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

October 19, 2001

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 NO. 50-397/01-04

Dear Mr. Parrish:

On September 22, 2001, the NRC completed an inspection at your Columbia Generating Station. The enclosed integrated inspection report documents the inspection findings, which were discussed on July 13, July 26, July 27, August 2, and September 27.

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 inspectors identified two issues of very low safety significance. The two issues were determined to involve violations of NRC requirements. However, because of their very low safety significance and because they were entered into your corrective action program, the NRC is treating these issues as noncited violations, in accordance with Section VI.A of the NRC Enforcement Policy. These noncited violations are discussed in the subject inspection report.

If you contest the violations or the significance of the noncited violations, you should provide a response within 30 days of the date of this inspection report, with the basis for you 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.

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 http://www.nrc.gov/NRC/ADAMS/index.html (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 No: 50-397
License No: NPF-21

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NRC Inspection Report
50-397/01-04

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket:	50-397
License:	NPF-21
Report:	50-397/01-04
Licensee:	Energy Northwest
Facility:	Columbia Generating Station
Location:	Richland, Washington
Dates:	June 24 through September 22, 2001
Inspectors:	G. D. Replogle, Senior Resident Inspector, Project Branch E, DRP M. S. Peck, Resident Inspector, Project Branch E, DRP J. F. Melfi, Resident Inspector, Project Branch E, DRP A. B. Earnest, Senior Security Inspector, Plant Support Branch, DRS P. J. Elkman, Emergency Preparedness Inspector, DRS J. B. Nicholas, PH.D., Senior Health Physicist, Plant Support Branch, DRS L. T. Ricketson, P.E. Senior Health Physicist, Plant Support Branch, DRS D. W. Schaefer, Security Inspector, Plant Support Branch, DRS M. P. Shannon, Senior Health Physiist, Plant Support Branch, DRS
Approved By:	W. B. Jones, Chief, Project Branch E, Division of Reactor Projects

ATTACHMENT: Supplemental Information

SUMMARY OF FINDINGS

IR 05000397-01-04; on 6/24-9/22, 2001; Energy Northwest; Columbia Generating Station. Integrated Inspection Report; Refueling Outage; Problem Identification and Resolution; Crosscutting Issues.

The report covers a 13-week period of routine resident and regional inspection from June 24 through September 22, 2001. The inspection identified three findings. Two had very low safety significance, which were both noncited violations. The third issue concerned a substantive human performance issue, which had no color as it was not subject to the significance determination process. The significance of the findings is indicated by their color (Green, White, Yellow, or Red) using Manual Chapter 0609, "Significance Determination Process." Findings for which the Significance Determination Process does not apply are indicated by No Color or the severity level of the applicable violation. The NRC's program for over seeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at http://www.nrc.gov/NRR/OVERSIGHT/index.html.

A. Inspector Identified Findings

Cornerstones: Initiating Events, Mitigating Systems, Occupational Radiation Safety

- Green. The inspectors identified a noncited violation of Technical Specification 5.4.1.a for failure to follow procedures when approving work, which resulted in the temporary loss of shutdown cooling during the outage. In addition, the inspectors noted two other human performance issues (determined not to be violations of NRC requirements) occurred that related to failure to adhere to procedures. The two other issues were: (1) mechanics failed to properly pack a valve that resulted in a forced shutdown to make repairs; and, (2) technicians set the over-frequency relay setpoint too low that resulted in a trip of Reactor Recirculation Pump B, while at power. The inspectors determined that these issues affected mitigating systems and/or initiating event cornerstones.

  The three issues had more than minor significance because the issues could have a credible impact on plant safety. The failure to adequately control work activities resulted in a loss of shutdown cooling. The severe packing leak on a feedwater valve increased the risk of a plant transient with loss of the power conversion system and the reactor recirculation pump trip increased the risk of a plant scram.

  The inspectors concluded the issues had very low safety significance (Green). The loss of shutdown cooling was assessed using Manual Chapter 0609, Significance Determination Process, Appendix G, Shutdown Operations. The inspectors found the event did not increase the likelihood of a loss of reactor coolant system inventory, degrade the ability to terminate a leak path, or significantly degrade the licensee's ability to recover decay heat removal. The recirculation pump trip and the valve packing leak were assessed using the at power significance determination process worksheets for initiating events. Based on the findings, it did not result in a substantive increase in the initiating event frequency for a transient with and without the power conversion system, or an increase in the likelihood of a loss of coolant accident, reactor trip with a loss of a mitigating system, or likelihood of an external event, the issues were determined to be of very low safety significance. (Section 1R20).

- Green. A noncited violation was identified regarding the licensee's failure to perform a radiological survey. During the review of Problem Evaluation Request 201-0051, the inspectors identified that the licensee had appropriately evaluated the operational issues associated with draining a system but failed to review the radiological issues. Problem Evaluation Request 201-0051 discussed that mechanics began repairs on Reactor Closed Cooling Valve-610, located on Spent Fuel Pool Cooling Heat Exchanger-1A, and found the system not completely drained. The workers identified and corrected the problem with the drain hose and waited in a low dose area approximately 45 minutes while the system finished draining. The licensee took corrective actions associated with the drain hose being too long and not properly routed.

  However, the licensee did not address the radiological consequences associated with not surveying an area after completely draining a component. Although originally planned for 45 mrem, the workers received an exposure of 109 mrem. The workers did not request that radiation protection personnel perform a survey to determine the radiological conditions after completely draining the heat exchanger.
  10 CFR 20.1501(a) requires surveys to determine the radiological conditions and the potential radiological hazards. The failure to perform a survey after completely draining the spent fuel pool cooling heat exchanger is a violation of 10 CFR 20.1501(a). The violation is being treated as a noncited violation consistent with Section VI.A. of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Problem Evaluation Request 201-1601.

