UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

February 8, 2011

Mr. M.E. Reddemann
Chief Executive Officer
Energy Northwest
P.O. Box 968, Mail Drop 1023
Richland, WA 99352-0968

Subject: COLUMBIA GENERATING STATION - NRC INTEGRATED INSPECTION REPORT 05000397/2010005

Dear Mr. Reddemann:

On December 31, 2010, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Columbia Generating Station. The enclosed integrated inspection report documents the inspection findings, which were discussed on January 6, 2011, with you 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. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, four NRC identified findings were evaluated under the risk significance determination process as having very low safety significance (Green). The NRC has determined that violations are associated with these issues. However, because of the very low safety significance and because they were entered into your corrective action program, the NRC is treating these findings as noncited violations, consistent with Section 2.3.2.a of the NRC Enforcement Policy.

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 your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001, with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 612 E. Lamar Blvd, Suite 400, Arlington, Texas, 76011-4125; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001; and the NRC Resident Inspector at the facility. In addition, if you disagree with the cross-cutting aspect assigned to any finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region IV, and the NRC Resident Inspector at the facility.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response, if you choose to provide one for cases where a response is not required, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal, privacy, or proprietary information so that it can be made available to the public without redaction.

Sincerely,

/RA/

Wayne Walker, Chief
Project Branch A
Division of Reactor Projects

Docket: 50-397
License: NPF-21

Enclosure:
NRC Inspection Report 05000397/2010005
w/ Attachment: Supplemental Information

cc w/Enclosure:

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C:DRS/OB	C:DRS/PSB1	C:DRS/PSB2	C:DRS/TSB	C:DRP/A
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U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket:	05000397
License:	NPF-21
Report:	05000397/2010005
Licensee:	Energy Northwest
Facility:	Columbia Generating Station
Location:	Richland, WA
Dates:	September 26, 2010 through December 31, 2010
Inspectors:	R. Cohen, Senior Resident Inspector M. Hayes, Resident Inspector
Approved By:	W. Walker, Chief, Project Branch A Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000397/2010005; 09/26/2010 – 12/31/2010; Columbia Generating Station, Integrated Resident and Regional Report; Maintenance Risk Assessment and Emergent Work Control, Postmaintenance Testing, Identification and Resolution of Problems.

The report covered a 3-month period of inspection by resident inspectors. Four Green noncited violations of significance were identified. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using Inspection Manual Chapter 0609, "Significance Determination Process." The cross-cutting aspect is determined using Inspection Manual Chapter 0310, "Components within the Cross-Cutting Areas." Findings for which the significance determination process does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified Findings and Self-Revealing Findings

Cornerstone: Initiating Events

- Green. The inspectors identified a noncited violation of 10 CFR 50.65(a)(4) for the licensee's failure to perform a risk assessment during lifting activities in the circulating water pump house. Specifically, licensee personnel failed to assess the increase in risk during movement of a circulating water pump motor over operating equipment. Licensee personnel performed a risk assessment and determined the correct risk profile for the movement of the circulating water pump motor. This issue was placed in the licensee's corrective action program as Action Request/Condition Report 228710.

  The performance deficiency was more than minor because it involved a failure to assess risk during a maintenance activity. The performance deficiency affected the equipment performance attribute of the Initiating Events Cornerstone objective to limit the likelihood of events that upset plant stability. The inspectors evaluated the performance deficiency using Inspection Manual Chapter 0609, Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process," and determined the performance deficiency to be of very low safety significance because the risk deficit during the time the motor was being moved was less than 1.0E-6. The inspectors determined the violation had a cross-cutting aspect in the area of human performance, resources component, for the failure to provide up to date procedures in the work order planning process that would incorporate risk insights during lifting operations around operating plant equipment [H.2.c] (Section 1R13).

Cornerstone: Mitigating Systems

- Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure

to follow Procedure PPM 10.2.53, "Seismic Requirements for Scaffolding, Ladders, Man-Lifts, Tool Gang Boxes, Hoists, Metal Storage Cabinets, and Temporary Shielding Racks," Revision 26. Specifically, the position of equipment was required to meet specific criteria to prevent damage to safety-related equipment during a seismic event. Contrary to this procedure, the inspectors identified that equipment was positioned adjacent to safety-related equipment without a supporting engineering evaluation. The inspectors notified the main control room personnel, who directed an equipment operator to immediately position the 55 gallon drum away from the standby liquid control system. This issue has been placed in the licensee's corrective action program as Action Request/Condition Report 230872.

This finding was more than minor because it was a human performance error which affected the Mitigating Systems Cornerstone objective to ensure the availability and reliability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance because it was not a design or qualification deficiency; it did not result in the loss of a system safety function; it did not represent the loss of a single train for greater than technical specification allowed outage time; it did not represent a loss of one or more non-technical specification risk-significant equipment for greater than 24 hours; and it did not screen as potentially risk significant due to seismic, flooding, or severe weather. A cross-cutting aspect in the human performance area with a work control component was identified in that Energy Northwest failed to appropriately plan work, resulting in job site conditions which may have impacted plant components [H.3.a] (Section 4OA2).

- Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to include acceptance criteria appropriate to the circumstance in surveillance testing procedures for the 125Vdc battery system. Specifically, licensee personnel listed a non-conservative inter-tier resistance value as acceptance criteria which led to a degraded condition being unanalyzed for 3 years. The licensee has revised the procedure to include the appropriate acceptance criteria for the 125Vdc battery system. This issue has been placed in the licensee's corrective action program as Action Request/Condition Report 231971.

  The performance deficiency is more than minor because it affects the equipment performance attribute of the mitigating systems cornerstone for ensuring the reliability of systems that respond to initiating events. Using Inspection Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," the inspectors determined that this performance deficiency was of very low safety significance because the finding was confirmed to not result in a loss of operability for the 125Vdc batteries. The inspectors determined a cross cutting aspect was not applicable to the finding due to the procedure change which implemented the new acceptance criteria occurring in 2007, and determined this not to be representative of current licensee performance (Section 1R19).

- Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to promptly identify and correct a condition adverse to quality involving both trains of control room emergency chillers. The hot gas bypass valves for each train of chillers were installed incorrectly. The inspectors identified that actions to correct the deficient condition were not timely. Procedure SWP-MAI-01, "Work Maintenance Process Overview," Revision 20, Paragraph 8.0 stated in part that tests are conducted to verify that maintenance is effective and is correctly implemented, the equipment will function as required and desired improvements were achieved. Contrary to this, the inspectors identified that post maintenance testing conducted on the chiller was not adequate in that adjustments were allowed to be made by procedure throughout the post maintenance testing process which could have masked problems with the chillers, specifically, that the hot gas bypass valves were installed incorrectly. The hot gas bypass valves were installed correctly in both A and B trains of the control room emergency chiller systems and a satisfactory operability test was performed on chiller CCH-CR-1A on October 13, 2010.

  The finding was greater than minor because it was associated with the configuration control attribute of the Mitigating Systems Cornerstone, and it affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors conducted a Phase 1 screening of the finding in accordance with IMC 0609, Attachment 0609.04, “Initial Screening and Characterization of Findings,” and determined the finding to be of very low safety significance because it was not a design or qualification deficiency; it did not result in the loss of a system safety function; it did not represent the loss of a single train for greater than technical specification allowed outage time; it did not represent a loss of one or more non-technical specification risk-significant equipment for greater than 24 hours; and it did not screen as potentially risk-significant due to seismic, flooding, or severe weather. The cause of this finding was determined to have no cross-cutting aspect due to the fact that the hot gas bypass valves were installed backwards more than three years ago and did not represent a current station performance issue (Section 1R19).

B. Licensee-Identified Violations

None

REPORT DETAILS

Summary of Plant Status

The plant began the inspection period at 100 percent power. The plant remained at 100 percent power for the remainder of the inspection period except for planned power reductions to support maintenance and testing.

1. REACTOR SAFETY

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

1R01 Adverse Weather Protection (71111.01)

.1 Readiness for Seasonal Extreme Weather Conditions

a. Inspection Scope

The inspectors performed a review of the adverse weather procedures for seasonal extremes (e.g., extreme high temperatures, extreme low temperatures, or hurricane season preparations). The inspectors verified that weather-related equipment deficiencies identified during the previous year were corrected prior to the onset of seasonal extremes, and evaluated the implementation of the adverse weather preparation procedures and compensatory measures for the affected conditions before the onset of, and during, the adverse weather conditions.

During the inspection, the inspectors focused on plant-specific design features and the procedures used by plant personnel to mitigate or respond to adverse weather conditions. Additionally, the inspectors reviewed the FSAR and performance requirements for systems selected for inspection, and verified that operator actions were appropriate as specified by plant-specific procedures. Specific documents reviewed during this inspection are listed in the attachment. The inspectors also reviewed corrective action program items to verify that plant personnel were identifying adverse weather issues at an appropriate threshold and entering them into their corrective action program in accordance with station corrective action procedures. The inspectors' reviews focused specifically on the following plant systems:

- November 18-19, 2010, diesel generator rooms and service water pump houses for cold weather preparations

These activities constitute completion of one readiness for seasonal adverse weather sample as defined in Inspection Procedure 71111.01-05.

b. Findings

No findings were identified.

.2 Readiness for Impending Adverse Weather Conditions

a. Inspection Scope

Since extreme cold conditions were forecast in the vicinity of the facility for November 24, 2010, the inspectors reviewed overall preparations/protection for the expected weather conditions. The inspectors inspected the transformer yard, diesel generators, and service water systems because their safety-related functions could be affected or required as a result of the extreme cold conditions forecast for the facility. The inspectors observed insulation, heat trace circuits, space heater operation, and weatherized enclosures to ensure operability of affected systems. The inspectors reviewed licensee procedures and discussed potential compensatory measures with control room personnel. The inspectors focused on plant management's actions for implementing the station's procedures for ensuring adequate personnel for safe plant operation and emergency response would be available. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of one readiness for impending adverse weather condition sample as defined in Inspection Procedure 71111.01-05.

b. Findings

No findings were identified.

1R04 Equipment Alignments (71111.04)

.1 Partial Walkdown

a. Inspection Scope

The inspectors performed partial system walkdowns of the following risk-significant systems:

- October 6, 2010, after fill verification of high pressure core spray system
- November 1, 2010, circulating water system during lifting activities
- December 20, 2010, containment instrument air system

The inspectors selected these systems based on their risk significance relative to the reactor safety cornerstones at the time they were inspected. The inspectors attempted to identify any discrepancies that could affect the function of the system, and, therefore, potentially increase risk. The inspectors reviewed applicable operating procedures, system diagrams, FSAR, technical specification requirements, administrative technical specifications, outstanding work orders, condition reports, and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have rendered the systems incapable of performing their intended functions. The inspectors also inspected accessible portions of the systems to verify system

components and support equipment were aligned correctly and operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no obvious deficiencies. The inspectors also verified that the licensee had properly identified and resolved equipment alignment problems that could cause initiating events or impact the capability of mitigating systems or barriers and entered them into the corrective action program with the appropriate significance characterization. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of three partial system walkdown samples as defined in Inspection Procedure 71111.04-05.

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05)

.1 Quarterly Fire Inspection Tours

a. Inspection Scope

The inspectors conducted fire protection walkdowns that were focused on availability, accessibility, and the condition of firefighting equipment in the following risk-significant plant areas:

- September 29, 2010, fire area RC-2, cable spreading room
- September 30, 2010, Technical Support Center heating, ventilation and air conditioning room
- October 15, 2010, TG-1, Turbine Building 471 foot elevation, digital electro-hydraulic pump area
- November 22, 2010, fire area RC-6, division 2 battery room

The inspectors reviewed areas to assess if licensee personnel had implemented a fire protection program that adequately controlled combustibles and ignition sources within the plant; effectively maintained fire detection and suppression capability; maintained passive fire protection features in good material condition; and had implemented adequate compensatory measures for out of service, degraded or inoperable fire protection equipment, systems, or features, in accordance with the licensee's fire plan. The inspectors selected fire areas based on their overall contribution to internal fire risk as documented in the plant's Individual Plant Examination of External Events with later additional insights, their potential to affect equipment that could initiate or mitigate a plant transient, or their impact on the plant's ability to respond to a security event. Using the documents listed in the attachment, the inspectors verified that fire hoses and extinguishers were in their designated locations and available for immediate use; that

fire detectors and sprinklers were unobstructed; that transient material loading was within the analyzed limits; and fire doors, dampers, and penetration seals appeared to be in satisfactory condition. The inspectors also verified that minor issues identified during the inspection were entered into the licensee's corrective action program. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of four quarterly fire-protection inspection samples as defined in Inspection Procedure 71111.05-05.

b. Findings

No findings were identified.

