

# UNITED STATES NUCLEAR REGULATORY COMMISSION REGION IV 611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TEXAS 76011-8064

April 23, 2002

Mr. J. V. Parrish Chief Executive Officer Energy Northwest P.O. Box 968; MD 1023 Richland, Washington 99352-0968

SUBJECT: COLUMBIA GENERATING STATION - INSPECTION REPORT 50-397/01-09

Dear Mr. Parrish:

On March 23, 2002, the NRC completed an inspection at your Columbia Generating Station for the period December 30, 2001, through March 23, 2002. The enclosed integrated inspection report documents the inspection findings, which were discussed on January 3, January 17, February 14, and March 26, 2002, as described in Section 4OA6 with Mr. G. Smith and other members of your staff.

The inspections examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspectors examined a selection of procedures and representative records, observed activities, and conducted interviews with personnel.

Based on the results of this inspection, the NRC has identified an issue that was evaluated under the risk significance determination process as having very low safety significance (Green). The NRC has also determined that a violation is associated with this issue. A second issue, which was not evaluated using the risk significance determination process, was also identified. A violation was associated with this issue. These violations are being treated as noncited violations (NCVs), consistent with Section VI.A.1 of the Enforcement Policy. These NCVs are described in the subject inspection report. If you contest the violation or significance of these 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 Columbia Generating Station.

Since September 11, 2001, Columbia Generating Station has assumed a heightened level of security based on a series of threat advisories issued by the NRC. Although the NRC is not aware of any specific threat against nuclear facilities, the heightened level of security was recommended for all nuclear power plants and is being maintained due to the uncertainty about the possibility of additional terrorist attacks. The steps recommended by the NRC include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with local law enforcement and military authorities, and limited access

of personnel and vehicles to the site. In February 2002, the NRC issued an order to all commercial power plants to implement interim compensatory measures for the generalized high-level threat environment. Some of the requirements formalize a series of security measures that NRC licensees had taken in response to advisories issued by the NRC. The order also imposes additional security requirements which have emerged from the ongoing security review.

The NRC continues to interact with the intelligence community and to communicate information to Energy Northwest. In addition, the NRC has monitored maintenance and other activities which could relate to the site's security posture.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <a href="http://www.gov/reading-rm/ADAMS.html">http://www.gov/reading-rm/ADAMS.html</a> (the Public Electronic Reading Room).

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

Sincerely,

#### /RA/

William B. Jones, Chief Project Branch E Division of Reactor Projects

Docket: 50-397 License: NPF-21

Enclosure: NRC Inspection Report 50-397/01-09

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# **ENCLOSURE**

# U.S. NUCLEAR REGULATORY COMMISSION REGION IV

Docket:	50-397
License:	NPF-21
Report:	50-397/01-09
Licensee:	Energy Northwest
Facility:	Columbia Generating Station
Location:	Richland, Washington
Dates:	December 30, 2001, through March 23, 2002
Inspectors:	<ul> <li>G. D. Replogle, Senior Resident Inspector, Project Branch E, DRP</li> <li>M. S. Peck, Resident Inspector, Project Branch E, DRP</li> <li>J. E. Whittemore, Senior Reactor Inspector, Engineering and Maintenance Branch, DRS</li> <li>M. P. Shannon, Senior Health Physicist, DRS</li> <li>W. M. McNeill, Reactor Inspector, Engineering and Maintenance Branch, DRS</li> <li>P. J. Elkmann, Emergency Preparedness Inspector, DRS</li> </ul>
Approved by:	W. B. Jones, Chief, Project Branch E, Division of Reactor Projects
ATTACHMENT:	Supplemental Information

# SUMMARY OF FINDINGS

IR 05000397-01-09; on 12/30/2001-3/23/2002; Energy Northwest; Columbia Generating Station. Integrated Inspection Report; Access Control.

The report covers a 12-week period of routine resident inspection activities from December 30, 2001, through March 23, 2002. The inspection identified one finding of very low safety significance and a finding of "No Color." Both findings were noncited violations. The significance of the findings is indicated by their color (Green, White, Yellow, or Red) using Manual Chapter 0609 "Significance Determination Process" (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <u>http://www.nrc.gov/NRR/OVERSIGHT/index.html.</u> Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation.

# A. Inspector Identified Findings

**Cornerstone: Physical Protection** 

• Green. The inspector identified a violation of the Facility Operating License, NPF-21, Section 2.E, for failure to fully implement and maintain in effect all provisions of the Commission approved physical security plan. On January 23, 2002, the inspector identified an inattentive security officer on post at the plant secondary alarm station. This condition violated provisions in the physical security plan which required the secondary alarm station be continuously monitored. The inattentiveness of the officer resulted in the temporary loss of secondary alarm station monitoring function. This violation is being treated as a noncited violation consistent with Section V1.A.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Problem Evaluation Request 202-0230 (Section 3PP2).