  This violation had more than minor safety significance because not surveying an area when plant system conditions change has a credible impact on worker radiological safety. This violation was processed through the Occupational Radiation Safety Significance Determination Process and determined to be of very low safety significance because there was no over exposure or substantial potential for over exposure. Further, the ability to assess dose was not compromised because personnel wore proper dosimetry (Section 4OA2).

- No Color. The inspectors identified a substantive human performance crosscutting issue with four examples, all associated with procedure adherence during maintenance activities. The issues had a credible impact on safety through an increased frequency of initiating events and/or the reliability, operability or functionality of mitigating equipment. The examples were: (1) a senior reactor operator failed to follow procedures when approving work, which resulted in the loss of shutdown cooling during the outage; (2) craftsmen failed to properly implement procedures when repacking a feedwater valve, which resulted in a substantial packing leak at power that required a plant shutdown to repair; (3) craftsmen failed to properly set a reactor recirculation pump over-frequency relay, which resulted in the pump unexpectedly tripping and caused a plant transient while at power; and (4) craftsmen failed to properly restore an instrument isolation valve to the open position following a surveillance, which rendered a scram discharge volume high level switch inoperable for 3 months (Section 4A04).

Report Details

Summary of Plant Status:

The period started with the plant in Refueling Outage 15. On June 24, 2001, operators initiated a reactor startup and increased plant power to 17 percent by June 29. At that time, the licensee decided to shut down the reactor to repair significant valve packing and bonnet leaks in the feedwater and main steam systems. Operators restarted the reactor on June 30 and increased power to 89 percent when on July 5, the Reactor Recirculation Pump B unexpectedly tripped on high frequency. After technicians identified and corrected a misadjusted relay, operators reduced power to 28 percent, restarted Reactor Recirculation Pump B and continued the power ascension. The licensee returned to full power operations on July 6. On July 26, operators shut down the reactor to repair a degraded reactor recirculation pump seal. Operators restarted the reactor on July 31, and achieved full power on August 3. The licensee operated the facility at essentially full power for the remainder of the report period.

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 reviewed equipment alignments for safety significant systems where the redundant equipment had been removed from service. The inspectors reviewed the following system alignments during this quarter:

- Division II Emergency Diesel Generator: On August 14, 2001, the inspectors walked down and observed the mechanical and electrical alignment of Division II emergency diesel generator, which was aligned in standby while the Division I emergency diesel generator was out of service for scheduled maintenance. The alignments of critical portions of the system were verified using Procedure 2.7.2.B, “Emergency D/G Division 2,” Revision 26, and Drawing M521-3, “Diesel Generator Miscellaneous Systems.”

- Division I Emergency Diesel Generator: On September 19, 2001, the inspectors walked down and observed the mechanical and electrical alignment of Division I emergency diesel generator, which was aligned in standby while the Division II emergency diesel generator was out of service for scheduled maintenance. The alignments of critical portions of the system were verified using Procedure 2.7.2.A, “Emergency D/G Division 1,” Revision 26, and Drawing M521-2, “Diesel Generator and Miscellaneous Systems.”

b. Findings

No findings of significance were identified.

.2 Complete Standby Liquid Control System Walkdown

b. Inspection Scope

On August 31, 2001, the inspectors reviewed the alignment of the standby liquid control system. Specifically, the inspectors considered system operability and its conformance with licensing requirements and commitments. The inspectors assessed whether the licensee had considered appropriate corrective measure to address related conditions adverse to quality. The inspectors reviewed the following documents as part of this inspection:

- Problem Evaluation Request 297-0012, standby liquid control relief valves setpoint found below limits, January 3, 1997
- Problem Evaluation Request 297-0916, standby liquid control system flow rate test problems, November 12, 1997
- Problem Evaluation Request 201-1774, standby liquid control flow indicator reading 3 gallons per minute with no system flow, August 21, 2001
- Problem Evaluation Request 201-1739, inadequate standby liquid control system relief valve margin, August 14, 2001
- Problem Evaluation Request 201-1820, Valve SLC-V-16 found locked contrary to system operating procedure and plant drawing, August 28, 2001
- Procedure 5.5.8, “Alternate Boron Injection,” Revision 7
- Drawing M522, “Standby Liquid Control System,” Revision 34
- Procedure 2.4.1, Attachment 6.1, “Standby Liquid Control System Valve Checklist,” Revision 17
- Procedure OPS-SLC-M101, “Standby Liquid Control Valve Alignment and Squib Valve Continuity Check,” Revision 1
- Clearance Order D-SLC-V-16-001, completed June 13, 2001

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

From July 12-20, 2001, the inspectors performed walkdown inspections to verify operational status and material condition of fire detection and mitigation systems, passive fire barriers, and the actual fire suppression equipment. The inspectors considered whether the licensee implemented appropriate controls for combustibles and ignition sources. The inspectors used the Final Safety Analysis Report, Section 9.5.1, "Fire Protection System," and Appendix F, "Fire Protection Evaluation," while performing this inspection. Specific fire areas included:

- Fire Area R-15, reactor building, Elevation 422, lobby outside stair A5
- Fire Area R-18, reactor building, Elevation 522, Division II motor control center
- Fire Area R-21, reactor building, Elevation 522, south valve and pipe space room
- Fire Area RC-2, radwaste building, Elevation 484, cable spreading room
- Fire Area RC-3, radwaste building, elevations 467 to 525, cable chase
- Fire Area RC-8, radwaste building, Elevation 467, Division II switchgear
- Fire Area RC-11, radwaste building, Elevation 525, Unit A air conditioning room
- Fire Area RC-12, radwaste building, Elevation 525, Unit B air conditioning room
- Fire Area RC-13, radwaste building, Elevation 525, emergency chillers, communications, instrument shop and heating, ventilation and cooling chase
- Fire Area RC-14, radwaste building, Division I switchgear