1R11 Licensed Operator Requalification Program (71111.11)

a. Inspection Scope

On November 2, 2010, the inspectors observed a crew of licensed operators in the plant's simulator to verify that operator performance was adequate, evaluators were identifying and documenting crew performance problems, and training was being conducted in accordance with licensee procedures. The inspectors evaluated the following areas:

- Licensed operator performance
- Crew's clarity and formality of communications
- Crew's ability to take timely actions in the conservative direction
- Crew's prioritization, interpretation, and verification of annunciator alarms
- Crew's correct use and implementation of abnormal and emergency procedures
- Control board manipulations
- Oversight and direction from supervisors
- Crew's ability to identify and implement appropriate technical specification actions and emergency plan actions and notifications

The inspectors compared the crew's performance in these areas to preestablished operator action expectations and successful critical task completion requirements. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of one quarterly licensed-operator requalification program sample as defined in Inspection Procedure 71111.11.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors evaluated degraded performance issues involving the following risk significant systems:

- October 19, 2010, Action Request/Condition Report 218546, “Control Room Emergency Chiller CCh-CR-1A Unreliable”

The inspectors reviewed events such as where ineffective equipment maintenance has resulted in valid or invalid automatic actuations of engineered safeguards systems and independently verified the licensee's actions to address system performance or condition problems in terms of the following:

- Implementing appropriate work practices
- Identifying and addressing common cause failures
- Scoping of systems in accordance with 10 CFR 50.65(b)
- Characterizing system reliability issues for performance
- Charging unavailability for performance
- Trending key parameters for condition monitoring
- Ensuring proper classification in accordance with 10 CFR 50.65(a)(1) or -(a)(2)
- Verifying appropriate performance criteria for structures, systems, and components classified as having an adequate demonstration of performance through preventive maintenance, as described in 10 CFR 50.65(a)(2), or as requiring the establishment of appropriate and adequate goals and corrective actions for systems classified as not having adequate performance, as described in 10 CFR 50.65(a)(1)

The inspectors assessed performance issues with respect to the reliability, availability, and condition monitoring of the system. In addition, the inspectors verified maintenance effectiveness issues were entered into the corrective action program with the appropriate significance characterization. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of one quarterly maintenance effectiveness sample as defined in Inspection Procedure 71111.12-05.

b. Findings

No findings were identified.

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

a. Inspection Scope

The inspectors reviewed licensee personnel's evaluation and management of plant risk for the maintenance and emergent work activities affecting risk-significant and safety-related equipment listed below to verify that the appropriate risk assessments were performed prior to removing equipment for work:

- November 2, 2010, circulating water system motor and pump lifting activities

The inspectors selected these activities based on potential risk significance relative to the reactor safety cornerstones. As applicable for each activity, the inspectors verified that licensee personnel performed risk assessments as required by 10 CFR 50.65(a)(4) and that the assessments were accurate and complete. When licensee personnel performed emergent work, the inspectors verified that the licensee personnel promptly assessed and managed plant risk. The inspectors reviewed the scope of maintenance work, discussed the results of the assessment with the licensee's probabilistic risk analyst or shift technical advisor, and verified plant conditions were consistent with the risk assessment. The inspectors also reviewed the technical specification requirements and inspected portions of redundant safety systems, when applicable, to verify risk analysis assumptions were valid and applicable requirements were met. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of one maintenance risk assessments and emergent work control inspection sample as defined in Inspection Procedure 71111.13-05.

b. Findings

Introduction: The inspectors identified a Green noncited violation of 10 CFR 50.65(a)(4) for the licensee’s failure to perform a risk assessment during lifting activities in the circulating water pump house on November 2, 2010.

Description: On November 2, 2010 the inspectors observed lifting and rigging activities in the circulating water pump house. The licensee was preparing to lift one circulating water motor from its pedestal to a truck, so the motor could be sent off for maintenance. The inspectors determined a risk assessment had not been performed for the movement of the motor. The inspectors questioned the licensee staff as to what the risk was during the movement of the motor based on the plant configuration. Licensee staff performed a risk assessment and determined the risk category to be one level higher than what was

reported during the lifting activities. The licensee's investigation determined that the work order planning process did not adequately evaluate the risk of lifting loads above operating equipment.

Analysis: The failure to perform a risk assessment was a performance deficiency. The performance deficiency was more than minor because it involved a failure to assess risk during a maintenance activity. The performance deficiency affected the equipment performance attribute of the Initiating Events Cornerstone objective to limit the likelihood of events that upset plant stability. The inspectors evaluated the performance deficiency using Inspection Manual Chapter 0609, Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process," and determined the performance deficiency to be of very low safety significance (Green) because the risk deficit during the time the motor was being moved was less than 1.0E-6. The inspectors determined the violation had a cross-cutting aspect in the area of human performance, resources component, for the failure to provide up to date procedures in the work order planning process that would incorporate risk insights during lifting operations around operating plant equipment [H.2.c].

Enforcement: Title 10 CFR 50.65(a)(4), states, in part, that the licensee shall assess and manage the increase in risk that may result from proposed maintenance activities. Contrary to the above, on November 2, 2010, the licensee failed to assess the increase in risk during lifting and rigging activities inside the circulating water pump house. Because this violation was of very low safety significance and has been entered into the licensee's corrective action program as Action Request 228710, this violation is being treated as a noncited violation, consistent with Section 2.3.2.a of the NRC Enforcement Policy: NCV 05000397/2010005-01, "Inadequate Risk Assessment During Lifting Activities."

