially those generated by contractors and consultants during the extended construction delay.

No violations or deviations were identified in this area.

6. Access Control

The inspector reviewed the licensee's construction site security procedures to ensure that they were being met and that control of materials and equipment to prevent unauthorized use or alteration has been established. The licensee's security guard force appeared to be adequate and responsive.

No violations or deviations were identified in this area.

7. Protection and Preservation

The inspector toured the containment and auxiliary buildings to observe the preservation of installed equipment and the Supply System's warehouses to observe the preservation of stored equipment. The inspector noted that electrical and control panels were protected under plastic. Pumps and motors were covered and lamps or equipment heaters utilized to minimize condensation. Incomplete systems had openings sealed with plastic or wood covers. Several systems had vapor phase inhibitors applied to minimize corrosion. The warehouses were clean, environmentally controlled, and materials were properly segregated and stored off the ground. When desiccators were used, the containers were sealed and had humidity indicators. A preventive maintenance program was established for safety-related equipment and activities. A record generation program was established for the preventive maintenance records. The inspector examined 40 maintenance records which varied from pump motor meggering tests, inspecting internals, rotating pump or motor shafts and respiking (refilling) oil. Records examined included the following safety-related systems: makeup system (MUS) pumps and motors, emergency service water (ESW) pumps and motors, containment spray pumps and motors, and the emergency diesel generator (EDG) engines and generators. The licensee has been conducting preventive maintenance within the prescribed scheduled intervals.

A rodent protection program was in progress as evidenced by the rat poison boxes located throughout the plant and several buildings. A fire protective program was evident as evidenced by the fire extinguishers and alarm boxes located within the containment and auxiliary buildings.

No violations or deviations were identified.

8. Nonconforming Activities and Conditions

The inspector observed that Supply System has Nonconforming Reports (NCR) for controlling materials, parts or components which do not conform to requirements in order to prevent their inadvertent use or installation. Supply System procedure QAR-15, Rev. 3, dated December 31, 1982, defines the initiation, segregation, disposition, review and controls for Nonconformance Reports of nonconforming material. The inspector verified that the NCR record generation and controls were as specified in the QAR-15. The inspector reviewed several NCRs and the corrective action appeared to be timely and appropriate. The licensee has a tracking system to follow open NCRs and track their progress.

No violations or deviations were identified.

9. Utilization of Inspection Personnel

The inspector examined the Supply System's inspection personnel records and determined that they appeared to have adequate qualifications and experience commensurate with type and extent of work activities. Their assigned duties and responsibilities were enumerated in each organization's guidance documents.

No violations or deviations were identified.

10. Use of Measuring and Test Equipment

The inspector examined the Supply System's measuring and test equipment storage area and verified that the equipment is checked and calibrated as required. Procedure QAR-12, Rev. 3, dated December 31, 1982, provides for the control of measuring and test equipment. The inspector verified that the calibration, adjustments and maintenance for selected equipment were being performed at prescribed intervals, or prior to use. Records of calibration status were being maintained. The equipment was suitably marked with a unique identification number, and stored in a locked area.

No violations or deviations were identified.

11. Identification and Status Records

The inspector examined the Supply System's list of safety-related materials, components, and structures, and verified that their disposition was current and controlled. Supply System's scheduled maintenance system report No. 09 provides a current list which provides location, status, maintenance activity to be performed, and when maintenance should be performed. The Supply System has a program of "As-builts" drawings and packages which provides the status of systems and what inspection was performed when construction was suspended. These drawings and documents have been placed in the document control room and with lock controlled access. A current list of names and corresponding signatures, initials, inspector stamp numbers, craft certification letters were provided of all personnel having QA record verification responsibility.

No violations or deviation were identified.

12. Exit Interview

The inspector met with the licensee representatives denoted in paragraph 1 on August 23, 1985, and summarized the scope and findings of the inspection activities. The licensee was informed that no violations had been identified.