



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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ARLINGTON, TEXAS 76011-4511

May 4, 2012

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 05000397/2012002

Dear Mr. Reddemann:

On March 23, 2012, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Columbia Generating Station. The enclosed inspection report documents the inspection results which were discussed on April 2, 2012, with Mr. W. Hettel, Vice President, Operations 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.

Three NRC identified and two self-revealing findings of very low safety significance (Green) were identified during this inspection. All of these findings were determined to involve violations of NRC requirements. Further, two licensee-identified violations which were determined to be of very low safety significance are listed in this report. The NRC is treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest these non-cited violations, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region IV; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at Columbia Generating Station.

If you disagree with a cross-cutting aspect assignment 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 Columbia Generating Station.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the

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Sincerely,

/RA/

Wayne C. Walker, Branch Chief
Project Branch A
Division of Reactor Projects

Docket: 05000397
License: NPF-21

Enclosure: Inspection Report 05000397/2012002
w/ Attachment: Supplemental Information

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Chief Executive Officer
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U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket: 05000397

License: NPF-21

Report: 05000397/2012002

Licensee: Energy Northwest

Facility: Columbia Generation Station

Location: Richland, WA

Dates: January 1, 2012 through March 23, 2012

Inspectors: J. Groom, Senior Resident Inspector
W. Schaup, Acting Senior Resident Inspector
M. Hayes, Resident Inspector
D. Bradley, Project Engineer
S. Hedger, Operations Engineer
J. Laughlin, Emergency Preparedness Inspector, NSIR

Approved By: W. Walker, Chief, Project Branch A
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000397/2012002; 01/01/2012 – 03/23/2012; Columbia Generation Station, Integrated Resident and Regional Report; Equipment Alignments; Fire Protection; Postmaintenance Testing; Problem Identification and Resolution; Followup of Events and Notices of Enforcement Discretion

The report covered a 3-month period of inspection by resident inspectors and an announced baseline inspection by a region-based inspector. Five 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 non-cited violation of Technical Specification 5.4.1.d, "Procedures," for the licensee's failure to implement Procedure PPM 1.3.10C, "Control of Transient Combustibles," Revision 13, which required the reactor building combustible loading calculation be updated when plastic tubing was added to all hydraulic control units. The inspectors identified this issue during a plant walkdown of the reactor building. When identified by the inspectors, the licensee promptly removed all of the plastic tubing and performed the required calculations which determined the margin from a low fire area hazard to a high fire hazard area was reduced by approximately 2 percent. At the conclusion of the inspection period the fire protection engineering group had not allowed reinstallation of the material pending an evaluation to determine an alternative low combustible material. This issue was entered into the licensee's corrective action program as Action Request 255802.

The failure to implement a fire protection procedure was a performance deficiency. The finding was more than minor because it affected the protection against external factors (fire) attribute of the Initiating Events Cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during at-power operations. Using Inspection Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," the inspectors determined the performance deficiency affected the fire protection defense-in-depth strategies involving administrative controls. The inspectors referred to Inspection Manual Chapter 0609, Appendix F, "Fire Protection Significance Process," and Inspection Manual Chapters 0609, Appendix F, Attachments 1 and 2, and determined the combustible material represented a low degradation rating against the combustible controls program

because the materials would not result in ignition of a fire from exiting sources of heat or electrical energy. Therefore, the finding was determined to be of very low safety significance (Green). The inspectors determined the finding had a cross-cutting aspect in the area of human performance with a work control component because the licensee failed to coordinate work activities by incorporating actions to address the impact of the work on different job activities and the need to coordinate and communicate between different departments. Specifically, the licensee failed to produce a work document that documented the need to install the tubing on the hydraulic control units. This oversight prevented the fire protection engineering group from evaluating the inclusion of the combustibles in the combustible loading calculation [H.3(b)] (Section 1R05).