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed the following issues:

- October 19, 2010, Action Request/Condition Report 227524, "Unexpected Trip of SGT-FN-1A1 during containment inerting"
- October 28, 2010, Action Request/Condition Report 228094, "Service Water System Piping 18" SW(22)-2-2 corrosion"
- November 4, 2010, Action Request/Condition Report 228614, "DMA-TIC-22/2 Indicating Off Scale High"
- November 9, 2010, Work Order 01185837, "CRD-LIS-601C is reading erroneously high"

The inspectors selected these potential operability issues based on the risk significance of the associated components and systems. The inspectors evaluated the technical

adequacy of the evaluations to ensure that technical specification operability was properly justified and the subject component or system remained available such that no unrecognized increase in risk occurred. The inspectors compared the operability and design criteria in the appropriate sections of the technical specifications and FSAR to the licensee personnel's evaluations to determine whether the components or systems were operable. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled. The inspectors determined, where appropriate, compliance with bounding limitations associated with the evaluations. Additionally, the inspectors also reviewed a sampling of corrective action documents to verify that the licensee was identifying and correcting any deficiencies associated with operability evaluations. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of four operability evaluations inspection samples as defined in Inspection Procedure 71111.15-04

b. Findings

No findings were identified.

1R18 Plant Modifications (71111.18)

a. Inspection Scope

To verify that the safety functions of important safety systems were not degraded, the inspectors reviewed temporary modification TMR 10-007.

The inspectors reviewed the temporary modification and the associated safety-evaluation screening against the system design bases documentation, including the FSAR and the technical specifications, and verified that the modification did not adversely affect the system operability/availability. The inspectors also verified that the installation and restoration were consistent with the modification documents and that configuration control was adequate. Additionally, the inspectors verified that the temporary modification was identified on control room drawings, appropriate tags were placed on the affected equipment, and licensee personnel evaluated the combined effects on mitigating systems and the integrity of radiological barriers.

These activities constitute completion of one sample for temporary plant modifications as defined in Inspection Procedure 71111.18-05.

b. Findings

No findings were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed the following postmaintenance activities to verify that procedures and test activities were adequate to ensure system operability and functional capability:

- October 1, 2010, Work Order 01189118, “Perform leak Check on Cylinders, 25 hours after Diesel Generator 1 Run”
- October 14, 2010, control room emergency chiller system A operability test
- October 18, 2010, Work Order 001196398, “CMS-SR-20 Testing of Newly Installed Fan”
- October 21, 2010, Work Order 01190544, replace standby liquid control relief valve 29B
- October 28, 2010, Work Order 01183582, “PMT Leakage Inspection RHR-M-P/2A”
- November 16, 2010, Work Order 01173045, “RHR-MO-3A, Baseline Diagnostic Test”
- November 22, 2010, Work Order 01184470, “Repair Inter-Tier Cable Between Cells 185 and 186 for 250Vdc Safety Related Battery”
- November 23, 2010, Work Order 01184469, “Repair Inter-Tier Cable Between Cells 28 and 29 of 125Vdc Division I Safety Related Battery”

The inspectors selected these activities based upon the structure, system, or component's ability to affect risk. The inspectors evaluated these activities for the following (as applicable):

- The effect of testing on the plant had been adequately addressed; testing was adequate for the maintenance performed
- Acceptance criteria were clear and demonstrated operational readiness; test instrumentation was appropriate

The inspectors evaluated the activities against the technical specifications, the FSAR, 10 CFR Part 50 requirements, licensee procedures, and various NRC generic communications to ensure that the test results adequately ensured that the equipment met the licensing basis and design requirements. In addition, the inspectors reviewed corrective action documents associated with postmaintenance tests to determine whether the licensee was identifying problems and entering them in the corrective action program and that the problems were being corrected commensurate with their

importance to safety. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of eight postmaintenance testing inspection samples as defined in Inspection Procedure 71111.19-05.

b. Findings

.1 Introduction: The inspectors identified a Green noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings" for the licensee's failure to include acceptance criteria appropriate to the circumstance in Surveillance Testing Procedure ESP-B11-A101 "12 Month Battery Inspection of 125Vdc E-B1-1," Revision 5. Specifically, licensee personnel listed a non conservative inter-tier resistance value as acceptance criteria which led to a degraded condition being unanalyzed for three years.

Description: On January 18, 2010, while performing Procedure ESP-B11-A101, licensee staff noted the inter-tier battery cable resistance between two battery cells had increased greater than 20 percent from the original installed value in 2006. This was found during review of the completed procedure by a licensee staff member who was familiar with the original installation value. The licensee documented the inter-tier resistance to be 106 micro-ohms in Action Request/Condition Report 211313. An operability review was performed and the batteries were determined to be operable due to total battery resistance being less than the design limit. In the same condition report the licensee documented the connection values in 2006 as 84 micro ohms, in 2007 as 103 micro ohms, in 2008 as 102 micro ohms, and in 2009 as 105 micro ohms. The condition report did not document that the values during these years did not meet the acceptance criteria for the battery. Due to the inspector's questioning, the licensee initiated Action Request/Condition Report 224744 to document that the inter-tier battery cable had not met its acceptance criteria since 2007. The licensee did not perform an operability review for each year the battery did not meet its acceptance criteria. After the inspectors questioned the licensee's review, the licensee documented a basis for operability for each year the inter-tier battery cable was above its acceptance criteria. The final basis for operability was documented in Action Request/Condition Report 230667.

Licensee Controlled Specification Surveillance Requirement 1.8.6.2.15 states that the acceptance criteria of inter-tier connection resistance shall be less than or equal to 20 percent above the original installed value. In 2006, when Columbia Generating Station installed new 125Vdc batteries, the measured installed resistance value for the inter-tier cable connection between cell 28 and cell 29 was 84 micro-ohms. The acceptance criteria for the inter-tier cable resistance should have been set at 101 micro-ohms. The surveillance procedure was revised in August of 2007 and the chart used to document cell resistance values listed the acceptance criteria of the inter-tier battery cable resistance as 120 micro-ohms. This nonconservative value caused workers who were performing the surveillance test to believe the acceptance criteria was met when it was not.

Analysis: The failure to include appropriate acceptance criteria in surveillance procedures is a performance deficiency. The performance deficiency is more than minor because it affects the equipment performance attribute of the Mitigating Systems Cornerstone for ensuring the reliability of systems that respond to initiating events. Using Inspection Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," the inspectors determined that this performance deficiency was of very low safety significance because the finding was confirmed to not result in a loss of operability for the 125Vdc batteries. The inspectors determined a cross-cutting aspect was not applicable to the finding because the procedure change which implemented the new acceptance criteria occurred in 2007, and thus, was not representative of current licensee performance.