This issue was more than minor because it involved a failure to meet the requirements of 10 CFR 73.55 (f) and associated licencee security plan. The issue was of very low safety significance (Green) because it did not involve an actual facility intrusion and there have not been greater than two similar findings in the previous four quarters.

• SL IV. The inspector identified a noncited violation of 10 CFR 50.70 (Inspections). On March 21, 2002, the inspector identified that a security officer alerted other on-duty officers that an NRC resident inspector arrived onsite. The issue was more than minor due to the potential for impacting the NRC's ability to perform its regulatory function, including performing unannounced inspections. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VI.A.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Problem Evaluation Request 202-0867 (Section 3PP2).

# B. <u>Licensee Identified Violations</u>

Two violations of very low significance were identified by the licensee and reviewed by the inspectors. Corrective actions taken or planned by the licensee appeared reasonable. These violations were listed in Section 40A7 of this report.

# Report Details

# Summary of Plant Status:

Energy Northwest operated the Columbia Generating Station at full power at the beginning of the inspection period. Full power operations continued until February 14, 2002, when Technical Specifications required a forced shutdown because of uncorrected issues associated with the Division II emergency diesel generator output breaker. The licensee completed corrective maintenance and restarted the reactor on February 23, 2002. The licensee operated the facility at full power until March 16, 2002. On March 16, 2002, Energy Northwest reduced reactor power to 65 percent and repaired a condensate booster pump seal and feedwater heating steam leaks. The licensee restored the unit to full power on March 18, 2002. The reactor operated at full power for the remainder of the inspection period.

On March 20, 2002, Energy Northwest determined two main steam line isolation valves were inoperable due to errors in the stroke timing test methodology. On March 21, 2002, the licensee requested an NRC Notice of Enforcement Discretion to continue reactor operation with the inoperable main steam isolation valves. The inoperable condition was associated with rapid closure times on two of the main steam isolation valves. The NRC approved the licensee's request for enforcement discretion on the same day.

# 1. **REACTOR SAFETY**

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness

- 1R04 Equipment Alignments (71111.04)
- .1 Partial System Walkdowns
- a. Inspection Scope

The inspectors performed partial system walkdowns of safety-significant equipment to verify proper alignment and readiness while the redundant systems were removed from service. The inspectors reviewed the following system alignments during the quarter:

- <u>Division II Standby Service Water System</u>: On January 31, 2002, the inspectors walked down the mechanical and electrical alignments of the Division II Standby Service Water (SW) system while the Division I SW system was out of service for corrective maintenance. The inspectors reviewed the alignment of critical system components using Procedure 2.4.5, "Standby Service Water System," Revision 42, and Drawing M524, "Flow Diagram, Standby Service Water System," Sheets 1, 2 and 3 (Revisions 91, 93 and 101 respectively).
- <u>Reactor Core Isolation Cooling System:</u> On February 5, 2002, the inspectors walked down the mechanical and electrical alignment of the reactor core insolation cooling (RCIC) system while the high pressure core spray system was out of service for corrective maintenance. The inspectors reviewed the alignment of critical system components using Procedure 2.4.6, "RCIC System," Revision 32, and Drawing M519, Flow Diagram, "RCIC System," Revision 82.

<u>Division I Low Pressure Coolant Injection</u>: On March 12, 2002, the inspectors walked down the mechanical and electrical alignments of the Division I low pressure coolant injection system while the Division II low pressure coolant injection system was out of service for scheduled testing. The inspectors reviewed critical system component alignment against Procedure 2.4.2, "Residual Heat Removal System," Revision 47, and Drawings M521-1, "Flow Diagram Residual Heat Removal System," Revision 94, and M521-2, "Flow Diagram Residual Heat Removal System," Revision 96.

# b. Findings

No findings of significance were identified.