Cornerstone: Mitigating Systems

- Green. The inspectors reviewed a self-revealing non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the licensee's failure to take corrective actions to address hardened lubricant in safety-related 480V disconnect switches. On December 7, 2011, a safety-related 480V disconnect switch unexpectedly opened due to hardened grease. The inspectors discovered that a similar issue occurred in October 2009, and that evaluation of the issue under Action Request AR 206698 concluded that preventive maintenance instructions were inadequate because they did not require removal of hardened lubricant from disconnect switches prior to the application of fresh lubricant. The inspectors determined that the licensee failed to perform an extent of condition review to identify other disconnects that had received similar preventive maintenance including the 480V disconnect switch that unexpectedly opened on December 7, 2011. Following identification of this issue, the licensee discovered 147 additional critical disconnects that may not have been adequately lubricated and initiated work requests to verify the disconnects were fully latched until the revised maintenance procedures could be implemented. This issue was entered into the licensee's corrective action program as Action Request AR 253985.

The failure to take prompt corrective actions to address hardened lubricant in safety-related disconnect switches was a performance deficiency. This finding was more than minor because it affected the equipment performance attribute of the Mitigating Systems Cornerstone objective of ensuring the reliability of systems that respond to initiating events. The inspectors used Inspection Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," and determined that the finding was of very low safety significance (Green) because it did not result in the loss of a system safety function, did not represent the loss of safety function of a single train for greater than its allowed outage time, did not result in the loss of safety function of any non-technical specification equipment, and did not screen as potentially risk significant due to seismic, flooding, or severe weather initiating events. The inspectors determined that this finding had a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program component because the licensee failed to thoroughly evaluate the extent of the condition and need for

resolution for all components potentially affected by the inadequate maintenance procedure identified in Action Request AR 206698 [P.1(c)] (Section 1R04).

- Green. The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," for the licensee's failure to follow procedure SWP-CAP-01, "Corrective Action Program," Revision 21, when evaluating the past operability and reportability of the division 3 emergency diesel generator. On February 28, 2010, the division 3 emergency diesel generator exhibited erratic behavior caused by foreign material. The licensee's reportability evaluation was completed prior to receipt of the forensic analysis which provided new information that foreign material had been present in the governor actuator since October 2005. Contrary to licensee procedure SWP-CAP-01, no re-evaluation of past operability or reportability was performed following receipt of this new information. Following identification of this issue by the inspectors, the licensee concluded that the division 3 diesel generator could not operate for its required mission time with the foreign material present and that the component was inoperable for a period greater than allowed by the plant's technical specifications. The licensee submitted Licensee Event Report 2012-001-00 on January 13, 2012, and supplemental Licensee Event Report 2012-001-01 on March 13, 2012. This issue was placed in the licensee's corrective action program as Action Requests AR 251950 and 255926.

The failure to follow requirements provided in procedure SWP-CAP-01 was a performance deficiency. This finding was more than minor because, if left uncorrected, the failure to follow procedures associated with the corrective action program could become a more significant safety concern. Specifically, the failure to follow corrective action program procedures could result in unrecognized reportable conditions or unevaluated degraded or nonconforming conditions. The inspectors used Inspection Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," and determined that the findings was of very low safety significance (Green) because it did not result in the loss of a system safety function, did not represent the loss of safety function of a single train for greater than its allowed outage time, did not result in the loss of safety function of any non-technical specification equipment, and did not screen as potentially risk significant due to seismic, flooding, or severe weather initiating events. The inspectors determined that this finding had a cross-cutting aspect in the area of human performance associated with the decision making component because the conclusions drawn in the root cause evaluation were not communicated to personnel responsible for making decisions associated with reportability such that a required licensee event report could be submitted in a timely manner [H.1(c)] (Section 4OA3).