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11)

a. Inspection Scope

On August 28, 2001, the inspectors observed a licensed operator simulator exercise. The inspectors evaluated licensed operator crew performance in terms of formality of communication, prioritizing actions, interpreting and verifying alarms, correct use and implementation of procedures, timely control board operation and manipulation, including high-risk operator actions. The inspectors also compared simulator board configurations with actual control room board configurations.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (71111.12)

a. Inspection Scope

The inspectors independently verified the implementation of the Maintenance Rule for selected risk-significant plant equipment with performance problems. 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, performance goals and corrective actions for components classified as (a)(1). The inspectors selected the following performance problems and evaluated the effectiveness of the corrective actions and Maintenance Rule evaluations:

- Problem Evaluation Request 200-1801, Residual Heat Removal Pump C failed because the equipment operator pulled the wrong fuses, dated October 15, 2000
- Problem Evaluation Request 201-1425, Valve RCIC-V-10 (reactor core isolation cooling system to condensate storage tank isolation valve) failed to automatically close during a surveillance, dated June 25, 2001
- Problem Evaluation Request 201-0732, Valve CRD-V-90A (scram discharge volume high level instrument switch isolation valve) found in wrong position at start of surveillance, dated May 5, 2001
- Problem Evaluation Request 201-1101, refueling bridge crane power inadvertently turned off during outage, dated June 4, 2001
- Problem Evaluation Request 201-1357, unexpected low level in spent fuel pool skimmer surge tank, dated June 15, 2001
- Problem Evaluation Request 201-1445, Standby Service Water Pump B found inoperable, dated June 29, 2001

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 Report for the Last Quarter of 2000 and First Quarter of 2001"

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors reviewed licensee plant risk assessments related to planned and emergent maintenance activities as required by 10 CFR 50.65(a)(4). The inspectors verified the accuracy and completeness of information considered in licensee risk assessments and the use of the SENTINEL computer program. The inspectors reviewed risk management activities and controls associated with rendering the following equipment inoperable:

- Division I emergency diesel generator, week of August 13, 2001
- Division I standby service water pump, week of September 9, 2001
- Division III emergency diesel generator, week of September 19, 2001
- Low pressure coolant injection and automatic depressurization systems, while concurrently inoperable during the week of September 19, 2001
- Reactor core isolation cooling system, planned and emergent work performed from September 5-7, 2001

The following documents were reviewed and utilized during this inspection:

- Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants," May 2000
- NUMARC 93-01, Section 11, "Assessment of Risk Resulting from Performance of Maintenance Activities," February 22, 2000
- Procedure 1.5.14, "Risk Assessment and Management for Maintenance and Surveillance Activities," Revision 1

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed the following operability evaluations for technical adequacy and to verify that the licensee properly considered degraded equipment conditions, compensatory measures and overall plant risk:

- Problem Evaluation Request 201-1721, abnormal high pressure core spray system motor vibrations, August 9, 2001
- Problem Evaluation Request 201-1839, standby liquid control system found partially voided, August 29, 2001
- Problem Evaluation Request 201-1783, Division III emergency diesel generator idle speed outside of limits, August 22, 2001

The inspectors utilized the following documents as criteria for this inspection:

- Updated Final Safety Analysis Report
- Technical Specifications
- Generic Letter 91-18, “Information to Licensees Regarding the NRC Inspection Manual Section on Resolution of Degraded and Nonconforming Conditions and on Operability,” Revision 1

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (71111.16)

a. Inspection Scope

On June 22, 2001, the inspectors reviewed the licensed operator workaround list and verified consistency with information kept by the inspectors to ensure that the licensee kept abreast of all significant workarounds. The inspectors also evaluated the potential affects, as well as the cumulative affects, on plant equipment and operator performance to ensure that operators would experience no significant adverse impacts when responding to emergency events.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

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

- Work Order 01026615-05, Containment Vacuum Breaker Relay CVB-RLY-V/1NP/R9 testing following maintenance, August 15, 2001
- Work Order 01025439-01, residual heat removal system Time Delay Relay RHR-RLY-K55 calibration, August 28, 2001
- Work Order 01026615, postmaintenance testing following corrective maintenance for Valve CVB-V-INP, August 16, 2001
- Work Order 01027608-01, Valve RRC-V-19 operability testing, August 4, 2001
- Work Order 01029385-01, Standby Service Water Pump B postmaintenance test, June 30, 2001
- Work Order 01032071-01, Reactor Core Isolation Cooling Valve RCIC-V-1 trip verification, September 6, 2001.
- Work Order 01029241-01, Reactor Core Isolation Cooling Valve RCIC-V-10 postmaintenance test, June 26, 2001

b. Findings

No findings of significance were identified.

1R20 Refueling and Other Outages (71111.20)

a. Inspection Scope

The inspectors observed or reviewed documents related to the following refueling outage activities to verify that the licensee controlled and accomplished the activities in accordance with documents appropriate to the circumstances:

- Plant shutdowns (June 29, and July 26, 2001)
- Shutdown cooling management
- Overall human performance
- Containment control
- Identification and resolution of problems
- Plant startups (June 24, June 30 and July 24)

The inspectors reviewed the following documents as part of this inspection:

- Work Order 01027692, repack Valve RFW-V-65A
- Procedure 10.2.79, "Valve Packing and Live Loading," Revision 5
- Procedure SWP-MAI-01, "Work Management - Planning, Scheduling and Work Activities," Revision 8
- Work Order 01011490-01, Reactor Recirculation Pump B relay calibrations

b. Findings

The inspectors identified a noncited violation of Technical Specification 5.4.1.a for failure to follow procedures when approving work, which resulted in the temporary loss of shutdown cooling during the outage. In addition, the inspectors noted two other human performance issues (determined not to be violations of NRC requirements) occurred that related to failure to adhere to procedures. The two other issues were: (1) mechanics failed to properly pack a valve that resulted in a forced shutdown to make repairs; and, (2) technicians set the over-frequency relay setpoint too low that resulted in a trip of Reactor Recirculation Pump B, while at power. The findings were determined to be of very low safety significance.