- .2 Complete Low Pressure Core Spray System Walkdown
- a. Inspection Scope

On February 8, 2002, the inspectors completed a verification of the low pressure core spray (LPCS) system alignment. The inspectors reviewed system operability and conformance with licensing requirements and commitments. The inspectors also reviewed the licensee's corrective measures to address related conditions adverse to quality. The following documents were reviewed as part of this inspection:

- System Operating Procedure 2.4.3, "LPCS System," Revision 23
- Drawing M520, Flow Diagram, "High Pressure Core Spray and LPCS," Revision 87
- Electrical Wiring Diagram, "LPCS," EWD-8E-000, Revision 10
- Electrical Wiring Diagram, "LPCS," EWD-8E-001, Revision 17
- Problem Evaluation Request 201-2559, "FSAR Tables 8.3-3 Incorrect," November 11, 2001
- Problem Evaluation Request 201-1964, "LPCS Oil Sample Displayed A High Particle Count," September 17, 2001
- "LPCS System Health Report," fourth quarter, 2001

# b. <u>Findings</u>

#### 1R05 Fire Protection (71111.05)

#### .1 <u>Annual Inspection</u>

a. Inspection Scope

The inspectors observed and evaluated a fire protection drill on February 11, 2002. The inspectors considered whether the drill scenario properly demonstrated the use of fire fighting equipment and that the subsequent drill critique was self-critical. The following documents were reviewed as part of this inspection:

- Drill Scenario
- Attribute Checklists

# b. Findings

No findings of significance were identified.

#### .2 Quarterly Fire Area Walkdowns

a. <u>Inspection Scope</u>

The inspectors performed walkdowns to verify operational status and material condition of fire detection and mitigation systems, passive fire barriers and fire suppression equipment. The inspectors reviewed the licensee's implementation of controls for combustible materials and ignition sources in selected fire protection zones. The inspectors compared observed plant conditions against descriptions and commitments described in the Final Safety Analysis Report, Section 9.5.1, "Fire Protection System," and "Fire Protection Evaluation," Appendix F. Specific fire areas inspected included:

- Fire protection water supply building (B-33) on January 7 and 8, 2002
- Fire Area TG-1, Turbine generator building general equipment area, on January 14, 2002
- Fire Area R-6, Reactor core isolation cooling pump room, on February 5, 2002
- Fire Area R-8, Low pressure core spray pump room, on February 8, 2002
- Fire Area 21, Reactor building South valve room, on March 1, 2002
- Fire Area R-18, Reactor building Motor control center room, Division II, on March 1, 2002

#### b. <u>Findings</u>

#### -4-

#### 1R12 Maintenance Rule Implementation (71111.12)

#### .1 Quarterly Reviews

#### a. Inspection Scope

The inspectors independently reviewed the implementation of the Maintenance Rule for selected plant equipment. The inspectors reviewed licensee Maintenance Rule scoping and characterization against the 10 CFR 50.65 criteria. The inspectors also reviewed licensee documentation of safety-significance classifications, performance criteria and performance goals. The review included:

- Problem Evaluation Request 201-1041, Division II emergency diesel generator failed to start during surveillance (during refueling outage), dated June 2, 2001
- Problem Evaluation Request 201-1434, Interim operational power range monitor setpoints nonconservative, dated June 30, 2002
- Problem Evaluation Request 201-0480, Reactor core isolation cooling room flood door found open, dated April 3, 2001
- Problem Evaluation Request 201-2596, Division II standby service water pump breaker failure, dated November 19, 2001
- Problem Evaluation Request 202-0195, Division II emergency diesel generator breaker unexpected alarm, dated January 17, 2002
- Problem Evaluation Request 202,0456, Division II emergency diesel generator breaker failure, dated February 13, 2002

The inspectors utilized the following documents during this inspection:

- Procedure TI 4.22, "Maintenance Rule Program," Revision 4
- Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 2
- NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 2
- Columbia Generating Station Maintenance Rule Program Status Reports

#### b. <u>Findings</u>

# .2 <u>Periodic Evaluation Reviews (Annual Inspection)</u>

#### a. Inspection Scope

The inspectors reviewed the licensee's quarterly and semi-annual reports documenting the performance of the Maintenance Rule periodic effectiveness assessments for recent past. These periodic evaluations covered the period from January 1999 through September 2001.

The inspectors noted that the licensee's program had monitored risk-significant functions associated with structures, systems, and components using reliability and unavailability. Additionally, the performance of nonrisk-significant functions were monitored using plant level criteria.

The inspectors reviewed the actions taken and conclusions reached by the licensee with regard to the use of industry-wide operating experience and the balance of reliability and unavailability for specific Maintenance Rule functions. The balance review was conducted by examining the licensee's evaluation of all risk-significant functions that had exceeded performance criteria during the evaluation periods.

The inspectors also examined the licensee's evaluation of program activities associated with the placement of Maintenance Rule Program risk-significant functions in Categories (a)(1) and/or (a)(2). Finally, the inspectors reviewed the periodic evaluation conclusions reached by the licensee for the following systems: standby service water; 480 Vac electrical distribution; 4160 Vac electrical distribution; postaccident monitoring function; process radiation monitoring system; emergency diesel generators; and the residual heat removal system.

# **Findings**

No findings of significance were identified.