Enforcement: Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires in part that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished. Contrary to this, on August 31, 2007, the licensee failed to include appropriate acceptance criteria for inter-tier battery cable resistance in Procedure ESP-B11-A101. This caused the licensee to not document higher than acceptable resistance readings on the 125Vdc battery system from 2007 through 2009. This surveillance procedure has been revised to include the appropriate acceptance criteria. Because this finding was determined to be of very low safety significance and was entered into the licensee's corrective action as Action Request/Condition Report 231971, this violation is being treated as a noncited violation consistent with Section 2.3.2.a of the NRC Enforcement Policy: NCV 05000397/2010005-02, "Failure to Include Appropriate Acceptance Criteria."

.2 Introduction: An NRC-identified Green noncited violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was identified for Energy Northwest's failure to promptly identify and correct a condition adverse to quality involving both trains of control room emergency chillers.

Description: The control room emergency chillers have tripped on numerous occasions in the past, but recently the CCH-CR-1A had tripped five times in the past six months due to low refrigerant pressure as documented in the licensee's control room logs and Action Request/Condition Reports:

- June 13, 2010, "CCH-CR-1A tripped due to refrigerant low pressure"
- June 15, 2010, "CCH-CR-1A tripped due to refrigerant low pressure"
- July 3, 2010, Action Request/Condition Report 221003, "CCH-CR-1A tripped due to refrigerant low pressure"
- August 1, 2010, Action Request/Condition Report 222650, "CCH-CR-1A tripped due to refrigerant low pressure"

- September 27, 2010, “CCH-CR-1A and the chiller tripped due to refrigerant Low Pressure (7R) light locked in and which comes from CCH-PS-2A. The hot gas bypass valve is not opening”

On August 13, 2010, the inspectors questioned the licensee's maintenance of the control room emergency chiller systems. The inspectors questioned the material condition, post maintenance testing procedural inadequacies, and operability of the system. As required per FSAR Paragraph 9.4.1.2, Amendment 54, the chillers are designed to be available to supply cooling water to the respective control room heating, ventilation and control system emergency coil in support of comfort cooling, provided the credited standby service water system allows temperatures to become uncomfortable for the control room staff. The main control room habitability systems are designed to ensure habitability inside the main control room during all normal and abnormal operating conditions, including 30 days of habitability following a Loss-of-Coolant Accident.

Discussions with engineering personnel revealed that adjustments were allowed to be made to the chillers during chiller operability testing. Procedure PPM OSP-CCH/IST-M701, “Control Room Emergency Chiller System A Operability”, Revision 28, Paragraphs 7.1.2, 7.1.22, 7.1.32 and 7.1.44, allows addition of oil and paragraphs 7.1.33 and 7.1.38 allows filling and venting certain points in the chiller system during operability testing. Following inspectors questioning, the licensee investigated chiller CH-CR-1A failures and determined that the hot gas bypass valves for the A and B trains of control room emergency chillers had been set up incorrectly, as documented in Action Request/Condition Report 226868. As a result, the hot gas bypass valves, which control chiller load and suction pressure in the compressor, opened when they should have been closed. In this configuration under low load conditions, suction pressure in the compressor was abnormally low, contributing to chiller trips on low refrigerant pressure. The hot gas bypass valves were installed correctly in both A and B trains of the control room emergency chiller systems and a satisfactory operability test was performed on chiller CCH-CR-1A on October 13, 2010.

Analysis: The failure to perform appropriate postmaintenance tests is a performance deficiency. The performance deficiency was determined to be more than minor because it was associated with the configuration control attribute of the Mitigating Systems Cornerstone, and affected the associated cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Manual Chapter 0609.04, Phase 1 – “Initial Screening and Characterization of Findings,” the finding was determined to have very low safety significance because: (1) the finding was not a qualification deficiency that resulted in a loss of functionality of control room chillers; (2) it did not lead to an actual loss of safety function of the system or train; (3) it did not result in an actual loss of safety function of a single train for greater than its technical specification allowed outage time; (4) it did not represent an actual loss of safety function of one or more non-technical specification trains of equipment designated as risk-significant per 10 CFR 50.65, for greater than 24 hours; and (5) it did not screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. The cause of this finding

was determined to have no cross-cutting aspect due to the fact that the hot gas bypass valves were installed backwards more than three years ago and did not represent a current station performance issue

Enforcement: Title 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," states, in part, that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and non-conformances are promptly identified and corrected. Contrary to the above, on numerous occasions as described above, inadequate operability testing failed to identify and correct hot gas bypass valves that were installed incorrectly on the A and B trains of control room emergency chillers. Because this finding was of very low safety significance and was entered into the licensee's corrective action program as Action Request/Condition Report 223485, this violation is being treated as a noncited violation, consistent with Section 2.3.2.a of the NRC Enforcement Policy: NCV 05000397/2010005-03; "Failure to Promptly Identify and Correct a Condition Adverse to Quality Associated with both Trains of Control Room Emergency Chillers".

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors reviewed the FSAR, procedure requirements, and technical specifications to ensure that the surveillance activities listed below demonstrated that the systems, structures, and/or components tested were capable of performing their intended safety functions. The inspectors either witnessed or reviewed test data to verify that the significant surveillance test attributes were adequate to address the following:

- Preconditioning
- Evaluation of testing impact on the plant
- Acceptance criteria
- Test equipment
- Procedures
- Jumper/lifted lead controls
- Test data
- Testing frequency and method demonstrated technical specification operability
- Test equipment removal
- Restoration of plant systems

- Fulfillment of ASME Code requirements
- Updating of performance indicator data
- Engineering evaluations, root causes, and bases for returning tested systems, structures, and components not meeting the test acceptance criteria were correct
- Reference setting data
- Annunciators and alarms setpoints

The inspectors also verified that licensee personnel identified and implemented any needed corrective actions associated with the surveillance testing.