The inspectors noted three self disclosing instances where human performance related problems resulted in adverse plant impacts. The three events are discussed below:

- On June 8, 2001, operators experienced an unexpected loss of shutdown cooling. Workers had initiated work on Relay MS-RLY-K85, which provided part of the closing logic for Valve RHR-V-8, shutdown cooling isolation. When technicians started the work, Valve RHR-V-8 automatically closed. The inspectors identified that the incident occurred because a control room supervisor (a senior reactor operator) failed to properly implement Procedure SWP-MAI-01, Step 3.5.7, which provides that operations ensure the plant is in the proper configuration to perform the desired work order task package. Specifically, the control room supervisor failed to verify proper plant configuration before approving the work.

  The loss of shutdown cooling was assessed using Manual Chapter 0609, Significance Determination Process, Appendix G, Shutdown Operations, for reactor vessel water level 23 feet above the vessel flange and greater than 2 hours before boiling would occur without decay heat removal. The inspectors found the event did not increase the likelihood of a loss of reactor coolant system inventory, degrade the ability to terminate a leak path, or significantly degrade the licensee's ability to recover decay heat removal. The inspectors noted the operators responded quickly to the challenge and restored shutdown cooling in 12 minutes. The finding was determined to be of very low safety significance (Green).

This issue constituted a violation of Technical Specification 5.4.1.a, which requires, in part, proper implementation of procedures recommended by Regulatory Guide 1.33, Appendix A, Revision 2. Regulatory Guide 1.33 recommends procedures for equipment control and for maintenance. The inspectors considered the safety impact more than minor because it resulted in an unplanned loss of safety-related decay heat removal capabilities and a challenge to plant operators. Based on the very low safety significance of this specific example and the licensee's action to include this issue in their corrective action program (Problem Evaluation Request 201-1171), this procedure violation is being treated as a noncited violation in accordance with Section VI.A of the NRC's Enforcement Policy (NCV 50-397/0104-01).

- On June 29, 2001, operators initiated a forced shutdown, in part, so that mechanics could repair feedwater system Containment Isolation Valve RFW-V-65A. The valve had developed a substantial steam packing leak (3 to 4 gallons per minute of water) even though mechanics had packed the valve during the outage. The inspectors identified that craftsmen failed to properly implement Procedure 10.2.79 when packing the valve in that the procedure required the craftsmen to inspect the stem. The licensee had determined that workers did not inspect the valve stem during the job; however, the licensee had erroneously determined that the procedure did not require the stem inspection.

  This issue did not constitute a violation of NRC requirements because valve packing is not a safety-related valve component. However, this human performance error resulted in a challenge to plant operators and, had the steam leak worsened, an increased risk for automatic closure of the main steam isolation valves (and scram) because of high steam tunnel temperatures. Accordingly, the inspectors concluded the issue had more than minor significance based on the finding could have a credible effect on safety. The finding affected initiating events. Specifically, the condition could credibly have led to high steam tunnel temperature which would result in a reactor scram and loss of the power conversion system. Although the power conversion system is a mitigating system, the finding did not result in a substantial increase in the initiating event frequency for reactor scram with loss of the power conversion system all ready analyzed under initiating events. Therefore, the senior reactor analyst determined that assessment of this condition using the initiating event cornerstone was appropriate. The inspectors found the issue was of very low safety significance (Green) based on the finding did not: (1) contribute to the likelihood of a primary or secondary system loss of coolant accident, (2) contribute to both a reactor scram and the unavailability of mitigating systems, (3) increase the likelihood of fire or flooding, or (4) result in an open pathway to containment. The problem is in the corrective action program as Problem Evaluation Request 201-1418.

- On July 5, 2001, Reactor Recirculation Pump B unexpectedly tripped, which resulted in reactor level perturbations but no reactor scram. The licensee

- identified that the pump tripped because technicians failed to follow Work Order 01011490-01 instructions. During an outage calibration, technicians incorrectly set the over-frequency relay at 54.7 hertz instead of 64.7 hertz.

  This issue did not constitute a violation of NRC requirements because the reactor recirculation pump over-frequency relay is not safety related. However, the human performance error resulted in a plant transient, which challenged operators and increased the potential for a plant scram. Consequently, the inspectors concluded this issue had a credible impact on safety. The inspectors utilized the significance determination process to evaluate the significance of the issue, which affected the initiating events cornerstone. The inspectors determined the issue had very low risk significance (Green) because the issue did not: (1) contribute to the likelihood of a primary or secondary system loss of coolant accident, (2) contribute to both a reactor scram and the unavailability of mitigating systems, and (3) increase the likelihood of fire or flooding. The problem is in the corrective action program as Problem Evaluation Request 201-1482.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

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

- Procedure SP-ELEC-M201, “Diesel Generator 1 - Monthly Operability Test,” Revision 11, observed on August 14, 2001

- Procedure OSP-ELEC-M101, “DO-TR-3A Operability Test of D/G Diesel Fuel Oil Day Tank,” Revision 1, completed on August 14, 2001

- Procedure OSP-SLC-B702, “Standby Liquid Control Loop B Injection Functional Test,” Revision 2, completed June 13, 2001