# .3 Identification and Resolution of Problems (Annual Review)

a. Inspection Scope

The inspectors evaluated the licensee's use of their corrective action process within the Maintenance Rule Program. This review was accomplished by examination of the performance evaluation requests listed in the attachment and a sample of screening activities related to past system and components failures or performance deficiencies. The purpose of this review was to establish that the corrective action program was entered at the appropriate threshold and effectively utilized for the purposes of:

- Starting the evaluation and determination of corrective action process when performance criteria was exceeded
- Identifying and implementing the system, structures and components get-well plan

- Starting the evaluation and determination of any necessary programmatic or specific adjustments to the maintenance rule program in response to the receipt of industry-wide operating experience
- Correction of performance-related issues or conditions identified during the periodic evaluation
- Correction of generic issues or conditions identified during programmatic audits and assessments

#### b. Findings

No findings of significance were identified.

#### 1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13)

a. <u>Inspection Scope</u>

The inspectors reviewed planned and emergent maintenance risk assessments as required by 10 CFR 50.65(a)(4). The inspectors considered the accuracy and completeness of information considered in licensee risk assessments and the use of the SENTINEL computer program. The inspector also used Procedure 1.5.14, "Risk Assessment and Management for Maintenance/Surveillance Activities," Revision 3, and Operations Instruction, OI-49, "Protected Systems," Revision A, during the reviews. The inspectors reviewed risk assessments and controls/continency plans associated with the following work activities:

- Work Requests 01036565 and 01035519, Standby service water Pump 1A mechanism operated cell switch inspection, performed on January 31, 2002
- Work Request 01030239, High pressure core spray outage, performed on February 5, 2002
- Work Request 0103512901, Low pressure core spray outage, performed on February 8, 2002
- Work Requests 0103112601, 013657011, 0103737201 and 0103412301, Turbine building service water pump outages, performed on February 4 and 5, 2002
- Work Order 01035988 and Procedure ESP-RHR-Q902, "Residual Heat Removal Pump "B" Time Delay (Low Pressure Coolant Injection Mode) - Channel Functional Test/ Channel Check," Revision 4, performed on February 26, 2002

#### b. Findings

# 1R15 Operability Evaluations (71111.15)

#### a. Inspection Scope

The inspectors reviewed licensee operability evaluations for degraded equipment conditions. The inspectors considered the adequacy of the licensee's technical review and implementation of compensatory measures considering overall plant risk. The licencee did not perform any new formal followup assessment of operability assessments during the inspection. However, the inspectors reviewed the licensee's operability conclusion for the following degraded plant systems:

- Problem Evaluation Request 202-0500, "Unexpected High Pressure Core Spray Pump-1 Suction Switch Over from Condensate Store Tank to Wetwell," February 16, 2002
- Problem Evaluation Request 202-0640, "Reactor Core Insolation Cooling (RCIC) Pump 1 Manually Tripped After Starting for Surveillance Due to Excessive Leakage From RCIC-RV-19T," February 28, 2002
- Problem Evaluation Request 202-0577, "E-CB-N1/1 Closing Spring Did Not Charge After Breaker Closed," February 24, 2002
- Problem Evaluation Request 202-0873, "Compliance with Technical Specifications Not Adequately Considering During Evaluation of OE11717," March 21, 2002
- b. Findings

No findings of significance were identified.

# 1R16 Operator Workarounds (71111.16)

a. Inspection Scope

During the week of January 14, 2002, the inspectors reviewed the plant tracking list summary of operator workarounds to determine if the functional capability of the system or initiating event human reliability response was adversely affected. The inspectors specifically evaluated the effect of the workaround on the operator's ability to implement abnormal or emergency operating procedures and the cumulative effects of workarounds on the reliability, availability, and potential for misoperation of plant systems.

b. Findings

#### 1R19 <u>Postmaintenance Testing (71111.19)</u>

#### a. <u>Inspection Scope</u>

The inspectors reviewed postmaintenance tests and to verify licensee personnel properly implemented procedural controls, tests adequately demonstrated equipment operability, and that applicable Technical Specification and licensing basis requirements were met. This inspectors reviewed the following postmaintenance tests:

- Work Order 01035519, Standby service water Pump 1A MOC switch inspection, performed on January 31, 2002
- Work Order 01034271, Repair of the Division II emergency diesel generator jacket cooling system, performed on January 18, 2002
- Work Order 01028159, RHR-V-75-B repair and Problem Evaluation Request 202-0848, "RHR -V-75B Failed to Indicate Closed During the Post Maintenance Test," completed on March 19, 2002
- Work Order 01040193 (Task 2), CRD-CB-P1A-MOC switch inspection performed on March 19, 2002
- Work Order 00LPZ1, Task 2, RHR-P-3 postmaintenance test, performed on March 15, 2002
- Work Order 29023020, Accident monitoring instruments for containment hydrogen and oxygen analyzer Sample Rack 13, performed on March 5, 2002
- b. Findings

No findings of significance were identified.

