



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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April 27, 2000

Mr. J. V. Parrish (Mail Drop 1023)
Chief Executive Officer
Energy Northwest
P.O. Box 968
Richland, Washington 99352-0968

SUBJECT: NRC INSPECTION REPORT NO. 50-397/00-09

Dear Mr. Parrish:

This refers to the inspection conducted on February 20 through April 1, 2000, at the WNP-2 facility. The enclosed report presents the results of this inspection.

Based on the results of this inspection, the NRC has determined that two Severity Level IV violations of NRC requirements occurred. The violations are being treated as noncited violations (NCVs), consistent with Section VII.B.1.a of the Enforcement Policy. The NCVs are described in the subject inspection report. If you contest the violations or severity level of the NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the WNP-2 facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if requested, will be placed in the NRC Public Document Room.

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/

Linda Joy Smith, Chief
Project Branch E
Division of Reactor Projects

Docket No.: 50-397
License No.: NPF-21

Enclosure:
NRC Inspection Report No. 50-397/00-09

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.: 50-397
License No.: NPF-21
Report No.: 50-397/00-09
Licensee: Energy Northwest
Facility: WNP-2
Location: Richland, Washington
Dates: February 20 through April 1, 2000
Inspectors: G. D. Replogle, Senior Resident Inspector
J. P. Rodriguez, Resident Inspector
Approved By: Linda Joy Smith, Chief, Project Branch E, Division of Reactor Projects

ATTACHMENT: Supplemental Information

EXECUTIVE SUMMARY

WNP-2 NRC Inspection Report No. 50-397/00-09

This information covers a 6-week period of resident inspection.

Operations

- The conduct of operations was professional and safety conscious. Operators were consistently knowledgeable of important plant issues and properly anticipated plant operations. Equipment was properly aligned (Sections O1.1 and O2.1).

Maintenance

- The licensee identified a violation of Technical Specification 5.4.1.a in that work instructions for calibrating safety-related standby gas treatment system heater temperature switches were inadequate. The package contained the wrong calibration sheets for the affected heaters and the equipment was initially returned to service before the problem was found. The heater miscalibrations rendered the system inoperable for slightly less than the corresponding Limiting Condition for Operation action time of 7 days. This Severity Level IV violation is being treated as a noncited violation consistent with Section VII.B.1.a of the NRC Enforcement Policy. The deficiency is in the corrective action program as Problem Evaluation Request 200-0364 (Section M1.2).

Engineering

- Engineering recently initiated the use of system health reports. The reports were an excellent tool to keep management informed of significant problems (Section E2.1).
- The inspectors identified a 10 CFR 50.71(e) violation in that the licensee failed to update the Licensee Controlled Specifications, part of the Final Safety Analysis Report, to include all containment isolation valves within the licensing basis. This regulation specifies that the Final Safety Analysis Report be updated to include the effects of safety evaluations performed in support of Technical Specification amendments. The licensee had committed to include the valves as part of an amendment request for Technical Specification 3.6.1.3, "Primary Containment Isolation Valves." This Severity Level IV violation is being treated as a noncited violation consistent with Section VII.B.1.a of the NRC Enforcement Policy. The issue is in the corrective action program as Problem Evaluation Request 299-2743 (Section E8.1).

Plant Support

- Radiation protection postings and controls were appropriate for the plant conditions (Section R1.1).
- Emergency preparedness facilities were properly maintained and on-shift staffing was consistent with the Emergency Plan (Section P2.1).

- Protected area illumination levels, maintenance of the isolation zones around protective area barriers, and security power supply equipment were properly maintained (Section S2.1).

Report Details

Summary of Plant Status

At the beginning of the inspection period, the plant operated at 100 percent power. Power was reduced briefly on March 11 to 87 percent to establish a new control rod pattern. Power was reduced to 80 percent on March 31 for economic dispatch, where it remained during the rest of the period.

I. Operations

O1 Conduct of Operations

O1.1 General Comments (71707)

Operators were knowledgeable of important plant parameters and problems and were appropriately focused on safety.

O2 Operational Status of Facilities and Equipment

O2.1 Engineered Safety Feature System Walkdowns

a. Inspection Scope (71707)

The inspectors walked down accessible portions of the following safety-related systems:

- High pressure core spray
- Low pressure core spray
- Residual heat removal, Trains A, B, and C
- Reactor core isolation cooling
- Division I, II, and III emergency diesel generators
- Division I, II, and III batteries
- Standby gas treatment system, Trains A and B
- Standby Service Water Divisions I, II, and III

b. Observations and Findings

The inspectors found the systems properly aligned for the plant conditions and generally in good material condition.

