

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-397/84-29

Docket No. 50-397

License No. NPF-21

Licensee: Washington Public Power Supply System
P. O. Box 968
Richland, Washington 99352

Facility Name: WNP-2

Inspection at: WNP-2 Site, Benton County, Washington

Inspection conducted: September 10-14 and October 1-5, 1984

Inspectors:

Dennis J. Willett
D. J. Willett, Reactor Inspector

11-1-84
Date Signed

DJ Willett for
L. R. Kanow, Reactor Specialist

11-1-84
Date Signed

Approved by:

P. H. Johnson
P. H. Johnson, Chief
Reactor Projects Section III

11/1/84
Date Signed

Summary:

Inspection on September 10-14 and October 1-5, 1984 (Report No. 50-397/84-29)

Areas Inspected: Routine, unannounced safety inspection of housekeeping, fire protection, and power ascension test results review. The inspection involved a total of 120 onsite hours by two NRC inspectors.

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

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DETAILS

1. Personnel Contacted

- +D. W. Mazur, Managing Director
- *+J. W. Shannon, Director, Power Generation
- *+J. D. Martin, WNP-2 Plant Manager
- *+C. M. Powers, Assistant Plant Manager
- *+D. H. Walker, Plant Quality Assurance Manager
- +J. F. Peters, Plant Administrative Manager
- *+P. L. Powell, Plant Licensing Manager
- +R. L. Corcoran, Plant Operations Manager
- +P. Murphy, Washington State DSHS for EFSEC
- R. Mertins, Compliance Engineer
- * M. Mills, Washington State EFSEC Environmentalist
- M. J. Hoylman, Plant Safety Supervisor
- +G. D. Bouchey, Director Support Services
- A. Wood, Shift Technical Advisor
- D. Gano, Shift Technical Advisor
- J. Fu, G.E. - STA Supervisor
- I. Jenkins, Senior Engineer
- J. A. Landon, Plant Maintenance Manager

The inspectors also held discussions with other licensee and contract personnel during this inspection. This included licensed and non-licensed operators, plant staff engineers, technicians, administrative assistants and quality assurance personnel.

+Denotes those present during the exit interview on September 14, 1984.

* Denotes those present during the exit interview on October 5, 1984.

2. Housekeeping - Cleanness and Fire Safety

The inspectors reviewed the housekeeping and cleanness controls program. This review included facility tours, document and procedure reviews and discussions with supervisors and personnel responsible for program development, management and implementation.

The following administrative and maintenance procedures were reviewed:

PPM 10.1.13 - "Systems Cleanliness Control", Rev. 3

PPM 10.1.19 - "Housekeeping", Rev. 4

PPM 1.3.7 - "Maintenance Work Requests", Rev. 5

PPM 1.3.10 - "Fire Protection Program", Rev. 3

These procedures were reviewed to verify that controls for housekeeping have been established which include:

- a. Establishment of housekeeping zones.
- b. Control of housekeeping during maintenance, construction and operating activities.
- c. Criteria for identifying and defining zone cleanliness.
- d. Requirements for cleanliness of safety-related components and systems.
- e. Establishment of cleanliness classifications for plant systems.

These procedures were reviewed and balanced against the guidance contained in:

- ° ANSI Standard N-45.2.3, "Housekeeping During the Construction Phase of Nuclear Power Plants"
- ° ANSI Standard N-45.2.1, "Cleaning of Fluid Systems and Associated Components During the Construction Phase of Nuclear Power Plants"
- ° ANSI Standard N-18.7, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants", Section, 5.2.10
- ° Regulatory Guide 1.39, "Housekeeping Requirements for Water-Cooled Nuclear Power Plants"
- ° Supply System position statements contained in Appendix C.3 of the FSAR and the Quality Assurance Topical Report referenced in Section 17.2 of the FSAR.

The inspectors toured accessible areas of the facility and observed the following:

- a. The general plan and condition of equipment appeared to be acceptable by visual examination.
- b. Combustible materials were properly controlled.
- c. Flammable and combustible liquid and gas usage was restricted and controlled.
- d. Access to fire suppression devices was clear.
- e. Fire hazards, ignition sources and flammable material were properly controlled.

The inspectors expressed the following concerns pertaining to housekeeping:

1. The plant has not been categorized into zones to which criteria for housekeeping can be applied during inspections.

2. There appears to be a lack of appropriate inspection criteria for department managers' monthly inspections.
3. There does not appear to be a mechanism to track and monitor the progress and status of identified housekeeping deficiencies to assure completion.

The licensee committed to provide cleanliness criteria for areas of the facility and appropriate inspection criteria/direction to personnel responsible for housekeeping inspection activities. This commitment will be reflected in changes to PPM 1.3.19 and will be verified during a follow-up inspection (84-29-01).