#### 1R20 <u>Refueling and Other Outages (71111.20)</u>

a. Inspection Scope

The inspectors reviewed that the licensee maintained defense-in-depth outage risk management for key safety functions and Technical Specifications when equipment was removed from service. The inspectors reviewed that the licensee adequately controlled emergent work, configuration changes, and unexpected conditions in accordance with the outage risk control plan. The inspectors reviewed decay heat removal parameters to verify proper system function. On a sampling basis, the inspectors reviewed that Technical Specification, license conditions, commitments, and administrative procedure prerequisites were met prior to reactor mode changes. The inspectors observed portions of the reactor startup and reviewed containment close out documents to verify that debris was not left which could adversely affect containment sumps performance.

The following procedures and safety plan were reviewed during this inspection activity:

- Procedure OSP-RCS-C101, "Reactor Pressure Vessel Heat up Surveillance," Revision 4, performed on February 23, 2002
- Procedure OSP-RRC-C103, "RRC Pump Start Temperature and Loop Flow Verification," Revision 5, performed February 22, 2002
- Procedure OSP-CONT-Q101, "Inside Primary Containment Integrity Verification," Revision 1, February 22, 2002
- "Forced Outage 02-01 Shutdown Safety Plan," Revision 1, February 15, 2002

# b. Findings

No findings of significance were identified.

# 1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors reviewed by witnessing and/or reviewing test data/procedures that surveillance tests for selected risk-significant systems and components met Technical Specification, Final Safety Analysis Report, and procedural requirements. The inspectors assessed whether surveillance tests adequately demonstrated that systems were capable of performing their intended safety and design-basis functions. The inspectors specifically evaluated surveillance testing for preconditioning, adequate acceptance criteria, calibration of test equipment and proper equipment restoration. The inspectors reviewed the following surveillance activities:

- Procedure OSP ELEC-M702, "Diesel Generator 2 Monthly Operability," Revision 13, observed on January 18, 2002
- Procedure OSP SW/IST-Q701, "Standby Service Water Loop A Operability," Revision 8, observed on January 31, 2001
- Procedure ISP-MS-Q938, "Main Steam Line Pressure Low A/C Channel Calibration," Revision 2, observed on February 4, 2002
- Procedure OSP-SW/IST-Q702, "Standby Service Water Loop A Operability," Revision 8, performed on January 16, 2002
- Procedure OSP-LPCS-M120, "LPCS Valve Lineup," Revision 0, performed on February 21,2002
- Procedure OSP-MS-M701, "Bypass Valve Test," Revision 3, performed on February 23, 2002

#### b. Findings

#### .1 Two Main Steam Line Isolation Valves Inoperable

On March 20, 2002, the licensee determined two inboard main steam line isolation valves (MSIVs) were inoperable due to closing stroke times greater than allowed by plant Technical Specifications (TS). TS Surveillance 3.6.1.3.6, Primary Containment Isolation Valves, required each MSIV to close within five seconds but no faster than three seconds. The three second TS limit ensured peak reactor vessel pressure and the minimum critical power ratio (MCPR) thermal limit did not exceed the reactor coolant system pressure and reactor core safety limits during the worst case transient. The licensee discovered an error in methodology used to measure stroke time. The licensee concluded MSIV MS-V-22A and MS-V22D exceeded the three second minimum isolation time after the last measured stroke times were corrected for the testing error. The failure of the two MSIVs to meet TS Surveillance Requirement 3.6.1.3.6 would have required the isolation of the two corresponding main steam lines within 8 hours, per TS Action Statement 3.6.1.3.A, resulting in a plant shutdown.

The licensee identified the MSIV testing methodology error during a review of an Operating Experience (OE) Report from the Monticello facility. The OE was issued on December 11, 2000, and was entered into the licensee's corrective action program as PER 201-0179 on January 31, 2001. From a review of the OE, the licensee determined the MSIV testing methodology incorrectly included circuit and valve actuator response times when the stroke times were measured. With the circuit response time subtracted from the measured times, MS-V-22A and MS-V22D were determined to have closure times of 2.74 and 2.88 seconds. While these stroke times were less than the 3 seconds specified in TS 3.6.1.3.6, the safety significance of the fast closure times were minimal. The two other main steam line MSIVs closed within the allowed range (approximately 3.4 seconds). This resulted in the average closure time for the main steam lines of 3.1 seconds. The accident analysis modeled the four steam line isolations as one closing orifice. The average closure time of 3.1 seconds for all four main steam lines was within the bounds of the accident analysis. The licensee performed additional analysis and concluded that with closure times as short as 2.5 seconds, the resulting pressure only resulted in a 4 pounds per square inch (psi) increase in peak post transient reactor pressure. The current accident analysis included 36 psi margin to the Reactor Coolant Pressure Safety Limit. The licensee determined the peak transient MCPR was bounded by the load reject without bypass analysis with the fast closing MSIVs. This issue was considered unresolved pending completion of the NRC's review of the timeliness of the licensee's corrective actions (URI 50-397-01009-01).