- Procedure OSP-SLC-B703, “Standby Liquid Control Pump Suction Flow Verification,” Revision 1, completed June 14, 2001

- Procedure OPS-SLC-M101, “Standby Liquid Control Valve Alignment and Squibb Valve Continuity Check,” Revision 1, completed August 14, 2001

- Procedure OSP-SLC/IST-Q701, “Standby Liquid Control Pump Operability Test,” Revision 7, completed August 9, 2001

- Procedure OSP-RHR-M102, “RHR [Residual Heat Removal] B Fill Verification,” Revision 1, procedure adequacy review completed July 13, 2001

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

Between August 20-24, 2001, the inspectors reviewed the following temporary modifications and their associated 10 CFR 50.59 safety/screening evaluations to ensure that the temporary modifications had not resulted in risk-significant plant impacts or unreviewed safety questions:

- Temporary Modification 01-034, install weld cap on Valve RFW-V-32B stuffing box
- Temporary Modification 01-003, install fuel sipping device on refuel bridge
- Temporary Modification 01-026, remove thermocouple from low pressure turbine
- Temporary Modification 01-008, disabling the loose parts detection system

The inspectors utilized the following documents for this inspection:

- Updated Final Safety Analysis Report
- Technical Specifications
- BWR [Boiling Water Reactors] Owners Group Topical Report NEDC-32975P, “Regulatory Relaxation for BWR Loose Parts Monitoring System,” July 2000
- NRC Safety Evaluation Report on NEDC-32975(P), January 25, 2001

b. Findings

No findings of significance were identified.

1EP2 Alert Notification System Testing (71114.02)

a. Inspection Scope

The inspectors observed a scheduled weekly siren system polling test and interviewed licensee telecommunication technicians responsible for conducting the tests. The

inspectors also reviewed the following documentation related to the offsite siren and tone alert radio systems to determine the adequacy of licensee methods for testing the alert and notification system in accordance with 10 CFR Part 50, Appendix E. The inspectors compared the siren testing program to the requirements of NUREG-0654, and Federal Emergency Management Agency REP-10:

- Procedure 6.2.3.2, “Emergency Response River Siren Polling Test,” Revision 3
- Procedure 6.2.24, “Siren Battery Clean and Inspect,” Revision 2
- Procedure 6.2.27, “FCC Equipment Operational Tests,” Revision 1
- Correspondence transmitting Federal Emergency Management Agency approval of siren system upgrades, 1994
- Washington Nuclear Project Number 2, Site Specific Offsite Radiological Emergency Preparedness Alert and Notification System, Quality Assurance Verification, May 19, 1994
- Description of the Early Warning System for the Washington Public Power Supply System Nuclear Plants 1, 2, and 4, December 1981
- WPS 2800 Series High Power Voice and Siren System, Installation and Instruction Manual, December 1991
- Preventative Maintenance Scheduled Activities Job 02194, Job 08013, Job 09008, Job 09174, Job 09199, and Job 12009

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization Augmentation Testing (71114.03)

a. Inspection Scope

The inspectors reviewed the following documents related to the emergency response organization augmentation system to determine the licensee ability to staff emergency response facilities in accordance with the licensee emergency plan and the requirements of 10 CFR Part 50, Appendix E:

- Procedure 13, “Dialogic Automated Notification System,” Revision 1
- Procedure 14, “Actions in the Event of a DANS Failure,” Revision 0
- Procedure 19, “Communications Test,” Revision 2
- Procedure 13.4.1, “Emergency Notifications,” Revision 25

- Procedure 13.10.1, “Control Room Operations and Shift Manager Duties,” Revision 20

- Drill Reports for Quarterly Notification Drills conducted January 18, 2000, April 25, 2000, October 26, 2000, January 23, 2001, and April 24, 2001

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors reviewed the Columbia Generating Station Emergency Plan, Revision 29, submitted June 28, 2001, against 10 CFR 50.54(q) to determine if the revision decreased the effectiveness of the plan.

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies (71114.05)

a. Inspection Scope

The inspectors reviewed the following documents related to the corrective action program to determine the licensee’s ability to identify and correct problems in accordance with 10 CFR 50.47(b)(14) and 10 CFR Part 50, Appendix E. The inspectors verified the corrective actions for a sampling of problem evaluation requests. The inspectors also interviewed the lead auditors responsible for Audit AU-EP-01 and staff in the corrective action group.

- Procedure SWP-CAP-01, “Problem Identification Requests,” Revision 2

- Procedure SWP-ASU-01, “Evaluations of Programs, Processes, and Suppliers,” Revision 8

- Audit plan for Quality Audit AU-EP-01 Emergency Preparedness Program, December 13, 2000

- Emergency Preparedness Audit AU-EP-01, April 10, 2001
  - Checklist 6, Corrective Actions (EP16)
  - Checklist 7, Corrective Actions (EP16)
  - Checklist 11, Offsite Interfaces (EP22)

- Emergency Preparedness Functional Area Report, AU-EP-01-1, October 10, 2000
- Emergency Preparedness Follow Up Assessment, Surveillance Report SR2000-014, May 9, 2000
- Emergency Preparedness Record Retention Self Assessment, PTL 160482, February 23, 2000
- Summaries of 62 corrective actions assigned to the emergency preparedness department during calendar years 1999 and 2000
- Details of 11 selected problem evaluation requests
- Drill evaluation reports for drills conducted on February 22, 2000; April 11, 2000; May 31, 2000; June 6, 2000; July 25, 2000; August 12, 2000; January 30, 2001; and February 27, 2001

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors observed an emergency preparedness drill on August 28, 2001, in order to evaluate the critique process, drill conduct, and drill performance. The inspectors reviewed the drill scenario and the Columbia Generating Station Emergency Plan, Revision 30, as part of this inspection.

b. Findings

No findings of significance were identified.