Cornerstone: Barrier Integrity

- Green. The inspectors identified a non-cited violation of Technical Specification 3.7.3, "Control Room Emergency Filtration (CREF) System," for the licensee's failure to provide adequate compensatory measures during maintenance on the

control room emergency filtration system. Specifically, the licensee failed to validate that the compensatory measures used in Procedure PPM 1.3.57, "Barrier Impairment," Revision 26, were adequate to limit dose to operators to within FSAR limits during maintenance on the control room emergency filtration system. The licensee issued a stop work order pending resolution of appropriate compensatory measures. The inspectors identified this issue during follow-up inspections of Action Request 256748 that documented transferring of dedicated individual duties during maintenance to unqualified individuals. This issue was entered into the licensee's corrective action program as Action Request 256960.

The failure to provide adequate compensatory measures during maintenance on the control room emergency filtration system was a performance deficiency. This finding was more than minor because it affected the procedure quality attribute of the Barrier Integrity Cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents. The inspectors used Inspection Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," and determined the finding was of very low safety significance (Green) since it only represented a degradation of the radiological barrier function provided for the control room. The inspectors determined that a cross-cutting issue was not applicable since the procedure that introduced the mitigating measures was first introduced in 2008 without verification that the mitigating measures were adequate and, therefore, not reflective of current plant performance (Section 1R19).

Cornerstone: Occupational Radiation Safety

- Green. The inspectors reviewed a self-revealing non-cited violation of Technical Specification 5.7, "High Radiation Area," when a mechanic entered into a high radiation area without authorization and using required controls on March 7, 2012. Specifically, the mechanic entered the high radiation area without authorization and was not knowledgeable of the dose rates in the high radiation area. This issue was entered into the licensee's corrective action program as Action Request AR 259217.

The entry into a high radiation area without authorization and the required controls was a performance deficiency. This finding was more than minor because it affected the human performance attribute of the Occupational Radiation Cornerstone and adversely affected the cornerstone objective to ensure the adequate protection of the worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. Using Manual Chapter 0609, Appendix C "Occupational Radiation Safety Significance Determination Process," the finding was determined to have very low safety significance (Green) because: (1) the finding is not related to as-low-as-reasonably-achievable planning, (2) did not involve an overexposure, (3) did not involve a substantial potential for overexposure, and (4) did not compromise the licensee's ability to assess dose. The finding was determined to

have a cross-cutting aspect in the area of human performance, associated with work practices component, self and peer checking. Specifically, the mechanic failed to perform self check techniques to ensure that the work activity was performed safely when encountering a high radiation area sign at the high radiation boundary and instead of stopping at the boundary, proceeded past [H.4(a)] (Section 4OA2).

B. Licensee-Identified Violations

Violations of very low safety significance that were identified by the licensee have been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. These violations and corrective action tracking numbers are listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

The reactor was operating at 100 percent power at the beginning of this inspection period. The facility down powered to 65 percent power the morning of March 4, 2012 for a rod sequence exchange and returned to 100 percent power during the evening of March 4, 2012. With the exception of scheduled reductions in power to support minor maintenance and testing, the facility operated at near 100 percent power for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

Readiness for Impending Adverse Weather Conditions

a. Inspection Scope

On January 17, 2012, a winter-weather advisory was issued for expected snowfall of three to six inches. The inspectors observed the preparations and planning for the potentially significant winter weather. 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. The inspectors conducted a site inspection, including various plant structures and systems, to check for maintenance or other apparent deficiencies that could affect system operations during the predicted significant weather. 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. 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:

- January 6, 2012, diesel generators 1 and 3 during unplanned diesel generator 2 outage
- February 22, 2012, 480V electrical distribution 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 two partial system walkdown samples as defined in Inspection Procedure 71111.04-05.

b. Findings

Introduction. The inspectors reviewed a self-revealing Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the failure of the licensee to take corrective actions to address hardened lubricant in safety-related 480V motor control center disconnect switches.