II. MAINTENANCE

M1 Conduct of Maintenance

M1.1 General Comments - Maintenance

a. Inspection Scope (61726, 62707)

The inspectors inspected the following maintenance activity:

- Work Order 00RCK6, Standby Gas Treatment System Temperature Switch Calibrations (event-related review)

b. Observations and Findings

Problems with craftsmen miscalibrating standby gas treatment system temperature switches are discussed in Section M1.2.

M1.2 Standby Gas Treatment System Temperature Switch Calibrations

Background: The standby gas treatment system removes fission products from secondary containment air following design basis accidents. Fission products, in part, are captured by charcoal beds which must remain dry in order to perform their safety function. Strip heaters in the air stream ensure that the air is well above the dew point prior to entering the charcoal beds.

Calibration: On February 28, the licensee identified that two heater temperature switches were miscalibrated and the condition rendered standby gas treatment system Train B inoperable. On February 22, the temperature switches were mistakenly calibrated to cycle at 110°F instead of 200°F because the wrong calibration master data sheets were included in the work package. Additionally, following postmaintenance testing on February 25, the operators missed an opportunity to identify the problem prior to restoring the system to service. An unexpected alarm associated with the first stage heater came in. Operators did not know what caused the alarm, but believed that the system remained operable and returned the unit to service before the alarm was thoroughly evaluated. A few days later, the licensee identified that the heater control switches were miscalibrated and declared the unit inoperable. The total time that the unit was inoperable (including maintenance time) was slightly less than 7 days.

The erroneous calibration sheets were for heater trip switches with a similar, but not the same, equipment part number. The craft supervisor and technicians, who reviewed the work package prior to work, failed to identify the problem. Further, craftsmen failed to ensure that the part numbers on the calibration sheets and the heater switches matched during the job.

As corrective measures, the licensee performed plant stand-downs, revised the prejob briefing process, retrained maintenance personnel on proper self-checking techniques, and reinforced management expectations. The corrective measures were acceptable.

The failure to provide an adequate work package for the standby gas treatment system temperature switch calibrations was a Technical Specification 5.4.1.a violation. This Technical Specification requires procedures for activities covered by Regulatory Guide 1.33. The regulatory guide specifies procedures for maintenance and calibration of safety-related equipment. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy. The problem is in the licensee's corrective action program as Problem Evaluation Request 200-0364 (50-397/00009-01).

c. Conclusions

The licensee identified a violation of Technical Specification 5.4.1.a in that work instructions for calibrating safety-related standby gas treatment system heater temperature switches were inadequate. The package contained the wrong calibration sheets for the affected heaters and the equipment was initially returned to service before the problem was found. The heater miscalibrations rendered the system inoperable for slightly less than the corresponding Limiting Condition for Operation action time of 7 days. This Severity Level IV violation is being treated as a noncited violation consistent with Section VII.B.1.a of the NRC Enforcement Policy. The deficiency is in the corrective action program as Problem Evaluation Request 200-0364.

III. ENGINEERING

E2 **Conduct of Engineering**

E2.1 General Comments (37551)

The inspectors reviewed documents associated with newly initiated System Health Reports. The reports provide a summary of system-specific information, including degraded components, repetitive problems, design challenges, and Maintenance Rule status. The inspectors concluded that the System Health Reports are an excellent tool to help site management maintain a keen awareness of significant problems.

E8 **Miscellaneous Engineering Issues (92903)**

E8.1 (Closed) Unresolved Item 50-397/99014-02: failure to update the Licensee Controlled Specifications to include all containment isolation valves.

The inspectors had identified that Licensee Controlled Specifications Table 1.6.1.3-1 was not complete in that it did not contain all containment isolation valves. Approximately 16 valves in the hydrogen/oxygen monitoring system and 2 valves and decon solution supply header were identified as containment isolation valves in Final Safety Analysis Report Table 6.2-16, but were not included in Licensee Controlled Specifications Table 3.6.1.3-1. Some of the valves in the hydrogen/oxygen monitoring system were solenoid valves and the remainder were manual valves.