# .2 Notice of Enforcement Discretion (NOED)

The licensee concluded the facility was in violation of TS 3.6.1.3, due to the fast MSIV closures, and a plant shutdown was required. On March 21, 2002, Energy Northwest requested and NRC granted a NOED for TS 3.6.1.3, pursuant to the NRC's policy regarding exercise of discretion for an operating facility, set out in Section VII.C, of the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600. The NOED was effective pending the licensee's

submission and NRC approval of a TS amendment request revising TS Surveillance 3.6.1.3.6, allowing relaxed stroke times for the two affected MSIVs. The TS amendment was to remain in effect until startup from Refueling Outage 16 or until restart from a forced outage of greater than 72 hours. The licensee determined that the NOED relaxation of minimum MSIV closure times would not result in exceeding MCPR or ASME vessel protection limits following an anticipated transient.

# 1R23 Temporary Plant Modifications (71111.23)

# a. Inspection Scope

During the week of January 14, 2002, the inspectors reviewed plant temporary modifications. This was to verify plant temporary modifications were correctly installed and properly reflected in plant documents, drawings, and procedures. The inspectors compared the temporary modifications against Final Safety Analysis Report and Technical Specifications requirements. The inspectors also reviewed postinstallation test results and reviewed the impact of selected temporary modifications on the permanent systems and interfacing systems. None of the temporary plant modifications installed at the time of the inspection were risk significant. The inspectors specifically reviewed the following temporary plant modifications:

- Temporary Modification 98-011, Standby service water pond sand filter
- Temporary Modification 99-004, Remove fuses and lock out breakers for FD-V-10, -15,& -24. Deactivate FD-RIS-1, -2, -3 & -4 and Safety Evaluation SE-99-0021, Revision 0
- Temporary Modification 01-003, Installation of fuel sipping device
- Temporary Modification 01-008, Disabling the loose parts detection system
- Temporary Modification 00-010, Temporary power to the security bunker
- b. Findings

No findings of significance were identified.

# 1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)

a. Inspection Scope

The inspectors performed an in-office review of Revision 30 to Emergency Plan Implementing Procedure 13.1.1, "Emergency Classification," and Revision 8 to Emergency Plan Implementing Procedure 13.1.1A, "Classifying the Emergency -Technical Bases," both submitted November 11, 2001, against 10 CFR 50.54(q) to determine if the revisions decreased the effectiveness of the emergency plan.

# b. Findings

No findings of significance were identified.

#### 1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)

#### a. <u>Inspection Scope</u>

The inspectors performed an in-office review of Revision 30 to Emergency Plan Implementing Procedure 13.1.1, "Emergency Classification," and Revision 8 to Emergency Plan Implementing Procedure 13.1.1A, "Classifying the Emergency -Technical Bases," both submitted November 11, 2001, against 10 CFR 50.54(q) to determine if the revisions decreased the effectiveness of the emergency plan.

b. Findings

No findings of significance were identified.

# 2. RADIATION SAFETY Cornerstone: Occupational Radiation Safety [OS]

#### 2OS2 ALARA Planning and Controls (71121.02)

a. Inspection Scope

The inspectors interviewed radiation workers and radiation protection personnel throughout the radiologically controlled area and conducted independent radiation surveys of selected work areas. The following items were reviewed and compared with regulatory requirements to assess the licensee's program to maintain occupational exposure as low as is reasonably achievable (ALARA):

- ALARA program procedures
- Radiation protection department self-assessments pertaining to Refueling Outage 15's ALARA and radiological operations performance
- Processes used to estimate and track exposures
- Plant collective exposure history for the past 3 years, current exposure trends, and 3-year rolling average dose information
- Three radiation work permit packages for work activities that resulted in the highest personnel collective exposures during calendar year 2001 (RWP 30000201, "Drywell CRD Under Vessel Work," RWP 30000371, Health Physics Routine Work," and RWP 30000336, "Routine Work <5 Millirem/Single Performance Task")