Description. On December 7, 2011, 480V disconnect switch WMA-42-81FE unexpectedly opened during planned thermography of the motor control center. The unexpected opening of WMA-42-81FE resulted in a loss of power to radwaste building mixed air fan WMA-FN-53B rendering that component inoperable. Because air fan WMA-FN-53B provided cooling to the division 2 electrical switchgear room which contained critical safety-related circuits for the diesel generator and standby service

water train B, the licensee entered into 72 hour Technical Specification Limiting Condition for Operation 3.7.1, "Standby Service Water," Condition B, and Limiting Condition for Operation 3.8.1, "AC Sources – Operating," Condition B. On December 7, 2011, the licensee performed Section 5.1 of Procedure SOP-ELEC-BKR-OPS, "AC Electrical Breaker Racking," Revision 6, to ensure that disconnect switch WMA-42-81FE was fully latched in its normal closed position. The licensee initiated Action Request AR 253985 to document the unexpected opening of 480V disconnect switches WMA-42-81FE. An apparent cause evaluation determined that hardened lubricant within the disconnect switch for starter WMA-FE-8F1E likely prevented the switch mechanism from fully latching when closed. Without being fully latched, 480V disconnect switches were not seismically qualified and susceptible to popping open with little or no outside force.

The inspectors reviewed the licensee's corrective action program and discovered that on October 28, 2009, the licensee initiated Action Request AR 206698 which documented that safety-related 480V disconnect DMA-DISC-7AA7A associated with the division 1 diesel generator mixed air electrical heaters would not stay closed. Troubleshooting revealed that the accumulation of hardened lubricant prevented the disconnect switch from fully latching. The licensee attributed the cause of this issue to inadequate preventive maintenance instructions contained in Procedure PPM 10.25.187, "Motor Control Center Starter (Bucket) Maintenance," Revisions 1 through 16, which did not require removal of hardened lubricant from disconnect switches prior to the application of fresh lubricant. Corrective actions for Action Request AR 206698 addressed the procedural inadequacy and corrected the individual lubrication issue associated with disconnect DMA-DISC-7AA7A but did not perform an extent of condition review to identify other disconnects that received inadequate preventive maintenance in accordance with Procedure PPM 10.25.187. The inspectors determined that the licensee's corrective actions should have identified that 480V disconnect switch WMA-42-81FE, which unexpectedly popped open on December 7, 2011, had not received proper preventative maintenance because it had last been serviced in accordance with an inadequate revision of Procedure PPM 10.25.187.

On December 29, 2011, the licensee discovered an additional 147 critical disconnects that may not have been adequately lubricated because they received preventive maintenance in accordance with an inadequate revision of Procedure PPM 10.25.187. The licensee initiated work requests to verify the 147 critical disconnects were fully latched to preserve their seismic qualification until the revised maintenance procedures could be implemented.

Analysis. The failure to take prompt corrective actions to address inadequately lubricated 480V electrical disconnects was a performance deficiency. This finding was more than minor because it affected the equipment performance attribute of the Mitigating Systems Cornerstone objective of ensuring the reliability of systems that respond to initiating events. The inspectors used Inspection Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," and determined that the findings was of very low safety significance (Green) because it did not result in the loss of a system safety function, did not represent the loss of safety function of a single train for greater than its allowed outage time, did not result in the loss of safety function of any non-technical specification equipment, and did not screen as potentially risk significant

due to seismic, flooding, or severe weather initiating events. The inspectors determined that this finding had a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program component because the licensee failed to thoroughly evaluate the extent of the condition and need for resolution of all components potentially affected by the inadequate maintenance procedure identified in Action Request AR 206698 [P.1(c)].

Enforcement. Title 10 of the Code of Federal Regulations, Part 50, Appendix B, Criterion XVI, "Corrective Actions," requires, in part, that measures shall be established to assure that conditions adverse to quality are promptly identified and corrected. On October 28, 2009, the licensee identified a condition adverse to quality in that safety related 480V motor control center disconnect switches were susceptible to unexpected opening due to the accumulation of hardened lubricant within the operating mechanism caused by inadequate maintenance. Contrary to the above, from October 28, 2009, through December 29, 2011, the licensee failed to identify the population of safety-related electrical disconnects that were susceptible to unexpected opening due to the accumulation of hardened lubricant and consequently failed to take corrective actions for all safety-related disconnects that had not received proper preventive maintenance. Because this violation was of very low safety significance and was entered into the licensee's corrective action program as Action Request AR 00253985, the violation is being treated as a non-cited violation consistent with the Enforcement Policy: NCV 05000397/2012002-01, "Failure to Take Corrective Actions to Address Hardened Lubricant Safety-Related Disconnect Switches."