2. Radiation Safety

Cornerstones: Occupational Radiation Safety, Public Radiation Safety

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
- 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 refueling outage work activities that resulted in the highest personnel collective exposures during Refueling Outage 15 (Drywell In service-Inspections/Eddy Current Support RWP 30000198, Reactor Pressure Vessel Nozzle Work RWP 30000462, and Removal/Replacement of Main Steam Relief Valves RWP 30000351)
- Use of engineering controls to achieve dose reductions including temporary shielding
- Hot spot tracking and reduction program
- Radiological work planning
- A summary of ALARA and radiological worker performance related to corrective action reports written since May 1, 2000. The inspectors reviewed in detail the following 11 problem evaluation requests: 200-1015, 201-0012, 201-0027, 201-0051, 201-0338, 201-0439, 201-0980, 201-0981, 201-1039, 201-1119, and 201-1305
- Declared pregnant worker dose monitoring controls
- Quality Service Audit AU-RP-01-1

No work was performed in high exposure or high radiation areas during this inspection. Therefore, this aspect of the above procedure could not be evaluated.

b. Findings

No findings of significance were identified.

2OS3 Radiation Monitoring Instrumentation (71121.03)

a. Inspection Scope

The inspectors interviewed cognizant licensee personnel and compared the following items to regulatory requirements:

- Calibration, operability, and alarm setpoint, when applicable, of selected portable radiation detection instrumentation, continuous air monitors, whole-body counting equipment, electronic alarming dosimeters, personnel contamination monitors, area radiation monitors (ARM-2, ARM-7), containment high range monitor (CMS-RE-27A, E, and F), main steam line monitor (MS-RE-3A), closed cooling water monitor (RCC-RE-7), and control room fresh air intake monitor (WOA-RE-31B)

- Calibration expiration and source response check currency on radiation detection instruments staged for use

- The status and surveillance records of self-contained breathing apparatuses staged and ready for use in the plant

- Licensee capability for refilling and transporting self-contained breathing apparatus air bottles to and from the control room and operations support center during emergency conditions

- Control room operator and emergency response personnel training and qualifications for use of self-contained breathing apparatus

- Licensee self-assessments (SA-00-053) and audits (AU-RP-01-1)

- Selected problem evaluation requests (200-0406, 200-0944, 200-0949, 200-0958, 200-1003, 201-0223, 201-0434, and 201-1317) that involved radiation monitoring instrument deficiencies or self-contained breathing apparatuses since the last inspection in this area

b. Findings

No findings of significance were identified.

2PS3 Radiological Environmental Monitoring Program and Radioactive Material Control Program (71122.03)

a. Inspection Scope

The inspectors interviewed members of the radiation protection staff responsible for implementing the radiological environmental and meteorological monitoring programs and inspected 11 environmental monitoring stations. These stations included four environmental air sampler stations (1, 4, 21, and 57), three surface water sample stations (26, 27, and 29), and four thermoluminescent dosimeter locations (1, 4, 21, and 47). The inspectors observed the preparation for analysis of 12 airborne particulate and charcoal samples and the collection and preparation for analysis of three surface water samples. The inspectors visited and inspected the primary meteorological tower and verified the meteorological instrument data displays in the control room and the emergency offsite facility. The inspectors also observed the licensee survey materials for release from the radiologically controlled area. The inspectors reviewed

and compared the following items with regulatory requirements to verify the impact of radioactive effluent releases to the environment and to ensure that the licensee performed surveys and established controls to prevent the inadvertent release of licensed materials into the public domain:

- Implementing procedures for the radiological environmental monitoring program, as described in the Offsite Dose Calculation Manual

- Number and location descriptions of the environmental sampling stations to determine that the environmental sampling program was representative of the effluent release pathways

- Environmental sampling schedules for 2000 and 2001, sample collection and analysis data records to determine any missed samples, inoperable samplers, and lost thermoluminescent dosimeters

- Environmental sample analytical results to determine proper analysis detection sensitivities and any positive sample analysis results

- Calendar year 1999 and 2000 annual land use census reports and any resulting changes to the radiological environmental monitoring program

- Calibration and maintenance records for five air samplers

- The vendor environmental laboratory's performance in the interlaboratory comparison program for 1999 and 2000

- Meteorological monitoring instrumentation calibration procedures and records

- Meteorological instrument operability, reliability, and annual meteorological data recovery

- Calendar year 1999 and 2000 Annual Environmental Operating Reports

- Calendar year 1999 and 2000 Annual Radioactive Effluent Release Reports

- Offsite Dose Calculation Manual, Amendment 32, issued December 2000 and Amendment 33, issued May 2001

- Procedures, methods, criteria, and instruments used to survey, control, and release materials from the radiologically controlled area

- Calibration procedures and records for instruments used to perform material release radiological surveys

- Detection sensitivities of radiation survey instruments used for contamination measurements prior to release of materials from the radiologically controlled

areas, including screening levels for commonly found site-specific surface contamination radio nuclides

- Quality Services Audit Report AU-CH-00, "Radiological Environmental Monitoring Program, Offsite Dose Calculation Manual, Radiological Effluent Monitoring Program, and Non-Radiological Effluent and Environmental Monitoring Program," performed September 13 through November 2, 2000

- Energy Northwest Commercial Grade Survey Audit 00-CG-01 of the Battelle Pacific Northwest National Laboratory's Hanford External Dosimetry Quality Assurance Program including their environmental thermoluminescent dosimetry quality control activities performed February 9-10, 2000

- Nuclear Procurement Issues Committee Joint Audit Report Number A1269823 of Teledyne Brown Engineering - Environmental Services performed January 30 through February 2, 2001

- Summary of problem evaluation requests related to the radiological environmental monitoring program, meteorological monitoring program, and release of licensed radioactive material written since the previous inspection conducted in January 2000. The inspectors reviewed the following 14 problem evaluation requests in detail: 200-0078, 200-0213, 200-0469, 200-1663, 200-1674, 200-1777, 201-0189, 201-0215, 201-0341, 201-0511, 201-0589, 201-0748, 201-0753, and 201-1145)

b. Findings

No findings of significance were identified.