- ALARA suggestion program
- Radiological work planning
- A summary of ALARA and radiological worker performance related to corrective action reports written since July 1, 2001 (nine corrective action reports were reviewed in detail: PER 201-1566, PER 201-1587, PER 201-1633, PER 201-1708, PER 201-1809, PER 201-1983, PER 201-2375, PER 201-2539, and PER 201-2655)
- Declared pregnant worker dose monitoring controls
- Quality Department 2<sup>nd</sup> Quarter 2001 Continuous Monitoring Report, Radiation Protection Functional Area Report AU-RP-01-3, and Radiation Protection Audit AU-RP-01
- Job site inspections and ALARA controls for the reactor building equipment drain line flushing work activities
- b. <u>Findings</u>

No findings of significance were identified.

# 3. SAFEGUARDS

Cornerstone: Physical Protection

# 3PP2 Access Control (71130.02)

a. Inspection Scope

The inspectors performed tours of the primary and secondary alarm station to verify that alarms annunciate audibly and visually and that there was an indication of the type and location of the alarm.

b. Findings

# .1 Security Officer Inattentive at the Secondary Alarm Station

On January 23, 2002, the inspector identified an inattentive security officer while on post at the plant secondary alarm station. This condition was a violation of the Facility Operating License, NPF-21, Section 2.E, and CGS physical security plan. The physical security plan required the secondary alarm station be continuously monitored. The officer's inattentiveness resulted in a temporary loss of the security monitoring function. This issue was more than minor because it involved a failure of the licensee to meet the requirements of 10 CFR 73.55 (f) and associated licensee security plan. The issue was of very low safety significance (Green) because it did not involve an actual facility intrusion and there have not been greater than 2 similar findings in the previous four quarters. This violation is in the licensee's corrective action program as Problem Evaluation Request 202-0230 (NCV 50-397/01009-02).

# .2 Security Officer Announced the arrival and presence of an NRC inspector

On March 21, 2002, the inspectors identified a violation of 10 CFR 50.70, "Inspections," after a security officer announced to other on-duty officers that the NRC resident inspector had arrived on-site. The security officer stated that gatehouse officers have provided central alarm and secondary alarm station security operators advance notification of NRC inspection activities. The officer stated he was unaware of the prohibition restricting the announcement of NRC inspection personnel. The issue was more than minor due to the potential for impacting the NRC's ability to perform its regulatory function. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VI.A.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Problem Evaluation Request 202-0867 (NCV 50-397/01009-03).

# 4. OTHER ACTIVITIES

- 4OA1 Performance Indicator Verification (71151)
- .1 <u>Reactor Related Performance Indicators</u>
- a. Inspection Scope

For reactor specific performance indicators, the inspectors utilized NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 0, and independently verified the following performance indicator data by reviewing operator logs, maintenance records, and corrective action documents.

- Coolant Specific Activity
- Coolant Leak Rate
- Unplanned scrams
- b. Findings

#### 40A5 Other

.1 (Closed) URI 50-397/0106-01: Design of fire protection sprinkler system in emergency diesel generator rooms.

The inspectors identified a question regarding the placement of automatic fire suppression sprinklers in such a location that they would be subject to the heat plume and has suitable sensitivity coupled with the design and orientation of heat collectors attached to them.

Upon further review, it was determined that the Safety Evaluation Report, NUREG 0892, Supplement 3, accepted this present design and configuration of the emergency diesel generator room sprinkler system.

#### 4OA6 Management Meetings

Regional and resident inspectors conducted several exit meetings with members of licensee management staff during the inspection period. These exit meetings included:

- January 3, 2002, the inspectors presented the results of the emergency action level and emergency plan changes inspection to Mr. R. Sherman, Acting Manager, Licensing, and other members of licensee management, during a telephonic exit interview. The licensee acknowledged the findings presented.
- January 17, 2002, the inspectors presented the results of the Maintenance Rule inspection with Mr. G. Smith, and other members of management. The licensee acknowledged the findings presented.
- On February 14, 2002, the inspectors presented the results of the ALARA planning and controls inspection to Mr. R. Webring, Vice President, Operation Support, and other members of licensee management. The licensee acknowledged the findings presented.
- On March 26, 2002, the inspectors presented the results of the resident inspection with Messrs. R. Webring and S. Oxenford and other members of licensee management staff. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any materials examined during the inspections should be considered proprietary. No proprietary information was identified by the licensee.

4OA7 <u>Licensee Identified Violations</u> The following findings of very low significance were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG 1600, for being dispositioned as NCVs.