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:

- January 11, 2012, fire area R-1/1, reactor building 522' elevation
- January 13, 2012, all fire areas, radwaste building 467' elevation
- February 16, 2012, fire area ASD Building
- February 24, 2012, fire area R-8/1, low pressure core spray

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 71111.05-05A.

b. Findings

Introduction. The inspectors identified a Green non-cited violation of Technical Specification 5.4.1.d, "Procedures," for the licensee's failure to implement procedures required by the plant's fire protection program. Specifically, the licensee failed to update the combustible loading calculation when plastic tubing was added to all of the control rod drive hydraulic control units.

Description. On January 11, 2012, the inspectors identified plastic tubing installed on all control rod drive hydraulic control unit drain valves. The inspectors questioned the licensee's fire marshal to determine if the tubing had a transient combustible permit associated with its installation. After review, the fire marshal determined that a transient combustible permit had not been issued for the current configuration. The inspectors interviewed several members of the operations, radiation protection and fire protection engineering departments and could not determine when the tubing was installed. During these interviews, the inspectors determined that the tubing's purpose was to support maintenance activities associated with the control rod drive hydraulic control units sometime during the most recent refueling outage R20, with a likely time of installation sometime in May 2011. Plastic tubing was routinely installed to support maintenance activities on the hydraulic control units during outages, and was typically taken down shortly after the maintenance was complete. Also, the scope of installation during past outages was such that sets of hydraulic control units had tubing installed instead of all hydraulic control units at the same time. This configuration would have been below the threshold for issuing a transient combustible permit. The inspectors determined this work scope change had not been coordinated with the fire protection engineering. After identification by the inspectors the licensee removed all of the plastic tubing on January 11, 2012.

Licensee personnel could not provide the inspectors with work documents used for installing or removing the plastic tubing. Based on this, the inspectors determined the plastic tubing could not be considered as transient and the issuing of a transient combustible permit was not required. Rather, the installation should be considered permanent and, therefore, required to be evaluated as such. For permanent installations of combustible material, consultation with fire protection engineering is required as stated in Step 3.1.1.b of Procedure PPM 1.3.10.C, "Control of Transient Combustibles,"

so the material can be included in the combustible loading calculation. The licensee estimated the total weight of the tubing was 107 pounds which added approximately 1.4E6 BTUs to the reactor building. Addition of these combustibles to the combustible loading calculation resulted in a loss of margin of 2.3 percent of the reactor building's margin to classification of a high fire hazard. At the close of the inspection period fire protection engineering had not allowed reinstallation of the plastic tubing pending identification of a material with lower combustible properties.

Analysis. The failure to update the combustible loading calculation in accordance with the procedure was a performance deficiency. The inspectors determined the performance deficiency was more than minor because it affected the protection against external factors (fire) attribute of the Initiating Events Cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during at-power operations. Due to identifying the condition while the plant was in at-power operations, the inspectors used Inspection Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," and determined the finding affected the fire protection defense-in-depth strategies involving administrative controls. The inspectors referred to Inspection Manual Chapter 0609, Appendix F, "Fire Protection Significance Process", Manual Chapter 0609 Attachment 1,"Attachment 1: Part 1: Application of Fire Protection SDP Phase 1 Worksheet," and Manual Chapter 0609 Attachment 2 "Attachment 2: Degradation Rating Guidance Specific to Various Fire Protection Program Elements" to determine the significance of the issue. The inspectors determined the combustible material represented a low degradation rating against the combustible controls program because the materials would not result in ignition of a fire from exiting sources of heat or electrical energy and, therefore, determined the finding to be of very low safety significance (Green). The inspectors determined the performance deficiency had a cross-cutting aspect in the area of human performance with a work control component because the licensee failed to coordinate work activities by incorporating actions to address the impact of the work on different job activities and the need to coordinate and communicate between different departments. Specifically, the licensee failed to produce a work document that documented the need to install the tubing on the hydraulic control units. This oversight prevented the fire protection engineering group from evaluating the inclusion of the combustibles in the combustible loading calculation [H.3(b)].