3. SAFEGUARDS

Cornerstone: Physical Protection

3PP1 Access Authorization (71130.01)

a. Inspection Scope

The inspectors:

- Reviewed the safeguards event logs for the third and fourth quarters of 2000 and first and second quarters of 2001 to identify problems in the access authorization program

- Reviewed Fitness-for-Duty Audit AU-FD-00, dated January 22, 2001

- Interviewed five supervisors/managers and five individuals who had been trained to escort visitors into the protected and/or vital areas to determine their

knowledge and understanding of their responsibilities in the behavior observation program

- Reviewed two semiannual fitness-for-duty reports, dated August 28, 2000 and February 23, 2001

- Reviewed 14 fitness-for-duty records that resulted from tests for cause

b. Findings

No findings of significance were identified.

3PP2 Access Control (71130.02)

a. Inspection Scope

The inspectors:

- Reviewed the safeguards event logs for the third and fourth quarters of 2000 and first and second quarters of 2001 to identify problems in the access control program

- Reviewed Procedures SPIP-SEC-06, "Vehicle Escort Officer, Vehicle Search Officer, and Protected Area Perimeter Gates," Revision 6; SPIP-SEC-19, "Lock and Key Control," Revision 1; SPIP-SEC-05, "Personnel Search Officer, Access Control/Security Communications Center Officer, Protected Area Access Point," Revision 3; and SPIP-SEC-14, "Communications Procedures," Revision 3

- Interviewed security personnel concerning the proper operation of the explosive and metal detectors, X-ray devices, and key card readers

- Observed licensee testing of access control equipment and the ability of security personnel to control personnel, packages, and vehicles entering the protected area

- Reviewed the access control records of five licensee personnel in order to determine that the licensee granted access to vital equipment and vital areas to authorized personnel having an identified need for that access

- Reviewed the quality assurance audit of the Security/Access Authorization Program Audit AU-SE-00, dated November 16, 2000

- Interviewed key security department and plant support personnel to determine their knowledge and use of the corrective action reports and resolution of problems regarding repair of security equipment

- Reviewed Problem Evaluation Requests 200-2121, 200-2195, 201-0131, and 201-0969

b. Findings

No findings of significance were identified.

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

.1 Reactor Related Performance Indicators

a. Scope

For reactor specific performance indicators, the inspectors utilized NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 0, and independently calculated the following performance indicator data by reviewing operator logs, maintenance records, and corrective action documents. The inspectors compared their calculated results to the data submitted to the NRC to verify the accuracy of the information:

- Unplanned scrams per 7000 critical hours
- Scrams with loss of normal heat removal
- Unplanned power changes per 7000 critical hours
- Reactor core insolation cooling system unavailability
- Safety system functional failures

b. Findings

No findings of significance were identified.

.2 Security Related Performance Indicators

a. Scope

For security-related performance indicators, the inspectors reviewed the program for collection and submittal of performance indicator data. Specifically a random sampling of security event logs and corrective action reports for the first and second quarter of 2001 were reviewed for the following program areas:

- Fitness-for-duty program performance
- Access authorization program performance
- Perimeter detection system performance
- Assessment aids system performance

b. Findings

No findings of significance were identified.

.3 Emergency Preparedness Performance Indicators

A. Drill and Exercise Performance

a. Inspection Scope

The inspectors reviewed the following documents related to the drill and exercise performance indicator in order to verify the reported data:

- Drill schedules for calendar years 2000 and 2001
- Drill objectives and scenarios for the third and fourth quarters of calendar year 2000 and for the first quarter of calendar year 2001
- Drill records (completed offsite notification forms, participant checklists, etc.) for the third and fourth quarters of calendar year 2000 and for the first quarter of calendar year 2001
- Drill evaluation worksheets for the third and fourth quarters of calendar year 2000 and for the first quarter of calendar year 2001
- Performance indicator summary sheets for the third and fourth quarters of calendar year 2000 and for the first quarter of calendar year 2001
- Performance indicator reports for the third and fourth quarters of calendar year 2000 and for the first quarter of calendar year 2001

b. Findings

No findings of significance were identified.

B. Emergency Response Organization Drill Participation

a. Inspection Scope

The inspectors reviewed the following records related to emergency response organization drill and exercise participation in order to verify the reported data:

- Emergency response organization rosters for the third and fourth quarters of calendar year 2000 and the roster for the first quarter of calendar year 2001
- List of key emergency response organization positions
- Drill participation records for a sample of 10 emergency responders

- Performance indicator summary sheets for the third and fourth quarters of calendar year 2000 and for the first quarter of calendar year 2001
- Performance indicator reports for the third and fourth quarters of calendar year 2000 and for the first quarter of calendar year 2001

b. Findings

No findings of significance were identified.

C. Alert and Notification System Reliability

a. Inspection Scope

The inspectors reviewed original siren test data for third and fourth quarters of calendar year 2000 and for the first quarter of calendar year 2001 to verify the accuracy of data reported for this performance indicator.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed corrective actions associated with Problem Evaluation Request 201-0051.

b. Findings

The inspectors identified a noncited violation with very low safety significance (Green) for failure to survey an area after plant system conditions changed. The licensee wrote Problem Evaluation Request 201-0051 because the actual dose associated with Reactor Closed Cooling Valve-610 repairs exceeded the planned dose, 109 mrem to 45 mrem, respectively.