	NCV Tracking Number	Requirement Licensee Failed to Meet
(1)	NCV 50-397/01009-04	Technical Specification 5.4.1.d required, in part, that written procedures for the fire protection program be implemented. Fire Protection Procedure, 15.1.19, "Fire Protection System Flow Path Valve Exercise," Revision 12, required FP-V-72, standby gas charcoal adsorber deluge isolation valve, be locked open. Contrary to the Technical Specification and the fire protection program, this valve was locked in the closed position between January 12 and March 13, 2002, because of human performance error. An operator failed to correctly reposition the valve during a previous surveillance. This issue had more than minor significance because the mispositioned valve resulted in loss of fire suppression capability to one standby gas charcoal absorber.
		The inspectors determined the issue had very low safety significance (Green) because the charcoal absorber deluge system only provided defense-in-depth fire suppression capability and the standby gas treatment system was not required for postfire plant safe shutdown, as described in FSAR Appendix F, fire protection evaluation. The licensee placed this issue into the corrective action program as Problem Evaluation Request 202-0783.
(2)	50-397/0109-05	Technical Specification 5.4.1(a) requires procedures to implement the ALARA program. Procedure SWP-MAI-01, "Work Management-Planning, Scheduling and Work Activities," Revision 10, implements ALARA planning. Section 3.7.1 of the above procedure states, in part, if the job scope is changed, ensure all appropriate individuals/organizations who initially reviewed the work order task review it again and concur with the proposed amendment. On September 17, 2001, the licensee documented a task pertaining to motor operator refurbishment work on Reactor Feedwater Valves MO-65A and B that was worked outside the original work order task ALARA plan. Radiation protection ALARA personnel were not informed of the change to the work order task ALARA plan. The licensee originally estimated the exposure as 348 Person-Millirem, but the actual exposure was 1800 Person-Millirem. The failure to contact ALARA personnel to obtain their concurrence is a Technical Specification 5.4.1(a) violation. This event is described in

the licensee's corrective action program, reference PER 201-1983. This violation is being treated as a noncited violation.

The safety significance of this violation was determined to be very low (Green) by the Occupational Radiation Safety Significance Determination Process because there was no overexposure or substantial potential for an overexposure and the ability to assess dose was not compromised.

# ATTACHMENT

# **Supplemental Information**

# PARTIAL LIST OF PERSONS CONTACTED

# Licensee

J. Parrish, Chief Executive Officer

D. Atkinson, Manager, Engineering

I. Borland, Manager, Radiation Protection

D. Coleman, Manager, Performance Assessment and Regulatory Programs

S. Oxenford, Plant General Manager

G. Smith, Vice President, Generation

# ITEMS OPENED AND CLOSED

# Items Opened, Closed, and Discussed during this Inspection

**Opened** 

50-397/01009-01	URI	(Section 1R22)	Two main steam line isolation valves inoperable
Opened and Closed	during t	this Inspection	
50-397/01009-02	NCV	(Section 3PP2)	Security officer inattentive at the secondary alarm station
50-397/01009-03	NCV	(Section 3PP2)	Security officer announced the arrival and presence of an NRC inspector
50-397/01009-04	NCV	(Section 4OA7)	Standby gas treatment charcoal adsorber deluge valve isolated for an extended period due to a human performance error
50-397/01009-05	NCV	(Section 4AO7)	Failure to follow ALARA planning procedures
Previous Items Close	<u>ed</u>		
50-397/01006-01	URI	(Section 4AO5)	Design of fire protection sprinkler system in emergency diesel generator rooms

# PARTIAL LIST OF DOCUMENTS REVIEWED

Maintenance Rule Periodic Assessment Report, First Quarter 1999 Maintenance Rule Periodic Assessment Report, Second Quarter 1999 Maintenance Rule Periodic Assessment Report, Third Quarter 1999 Maintenance Rule Periodic Assessment Report, Fourth Quarter 1999 Maintenance Rule Periodic Assessment Report, Last Quarter 2000 and First Quarter 2001 Maintenance Rule Periodic Assessment Report, Second and Third Quarter 2001 Performance Engineering Group Monthly Performance Report, January 2002

#### **Problem Evaluation Requests:**

298-1517	200-0232	200-1801	201-1753
299-0182	200-0392	201-0119	201-2596
299-0239	200-0878	201-0695	201-2744
299-0995	200-1290	201-0744	201-2852
299-1521	200-1582	201-1445	202-0182
200-0185			

#### PROCEDURES

NUMBER	DESCRIPTION	REVISION
1.5.11	Maintenance Rule Program	2
SWP-CAP-01	Corrective Action Program	4
SWP-CAP-03	Operating Experience Program	1
TI4.22	Maintenance Rule Program Technical Instruction	4
TI4.23	Maintenance Rule Structural Baseline Inspections	0

# Previous Items Discussed

None