Enforcement. Technical Specification 5.4.1.d requires that written procedures be established, implemented, and maintained covering activities related to fire protection program implementation. Procedure PPM 1.3.10.C, "Control of Transient Combustibles," Revision 13, Step 3.1.1.b, requires, in part, that combustibles that are going to permanently remain in the plant are not considered transient and must be evaluated by fire protection for impacts to the combustible loading calculation. Contrary to this requirement, from May 2011, through January 11, 2012, the licensee failed to evaluate the impact of plastic tubing installed on hydraulic control units that could not be considered transient because there was no tracking mechanism for installation or removal from the plant. Upon identification by the inspectors, the licensee removed all of the plastic tubing that was installed on the hydraulic control units. Because this violation was of very low safety significance and was entered into the licensee's

corrective action program as Action Request AR 255802, this violation is being treated as a non-cited violation consistent with the Enforcement Policy:
NCV 05000397/2012002-02, "Failure to Update Combustible Loading Calculation."

.2 Annual Fire Protection Drill Observation (71111.05A)

a. Inspection Scope

On February 8, 2012, the inspectors observed a fire brigade activation due to a fire simulated in a tool storage area in the radwaste building. The observation evaluated the readiness of the plant fire brigade to fight fires. The inspectors verified that the licensee staff identified deficiencies, openly discussed them in a self-critical manner at the drill debrief, and took appropriate corrective actions. Specific attributes evaluated were (1) proper wearing of turnout gear and self-contained breathing apparatus; (2) proper use and layout of fire hoses; (3) employment of appropriate fire fighting techniques; (4) sufficient firefighting equipment brought to the scene; (5) effectiveness of fire brigade leader communications, command, and control; (6) search for victims and propagation of the fire into other plant areas; (7) smoke removal operations; (8) utilization of preplanned strategies; (9) adherence to the preplanned drill scenario; and (10) drill objectives.

These activities constitute completion of one annual fire-protection inspection sample as defined in Inspection Procedure 71111.05-05.

b. Findings

No findings were identified.

1R11 Licensed Operator Requalification Program (71111.11)

.1 Quarterly Review of Licensed Operator Requalification Program

a. Inspection Scope

On February 16, 2012, the inspectors observed a crew of licensed operators in the plant's simulator during training. The inspectors assessed the following areas:

- Licensed operator performance
- The ability of the licensee to administer the training
- The modeling and performance of the control room simulator
- The quality of post-scenario critiques
- Follow-up actions taken by the licensee for identified discrepancies

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.

.2 Quarterly Observation of Licensed Operator Performance

a. Inspection Scope

On March 4, 2012, the inspectors observed the performance of on-shift licensed operators in the plant's main control room. At the time of the observations, the plant was in a period of heightened activity due to a planned power reduction for control rod sequence exchange and testing.

In addition, the inspectors assessed the operators' adherence to plant procedures, including conduct of operations procedure and other operations department policies.

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

b. Findings

No findings were identified.

.3 Annual Inspection

a. Inspection Scope

The inspectors reviewed the annual operating examination test results for 2011. Since this was the first half of the biennial requalification cycle, the licensee was not required to administer a written examination. These results were assessed to determine if they were consistent with NUREG 1021, "Operator Licensing Examination Standards for Power Reactors," guidance and Inspection Manual Chapter 0609, Appendix I, "Licensed Operator Requalification Significance Determination Process," thresholds. The inspectors verified that all failures were remediated following the exam, and the affected individuals and crews passed a simulator re-examination prior to resuming watch standing.