- October 6, 2010, SOP-TIP-OPS, "TIP System Operation"
- November 15, 2010, OSP-RHR/IST-Q702, "RHR Loop A Operability Test"
- December 9, 2010, TSP-RHRB/RHRC-B502, "RHRB/RHRC Annunciator LSFT"
- December 20, 2010, Work Order 01192226, SOP-FDR-OPS, "Floor Drain System Operation"

Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of four surveillance testing inspection samples as defined in Inspection Procedure 71111.22-05.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

.1 Data Submission Issue

a. Inspection Scope

The inspectors performed a review of the performance indicator data submitted by the licensee for the third Quarter 2010 performance indicators for any obvious inconsistencies prior to its public release in accordance with Inspection Manual Chapter 0608, "Performance Indicator Program."

This review was performed as part of the inspectors' normal plant status activities and, as such, did not constitute a separate inspection sample.

b. Findings

No findings were identified.

.2 Mitigating Systems Performance Index - Residual Heat Removal System (MS09)

a. Inspection Scope

The inspectors sampled licensee submittals for the mitigating systems performance index - residual heat removal system performance indicator for the period from the third quarter 2009 through the fourth quarter 2010. To determine the accuracy of the performance indicator data reported during those periods, the inspectors used definitions and guidance contained in NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6. The inspectors reviewed the licensee's operator narrative logs, issue reports, mitigating systems performance index derivation reports, event reports, and NRC integrated inspection reports for the period of July 2009 through December 2010, to validate the accuracy of the submittals. The inspectors reviewed the mitigating systems performance index component risk coefficient to determine if it had changed by more than 25 percent in value since the previous inspection, and if so, that the change was in accordance with applicable NEI guidance. The inspectors also reviewed the licensee's issue report database to determine if any problems had been identified with the performance indicator data collected or transmitted for this indicator and none were identified. Specific documents reviewed are described in the attachment to this report.

These activities constitute completion of one mitigating systems performance index-residual heat removal system sample as defined in Inspection Procedure 71151-05.

b. Findings

No findings were identified.

.3 Mitigating Systems Performance Index - Cooling Water Systems (MS10)

a. Inspection Scope

The inspectors sampled licensee submittals for the mitigating systems performance index - cooling water systems performance indicator for the period from the third quarter 2009 through the fourth quarter 2010. To determine the accuracy of the performance indicator data reported during those periods, the inspectors used definitions and guidance contained in NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6. The inspectors reviewed the licensee's operator narrative logs, issue reports, mitigating systems performance index derivation reports, event reports, and NRC integrated inspection reports for the period of July 2009 through December 2010, to validate the accuracy of the submittals. The inspectors reviewed the mitigating systems performance index component risk coefficient to determine if it had changed by more than 25 percent in value since the previous inspection, and if so, that

the change was in accordance with applicable NEI guidance. The inspectors also reviewed the licensee's issue report database to determine if any problems had been identified with the performance indicator data collected or transmitted for this indicator and none were identified. Specific documents reviewed are described in the attachment to this report.

These activities constitute completion of one mitigating systems index-cooling water system sample as defined in Inspection Procedure 71151-05.

b. Findings

No findings were identified.

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Public Radiation Safety, Occupational Radiation Safety, and Physical Protection

4OA2 Identification and Resolution of Problems (71152)

.1 Routine Review of Identification and Resolution of Problems

a. Inspection Scope

As part of the various baseline inspection procedures discussed in previous sections of this report, the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify that they were being entered into the licensee's corrective action program at an appropriate threshold, that adequate attention was being given to timely corrective actions, and that adverse trends were identified and addressed. The inspectors reviewed attributes that included the complete and accurate identification of the problem; the timely correction, commensurate with the safety significance; the evaluation and disposition of performance issues, generic implications, common causes, contributing factors, root causes, extent of condition reviews, and previous occurrences reviews; and the classification, prioritization, focus, and timeliness of corrective actions. Minor issues entered into the licensee's corrective action program because of the inspectors' observations are included in the attached list of documents reviewed.

These routine reviews for the identification and resolution of problems did not constitute any additional inspection samples. Instead, by procedure, they were considered an integral part of the inspections performed during the quarter and documented in Section 1 of this report.

b. Findings

No findings were identified.

.2 Daily Corrective Action Program Reviews

a. Inspection Scope

In order to assist with the identification of repetitive equipment failures and specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's corrective action program. The inspectors accomplished this through review of the station's daily corrective action documents.

The inspectors performed these daily reviews as part of their daily plant status monitoring activities and, as such, did not constitute any separate inspection samples.

b. Findings

No findings were identified.

.3 Selected Issue Follow-up Inspection

a. Inspection Scope

During a review of items entered in the licensee's corrective action program, the inspectors reviewed the following corrective action items:

- February 1, 2010, Action Request/Condition Report 212058, "NRC Questions Regarding Improperly Installed Fuses"

- December 12, 2010, Action Request/Condition Report 203872, "NRC Questions the location of a barrel near Standby Liquid Control Equipment"

The inspectors performed a review of the licensee's corrective action program and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors' review was focused on repetitive equipment and corrective maintenance issues but also considered the results of daily inspector corrective action program item screenings discussed in Section 4OA2.1. Corrective actions associated with identified trends were reviewed for adequacy.

These activities constitute completion of two in-depth problem identification and resolution samples as defined in Inspection Procedure 71152-05.

b. Findings

Introduction: The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for Energy Northwest's repetitive failure to conduct engineering evaluations in accordance with the station's seismic procedure as it relates to equipment positioned adjacent to safety-related components.

Description: On December 15, 2010, during a walkdown of the standby liquid control system, the inspectors noted that a 55 gallon drum was positioned adjacent to the standby liquid control system. This barrel had been staged to support work associated with the standby service water system per Work Order 01188898. The inspectors noted that this container was positioned such that it could overturn during a seismic event and impact the safety-related standby liquid control system. The inspectors notified the main control room personnel, who directed an equipment operator to immediately position the 55 gallon drum away from the standby liquid control system. This was documented in Action Request/Condition Report 230872.

The inspectors questioned the Energy Northwest staff if this met the requirements of Procedure PPM 10.2.53, "Seismic Requirements For Scaffolding, Ladders, Man-Lifts, Tool Gang Boxes, Hoists, Metal Storage Cabinets, and Temporary Shielding Racks," Revision 26 to properly secure or analyze equipment in close proximity to safety-related equipment to prevent seismically-induced interactions. Step 7.2.2 of Procedure PPM 10.2.53 stated that transient equipment used in the reactor building is to be stored so it does not overturn in a seismic event and impact safety-related equipment. Energy Northwest staff concluded damage could result from an impact of the improperly staged barrel next to the standby liquid control system during a seismic event.