The licensee committed to review, with the monthly housekeeping inspection reports, the progress and status of any deficiencies identified in the last housekeeping inspection reports.

No violations or deviations were identified.

3. Fire Protection for Welding, Cutting and Grinding Activities

The inspectors reviewed the work controls which direct activities involving welding, open flame, and ignition sources. This review included facility tours, document and procedure reviews, inspection of welding areas and welding in progress and discussions with supervisors and personnel responsible for program development, management and implementation.

The following administrative procedures were reviewed:

- PPM 1.3.10 - "Fire Protection Program", Rev. 3
- PPM 1.3.7 - "Maintenance Work Request", Rev. 5

These procedures were reviewed to verify that clear and cogent instructions exist which:

- a. Identify and protect flammable material, cable trays and critical equipment.
- b. Require a trained fire watch with:
 - ° Capability for communications with the control room.
 - ° Criteria for performing duties.
- c. Designate responsibilities and identify criteria for performance of inspections and work authorizations.

Accessible areas of the facility were toured by the inspectors who observed repair work to the feedwater heater hand inspection ports and installation of moisture barriers to the ventilation system for the circulating water pump building. The following areas were also observed:

- a. Radiation control practices including barrier controls.

- b. Quality control inspection of feedwater heater welding repair.
- c. Welding permits and maintenance work requests/approvals.

The procedure and document reviews as well as facility tours and inspections were balanced against the guidance, commitments and requirements of the following:

- o ANSI N45.2.3-1973 and Addenda - "Housekeeping During the Construction Phase of Nuclear Power Plants"
- o Regulatory Guide 1.120 - "Fire Protection Guidelines for Nuclear Power Plants"
- o NFPA 51B-1977 - "Standard for Fire Prevention in the Use of Cutting and Welding Processes"
- o ANSI 18.7/ANS 3.2 - "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants"
- o Regulatory guide 1.39 - "Housekeeping Requirements for Water Cooled Nuclear Power Plants"
- o WNP-2 FSAR - Appendix C.3, "Commitment to Regulatory Guides"
- o WNP-2 Topical Report referenced in FSAR Section 17.2
- o WNP-2 Position Statements - contained in the Operational Quality Assurance program description

The inspectors expressed the following concerns relative to fire protection.

- a. There does not appear to be a formal method with approved training criteria for insuring fire watch qualifications.
- b. Criteria for duties of the fire watch do not appear to be formally addressed.
- c. Procedures which govern work area review/inspections, prior to welding/cutting, by supervisors (designated individuals) appear to lack appropriate criteria.

The licensee acknowledged the inspectors' concerns and committed to address the above concerns by changes to PPM 1.3.10 and The Fire Protection Program. These items will be followed-up and implementation verified in a subsequent inspection (84-29-02).

No violations or deviations were identified.

4. Power Ascension Test Results

The inspectors reviewed the test record copies, apparent test result determinations, vendor generated startup test reports and associated

documentation for the following selected power ascension tests on a sampling basis:

PPM 8.2.28 - "Shutdown from Outside the Control Room"

PPM 8.2.19 - "Core Performance"

PPM 8.2.10 - "IRM Performance"

PPM 8.2.11 - "LPRM Calibration"

PPM 8.2.12 - "APRM"

The results were balanced against the guidance, commitments, and requirements contained in:

- ° Regulatory Guide 1.68 - "Initial Test Programs for Water-Cooled Nuclear Power Plants"
- ° Regulatory Guide 1.68.2 - "Initial Startup Test Program to Demonstrate Remote Shutdown Capability for Water Cooled Nuclear Power Plants"
- ° 10 CFR 50 General Design Criterion No. 19 - "Control Room"
- ° WNP-2 FSAR Section 14, Amendment No. 34
- ° WNP-2 FSAR Appendix C.2 and C.3
- ° PPM 8.2.0 - "Power Ascension Test Program Administration"

This review verified that:

1. Results were within previously established acceptance criteria.
2. Testing, test changes and record keeping were in accordance with administrative practices and regulations.
3. Results, deficiencies and changes were reviewed, dispositioned and approved, respectively.
4. The results have been extrapolated and compared satisfactorily with predicted performance allowing testing to proceed to the next test condition/power plateau.

The inspectors expressed the concern that Level II and III test criteria are not subject to the same formal documented plant operating committee review and approval process which Level I criteria undergo. There are a significant number of tests which have only Level II and/or III criteria.

The licensee acknowledged the inspectors' concern and committed to a documented review of Level II criteria also. This commitment will be reflected in changes to PPM 8.2.0 (84-29-03).

No violations or deviations were identified.

5. Exit Interview

The inspectors met with representatives (denoted in paragraph 1) at the conclusion of the inspection trips on September 14 and October 5, 1984. The scope and findings of the inspection were discussed during the exit interview, as set forth in paragraphs 1 through 4 of this report.