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

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:

- February 23, 2012, onsite emergency AC system including emergency diesel generators
- March 5, 2012, circulating water system following circulating water pump 1C coupling failure

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 two quarterly maintenance effectiveness samples 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:

- January 5, 2012, Yellow risk during emergent issue with diesel generator 2
- January 19, 2012, Yellow risk during winter storm warning
- January 19, 2012, Green risk while performing maintenance activities on reactor feedwater drive turbine control panel 1B
- February 15, 2012, Yellow risk during emergent maintenance on high pressure core spray keep fill pump

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 four maintenance risk assessments and emergent work control inspection samples as defined in Inspection Procedure 71111.13-05.

b. Findings

No findings were identified.

1R15 Operability Evaluations and Functionality Assessments (71111.15)

a. Inspection Scope

The inspectors reviewed the following assessments:

- January 6, 2012, Action Request AR 255400 documenting abnormal voltage indication on A and C phases of diesel generator 2
- January 11, 2012, Action Requests AR 255720 and AR 255797, documenting the failure to complete surveillance on RCIC-V-47
- January 23, 2012, Action Request AR 256241, documenting higher than normal temperature readings on the North bearing for diesel generator 1
- February 7, 2012, Action Request AR 258629 documenting indications found during non-destructive examinations on a weld associated with RHR-V-145C

The inspectors selected these operability and functionality assessments based on the risk significance of the associated components and systems. The inspectors evaluated the technical adequacy of the evaluations to ensure technical specification operability was properly justified and to verify 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'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. Additionally, the inspectors 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 71111.15-05.

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 the temporary modification identified as bypassing of the high pressure core spray diesel generator high temperature shutoff switch.

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 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:

- January 7, 2012, postmaintenance testing of diesel generator 2 after potential transformer maintenance
- January 30, 2012, postmaintenance testing of division 1 control room emergency filtration system WMA-FU-54A
- February 23, 2012, postmaintenance testing of diesel generator 3 following DCW-TS-4 replacement and modification
- March 8, 2012, postmaintenance testing of standby gas treatment train A following maintenance
- March 13, 2012, postmaintenance testing of recirculation fan PRA-FN-1A after coupling replacement
- March 19, 2012, postmaintenance testing of diesel generator 1 after maintenance and head replacement

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:

- 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 six postmaintenance testing inspection samples as defined in Inspection Procedure 71111.19-05.

b. Findings

Introduction. The inspectors identified a Green non-cited violation of Technical Specification 3.7.3 "Control Room Emergency Filtration (CREF) System" for the licensee's failure to provide adequate compensatory measures during maintenance on the control room emergency filtration system. Specifically, the licensee failed to validate that the mitigating measures used in Procedure PPM 1.3.57, "Barrier Impairment," Revision 26, were adequate to limit dose to operators to within FSAR limits during maintenance on the control room emergency filtration system.

Description. On January 16, 2012, licensee personnel removed one train of the control room emergency filtration system from service to perform planned maintenance activities. These activities included breaching the control room envelope boundary. Breaching of this boundary required entry into Technical Specification 3.7.3.B which requires the licensee to immediately initiate mitigating actions and to verify within 24 hours that these actions will ensure occupants of the control room will not exceed exposure limits specified in applicable design bases calculations. These mitigating actions are listed in Procedure PPM 1.3.57 and require a dedicated individual stationed on the job site who is in continuous communications with control room personnel and who is capable of quickly restoring the control room envelope boundary. The maintenance activity was completed, the control room envelope boundary restored, and the control room emergency filtration system declared operable on January 22, 2012.