Analysis: The licensee's failure to implement Procedure PPM 10.2.53 is a performance deficiency. This finding was more than minor because it was a human performance error which affected the Mitigating Systems Cornerstone objective to ensure the availability and reliability of systems that respond to initiating events to prevent undesirable consequences. Energy Northwest's failure to evaluate this condition in accordance with Procedure PPM 10.2.53 was not commensurate with ensuring the reliability and availability of safety-related equipment in the plant. The finding was determined to be of very low safety significance because it was not a design or qualification deficiency; it did not result in the loss of a system safety function; it did not represent the loss of a single train for greater than technical specification allowed outage time; it did not represent a loss of one or more non-technical specification risk-significant equipment for greater than 24 hours; and it did not screen as potentially risk significant due to seismic, flooding, or severe weather. A cross-cutting aspect in the human performance area with a work control component was identified in that Energy Northwest failed to appropriately plan work, resulting in job site conditions which may have impacted plant components [H.3.a].

Enforcement: Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," states, in part, that activities affecting quality shall be accomplished in accordance with documented instructions appropriate to the circumstances. Contrary to this requirement, on December 15, 2010, Energy Northwest failed to implement Procedure PPM 10.2.53 by failing to conduct an engineering evaluation to assess the seismic interaction of equipment staged adjacent to safety related components. Because this finding was of very low safety significance and was entered into the licensee's corrective action program as Action Request/Condition Report 230872, this violation is being treated as a noncited violation, consistent with Section 2.3.2.a of the NRC Enforcement Policy: NCV 05000397/2010005-04; “Failure to Perform Engineering Evaluation to Determine Seismic Qualification of Safety-related Equipment”.

4OA5 Other Activities

.1 (Closed) Licensee Event Report (LER) 05000397/2010-001-00: Secondary Containment Isolation Valve Not Fully Seated

This LER documented a secondary containment isolation valve not being fully closed since July 4, 1994. Technical Specification Section 3.6.4.2, requires that each secondary containment isolation valve shall be operable. Contrary to this requirement, on August 13, 1994, the air actuator for FDR-V-219 (a secondary containment isolation valve) was replaced without ensuring that the valve was fully seated and thus was considered inoperable. NRC Inspection Report 05000397/2010004 previously documented one licensee identified finding associated with this issue. This LER is closed.

4OA6 Meetings

Exit Meeting Summary

On January 6, 2011, the inspectors presented the inspection results to Mr. M. Reddemann, Chief Executive Officer, and other members of the licensee staff. The licensee acknowledged the issues presented. The inspector asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

D. Brown, Operations Manager
K. Christianson, Acting Licensing Supervisor
D. Clymer, Supervisor, Quality Services
M. Davis, Radiological Services Manager
C. Forrester, Manager, Nuclear Security
S. Gambhir, Vice President, Engineering
D. Gregoire, Acting Manager, Regulatory Affairs
C. King, Assistant Plant General Manager
J. Latta, Supervisor, System Engineer
D. Montgomery, Maintenance Coach
C. Moon, Training Manager
R. Parmelee, Systems Engineering Manager
J. Roy, Acting Manager, Production Maintenance
C. Sanoda, Licensing Engineer
B. Sawatzke, Chief Nuclear Officer
L. Sawyer, Organization Effectiveness Manager
N. Stuart, Maintenance Manager
D. Swank, General Manager, Engineering
J. Tansy, PSA Supervisor
L. Williams, Licensing Engineer

NRC Personnel

R. Cohen, Senior Resident Inspector
M. Hayes, Resident Inspector

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None.

Opened and Closed

05000397/2010005-01	NCV	Inadequate Risk Assessment During Lifting Activities (Section 1R13)
05000397/2010005-02	NCV	Failure to Include Appropriate Acceptance Criteria (Section 1R19)
05000397/2010005-03	NCV	Failure to Promptly Identify and Correct a Condition Adverse to Quality Associated with both Trains of Control Room Emergency Chillers (Section 1R19)

05000397/2010005-04	NCV	Failure to Perform Engineering Evaluation to Determine Seismic Qualification of Safety-related Equipment (Section 4OA2)

Closed

05000397-2010-01-00	LER	Secondary Containment Isolation Valve Not Fully Seated

Discussed

None.

LIST OF DOCUMENTS REVIEWED

Section 1RO1: Adverse Weather Protection

PROCEDURES

NUMBER	TITLE	REVISION
SOP-COLDWEATHER-OPS	Cold Weather Operations	15

Section 1RO4: Equipment Alignment

MISCELLANEOUS DOCUMENTS

NUMBER	TITLE	REVISION
OSP-HPCS-M101	Fill Verification High pressure Core Spray System	6
SOP-CIA-LU	Containment Instrument Air System Valve and Breaker Lineup	1
SOP-CIA-OPS	Containment Instrument Air System Operation	0
Drawing M556	Containment Instrument air System	50

ACTION REQUEST/CONDITION REPORTS

01189275

Section 1RO5: Fire Protection

PROCEDURES

NUMBER	TITLE	REVISION
FSAR	Section F 2.2.15	Amendment 54

Section 1R11: Licensed Operator Requalification Program

MISCELLANEOUS DOCUMENTS

NUMBER	TITLE	REVISION
LR002002	Columbia Generating Station Simulator Examination	September 3, 2010

Section 1R12: Maintenance Effectiveness

MISCELLANEOUS DOCUMENTS

NUMBER	TITLE	REVISION / DATE
AR/CR 223485	CCH-CR-1A/1B Control Room Emergency Chiller System Concerns	September 12, 2010
AR/CR 212058	NRC Questions Regarding Improperly Installed Fuses	February 1, 2010

Section 1R13: Maintenance Risk Assessment and Emergent Work Controls

PROCEDURES

NUMBER	TITLE	REVISION / DATE
ESP-B11-A101	12 Month Battery Inspection of 125 VDC E-B1-1	6