During the review of Problem Evaluation Request 201-0051, the inspectors identified that the licensee had appropriately evaluated the operational issues associated with draining a system but failed to review the radiological issues. Problem Evaluation Request 201-0051 discussed that mechanics began repairs on Reactor Closed Cooling Valve-610, located on Spent Fuel Pool Cooling Heat Exchanger-1A, and found the system not completely drained. The workers identified and corrected the problem with the drain hose and waited in a low dose area approximately 45 minutes while the system finished draining. The licensee took corrective actions associated with the drain hose being too long and not properly routed.

However, the licensee did not address the radiological consequences associated with not surveying an area after completely draining a component. Although originally planned for 45 mrem, the workers received an exposure of 109 mrem. The workers did not request that radiation protection personnel perform a survey to determine the radiological conditions after completely draining the heat exchanger.

10 CFR 20.1501(a) requires surveys to determine the radiological conditions and the potential radiological hazards. The failure to perform a survey after completely draining the spent fuel pool cooling heat exchanger is a violation of 10 CFR 20.1501(a). This occurrence is being treated as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. This violation is in the corrective action program as Problem Evaluation Request 201-1601 (50-397/01004-02).

4OA4 Crosscutting Issues

.1 Substantive Human Performance Issue

The inspectors identified a performance trend associated with procedural adherence during maintenance activities. Examples include: (1) a senior reactor operator failed to follow procedures when approving work, which resulted in the loss of shutdown cooling during the outage (noncited violation in Section 1R20.b); (2) craftsmen failed to properly implement procedures when packing a feedwater valve, which resulted in a substantial packing leak at power, requiring a plant shutdown to repair (refer to Section 1R20.b); (3) craftsmen failed to properly set a reactor recirculation pump over-frequency relay, which resulted in the pump unexpectedly tripping and causing a plant transient while at power (refer to Section 1R20.b); and (4) five months prior to this inspection period, craftsmen failed to properly restore an instrument isolation valve to the open position following a surveillance, which rendered a scram discharge volume high level switch, part of the reactor protection system logic, inoperable for three months (NCV 50-397/01003-06). These individual findings have each had a direct or credible impact on safety and increased the risk of initiating events or affected the reliability, operability, or functionality of mitigating equipment. This performance trend is considered a substantive crosscutting issue indicating a performance trend and is a finding characterized as No Color.

4OA5 Other

.1 (Closed) URI 50-397/01003-04: Questionable emergency diesel generator testing. The inspectors had identified that the test schedule permitted the performance of multiple emergency diesel generator surveillances (on the same unit) in a manner that did not ensure that the diesel engines cooled to the normal standby temperatures before subsequent testing. The inspectors expressed concern that this practice could result in testing an emergency diesel generator at substantially warmer temperatures than might be permitted by the Technical Specification Bases. In response to the concern, the licensee performed baseline testing and determined that the diesel engines required 12 minutes to cool to 155°F, the upper temperature limit. The licensee checked tests records to ensure that all diesel engines had cooled for at least 12 minutes between tests. One surveillance had to be repeated. The licensee justified their testing methods

and performed required testing, as necessary, prior to relying on the surveillances to justify emergency diesel generator operability. As such, no violation of NRC requirements occurred and the initial finding had only minor safety significance.

In addition, the inspectors wanted to evaluate whether using the 155°F temperature limit in lieu of the normally expected standby temperature of 130°F. Upon further review, the inspectors found that this position satisfied the Technical Specification Surveillance Requirements.

4OA6 Management Meetings

Exit Meeting Summary

Several exit meetings were conducted with plant senior managers and other members of the licensee's staff. Specifically, a senior health physicist presented the radiation monitoring instrumentation inspection results to Mr. S. Oxenford, Plant General Manager on July 13, 2001. A senior health physics inspector presented the ALARA planning and controls inspection results to Mr. G. Smith, Vice President, Generation on July 26. An emergency preparedness inspector presented his results to Mr. R. Webring, Vice President, Operation Support, on July 27. On August 2, a senior security inspector and a senior health physics inspector presented the security and environmental monitoring and material control inspection results to Mr. J. Wyrick, Manager, Resource Protection and Mr. D. Feldman, Operations Manager, respectively. Finally, the senior resident inspector presented the remainder of the inspection results to Mr. S. Oxenford on September 27. The licensee acknowledged the inspection results during each meeting. Following the meetings, the inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. Some proprietary information was identified by the licensee but no mention of any proprietary details were made in this report.

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
D. Feldman, Manager, Operations
V. Harris, Maintenance Manager
T. Messersmith, Corporate Emergency Preparedness, Safety and Health Officer
R. Sherman, Manager, Licensing
W. Oxenford, Plant General Manager
J. Peters, Manager, Radiation Services
R. Sherman, Acting Manager, Licensing
G. Smith, Vice President, Generation
C. Townsend, Corrective Action Program Manager
R. Webring, Vice President, Operation Support
S. Wood, Manager, Chemistry
J. Wyrick, Manager, Resource Protection

ITEMS OPENED AND CLOSED

Items Opened, Closed, and Discussed During this Inspection

Opened

Opened and Closed During this Inspection

50-397/01004-01	NCV	Failure to follow procedures results in loss of shutdown cooling (Section 1R20)
50-397/01004-02	NCV	Failure to survey (Section 4OA2)

Previous Items Closed

50-397/01003-04	URI	Questionable emergency diesel generator testing (Section 4A05)

Previous Items Discussed

None