Since the valves were not included in the Licensee Controlled Specifications table, they were not controlled as containment isolation valves per Technical Specification 3.6.1.1, which references the Licensee Controlled Specifications table through the Technical Specification Bases. This condition was contrary to statements made in the licensee's submittal for Improved Technical Specification 3.6.1.3. Specifically, the licensee's December 8, 1995, letter to the NRC stated, in part:

The list of primary containment isolation valves are proposed to be relocated to the Licensee Controlled Specifications Manual consistent with Generic Letter 91-08 ["Removal of Component Lists From Technical Specifications"].

Generic Letter 91-08 specified, in part, that relocation of the primary containment isolation valve listing from the Technical Specifications to other documents was permissible, if the list was updated to contain all containment isolation valves listed in the current licensing basis, which was not accomplished.

The primary containment isolation valve listing (Licensee Controlled Specifications Table 3.6.1.3-1) was included in Revision 7 to the Licensee Controlled Specifications and was provided to the NRC, attached to a letter dated March 24, 1997. Improved Technical Specifications were implemented at WNP-2 on March 10, 1997. The Licensee Controlled Specifications were made a part of the Final Safety Analysis Report when they were incorporated by reference into Chapter 16, in Amendment 53, dated November 1998. As a result, the Licensee Controlled Specifications are within the scope of 10 CFR 50.71(e).

The failure to update Licensee Controlled Specifications Table 3.6.1.3-1 to include all containment isolation valves was a violation of 10 CFR 50.71(e). This regulation requires the licensee to update the Final Safety Analysis Report to include the effects of all safety evaluations performed by the licensee in support of requested license amendments. Further, 10 CFR 50.71(e)(4) specifies that subsequent revisions must reflect all changes up to a maximum of 6 months prior to the date of filing. The Final Safety Analysis Report was updated in November 1998 to include the Licensee Controlled Specifications but the update did not include the necessary containment isolation valves (a change beyond the 6-month window). This Severity Level IV violation is being treated as a noncited violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy. The problem is in the licensee's corrective action program as Problem Evaluation Request 299-2743 (50-397/00009-02).

IV. Plant Support

R1 Radiological Protection and Chemistry Controls

R1.1 General Comments (71750)

During routine plant tours, the inspectors verified that radiological postings and barriers were appropriate for the plant conditions. No problems were identified.

P2 Status of Emergency Preparedness Facilities, Equipment, and Resources

P2.1 General Comments (71750)

During routine plant tours, the inspectors verified that the emergency preparedness facilities were properly maintained and that the licensee maintained at least the minimum staffing required by their Emergency Plan. No problems were found.

S2 Status of Security Facilities and Equipment

S2.1 General Comments (71750)

During routine tours, the inspectors observed protected area illumination levels, maintenance of the isolation zones around protective area barriers, and the status of security power supply equipment. No problems were observed.

V. MANAGEMENT MEETINGS

X1 Exit Meeting Summary

The inspectors presented the inspection results to members of licensee management on March 30, 2000. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

J. V. Parrish, Chief Executive Officer
D. K. Atkinson, Engineering Manager
I. M. Borland, Radiation Protection Manager
S. A. Boynton, Quality Assurance Manager
J. W. Dabney, Outage Manager
P. J. Inserra, Licensing Manager
D. W. Martin, Security Manager
W. S. Oxenford, Operations Manager
J. F. Peters, Radiation Services Manager
D. J. Poirier, Maintenance Manager
G. O. Smith, Vice President - Generation/Nuclear Plant General Manager
R. L. Webring, Vice President - Operations Support

INSPECTION PROCEDURES USED

IP 37551: Onsite Engineering
IP 61726: Surveillance Observations
IP 62707: Maintenance Observations
IP 71707: Plant Operations
IP 71750: Plant Support
IP 37551: Engineering
IP 92903: Engineering Followup

ITEMS OPENED AND CLOSED

Opened and Closed

50-397/00009-01	NCV	Inadequate temperature switch calibration package results in rendering standby gas treatment system inoperable (Section M1.2)
50-397/00009-02	NCV	Failure to update the Licensee Controlled Specifications to include all containment isolation valves (Section E8.1)

Closed

50-397/99014-02	URI	Failure to update the Licensee Controlled Specifications to include all containment isolation valves.
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LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
NCV	noncited violation
NRC	U.S. Nuclear Regulatory Commission
URI	unresolved item