ACTION REQUEST/CONDITION REPORTS

230667	211372	47998	229807	224774
211313	211374			

Section 1R15: Operability Evaluations

MISCELLANEOUS DOCUMENTS

NUMBER	TITLE	REVISION / DATE
Work Order 01185837	CRD-LIS-601C is reading erroneously high	November 9, 2010
Calculation CMR 96-0115	Correct Algebraic Expression	November 9, 2010
AR/CR 213131	CRD-LIS-601C indicating erroneously high	November 9, 2010
CER C92-0488	Component Classification Record	0

Section 1R18: Plant Modifications

NUMBER	TITLE	DATE
TMR 10-007	Jumper Input Due to Reactor Feedwater Governor Speed Probe RFT-SE-99T/1B1 Providing an Erratic Signal	October 4, 2010

Section 1R19: Postmaintenance Testing

MISCELLANEOUS DOCUMENTS

NUMBER	TITLE	REVISION / DATE
OSP-CCH/IST-M701	Control Room Emergency Chiller System A Operability Test	28
Work Order 01196398	CMS-SR-20 Testing Of Newly Installed Fan	October 18, 2010
AR/CR 227450	Oxygen Levels Trending Up Again Flowing Maintenance on CMS-SR-20	
Work Order 01189119	Perform Leak Check on Cylinders 25 Hours after Diesel Generator 1 Run	October 1, 2010
Work Order 01184470	Repair Inter-Tier Cable between Cells 185 and 186 for 250VDC Safety Related Battery	November 22, 2010
Work Order 01184469	Repair Inter-Tier Cable Between Cells 28 and 29 of 125VDC Division I Safety Related Battery	November 23, 2010

Section 1R22: Surveillance Testing

PROCEDURES

NUMBER	TITLE	REVISION
SOP-TIP-OPS	TIP System Operation	8
OSP-RPS-W401	Manual Scram Functional Test	6
TSP-RHRB/RHRC-B502	RHRB/RHRC Annunciator LSFT	2
OSP-RHR-M105	Residual Heat Removal System B Valve position Verification	2
OSP-RHR-M106	Residual Heat Removal System C Valve Position Verification	1
SOP-FDR-OPS	Floor Drain System Operation	0
SOP-CIA-LU	Containment Instrument Air System Valve and Breaker Lineup	1
SOP-CIA-OPS	Containment Instrument Air System Operation	0

WORK ORDERS

01191549	01192111	01192110	01192226

Section 4OA1: Performance Indicator Verification

MISCELLANEOUS DOCUMENTS

NUMBER	TITLE	REVISION / DATE
NEI 00-02	Regulatory Assessment Performance Indicator Guideline	6
	Energy Northwest and NRC Performance indicator Data for July 2009 through December 2010	N/A
	Energy Northwest Operator Logs for July 2009 through December 2010	N/A

Section 4OA2: Identification and Resolution of Problems

ACTION REQUEST/CONDITION REPORTS

00226033	00226038	00226040	00226041	00226072
00226075	00226076	00226080	00226088	00226089
00226090	00226092	00226099	00226100	00226105
00226106	00226107	00226150	00226156	00226139
00226141	00226167	00226173	00226184	00226187
00226195	00226229	00226162	00226235	00226236
00229252	00229253	00229261	00229262	00229299
00229300	00229302	00229303	00226327	00226358
00226381	00226383	00226396	00226403	00226408
00226410	00226415	00226417	00226418	00226420
00226423	00226424	00226425	00226363	00226415
00226488	00226491	00226493	00226496	00226512
00226521	00226524	00226926	00226941	00226953
00226956	00226964	00226976	00226981	00227007
00227015	00227023	00227058	00227060	00227084
00227143	00227146	00227148	00227151	00227154
00227156	00227160	00227164	00227166	00227167
00227169	00227170	00227171	00227172	00227178
00227179	00227180	00227181	00226524	00226608
00226609	00226613	00226626	00226637	00226638
00226647	00226655	00226672	00226687	00226694
00226695	00226718	00226723	00226726	00226730
00226731	00226841	00226844	00226860	00226862

00226875	00226903	00226904	00227347	00227359
00227365	00227366	00227409	00227410	00227441
00227442	00227443	00227444	00227450	00227451
00227472	00227473	00227474	00227475	00227476
00227477	00229079	00229086	00229087	00229092
00229095	00229096	00229097	00229098	00229099
00229100	00229102	00229104	00229105	00229125
00229126	00229128	00229129	00229164	00229165
00229166	00229167	00229191	00229132	00229196
00229197	00229200	00229217	00229218	00229784
00229785	00229786	00229788	00229796	00229798
00229807	00229808	00229812	00229813	00229836
00229838	00229847	00229848	00229849	00229856
00229857	00229860	00229861	00229864	00229865
00229755	00229758	00229170	00229268	00229407
00229416	00229419	00229488	00229498	00229510
00229559	00229607	00229621	00229634	00229635
00229692	00229707	00229708	00229710	00230580
00230581	00230582	00230539	00230540	00230541
00230546	00230547	00230562	00230604	00230605
00230607	00230610	00230611	00230612	00230845
00230846	00230847	00230866	00230867	00230870
00230874	00230876	00230795	00230796	00230800
00230805	00230806	00230814	00230817	00230819
00230820	00230821	00230822	00230823	00230824
00230785	00230783	00230782	00230781	00230779
00230780	00230753	00230749	00230750	00230732
00230733	00230731	00230720	00230730	00230964
00230965	00230961	00230963	00230914	00230933
00230934	00230936	00230936	00230938	00230959
00230960	00231070	00231072	00231073	00231082
00231085	00231086	00231129	00231133	00231129
00231133	00230959	00230960		

MISCELLANEOUS DOCUMENTS

NUMBER	TITLE	DATE
AR/CR 230872	NRC Questioned the Location of a Barrel Near SLC Pumps	December 12, 2010
AR/CR 212058	NRC Questions Regarding Improperly Installed Fuses	February 1, 2010
Work Order 01188898	Disassembled and Clean out Orifice Flange Ports for SW-FI-44	December 12, 2010
PPM 10.2.53	Seismic Requirements for Scaffolding, Ladders, Man-Lifts, Tool Gang Boxes, Hoists, Metal Storage Cabinets, and Temporary Shielding Racks	26