On January 30, 2012, the inspectors reviewed Action Request 256748 which documented that during the maintenance activity the dedicated individual role was transferred to multiple individuals within the maintenance department and at one time to a quality assurance inspector overseeing the work. The transfers were done, at times, without the knowledge of the control room and to people who were not aware of their

duties to rapidly restore the control room envelope boundary. The action request initiator stated that no technical specification was violated. The inspectors questioned whether technical specifications were followed during this time period. Due to the inspectors' questions, the licensee initiated an event investigation and determined that not only were Procedure PPM 1.3.57 requirements not followed, but also that the mitigating measures that were in place would not have been successful in limiting dose to the operators to below FSAR specifications. The calculation used to justify the mitigating measures specified in PPM 1.3.57 concluded that maintenance personnel had up to 4 minutes, when called upon, to restore the control room envelope boundary to limit dose to the operators to within FSAR limits. The maintenance personnel involved with restoring the boundary concluded that once called upon to do so, they could restore the boundary in about 10 to 15 minutes. During the maintenance on the control room envelope boundary there were times when maintenance would have taken up to 37 minutes to restore the control room envelope boundary. This delay would result in a dose to the control room operators greater than what is specified in the Columbia Generating Station FSAR.

The inspectors determined that the requirement for staging a dedicated individual was due to a license amendment issued in 2008. Upon issuance of the licensee amendment, the compensatory measures specified in PPM 1.3.57 should have been validated as sufficient to limit dose to the control room operators to within FSAR limits.

Analysis. The failure to establish appropriate mitigating measures while conducting maintenance on the control room envelope boundary was a performance deficiency. This performance deficiency was more than minor because it affected the procedure quality attribute of the Barrier Integrity Cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents. Specifically, the procedure used to implement the requirements of Technical Specification 3.7.3.B.2 was inadequate since the compensatory measures specified in Procedure PPM 1.3.57 would not limit dose to control room operators below FSAR values. The inspectors used Inspection Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," and determined that the findings was of very low safety significance (Green) since it only represented a degradation of the radiological barrier function provided for by the control room. The inspectors determined that a cross-cutting issue was not applicable since the procedure that introduced the compensatory measures was first introduced in 2008 and was not reflective of current plant performance.

Enforcement. Technical Specification 3.7.3 requires, in part, that two control room emergency filtration subsystems shall be operable in Modes 1, 2, and 3. Limiting Condition for Operation 3.7.3.B requires that when one or more control room emergency filtration subsystems are inoperable due to an inoperable control room envelope boundary in Modes 1, 2, or 3, the licensee must immediately initiate actions to implement mitigating actions; has 24 hours to verify mitigating actions ensure control room envelope occupant exposures to radiological, chemical, and smoke hazards will not exceed limits; and has 90 days to restore the control room envelope boundary to operable status. If the associated completion times of any of the required actions in

Limiting Condition for Operation 3.7.3.B are not met in Modes 1, 2, or 3, the licensee has 12 hours to be in Mode 3 and 36 hours to be in Mode 4. Contrary to the above, from January 16, 2012, through January 22, 2012, the licensee failed to verify the mitigating actions in place for an inoperable control room envelope boundary would limit radiological hazards to below FSAR limits. Because this violation was determined to be of very low safety significance and was entered into the licensee's corrective action program as Action Request AR 256960, this violation is being treated as a non-cited violation consistent with the Enforcement Policy: NCV 05000397/2012002-03, "Failure to Validate Compensatory Measures During Maintenance."

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.

- January 10, 2012, OSP-RCIC/IST-Q701, "RCIC Operability Test"
- January 19, 2012, OSP-INST-H101, "Shift and Daily Instrument Checks (Modes 1, 2, 3)" for suppression pool temperature monitoring
- February 29, 2012, OSP-SW/IST-Q703, "HPCS Service Water Operability"
- March 4, 2012, TSP-CRD-C101, "CRD SCRAM Timing with Auto SCRAM Timer System"

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.

Cornerstone: Emergency Preparedness

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

a. Inspection Scope

The NSIR headquarters staff performed an in-office review of the latest revisions of various Emergency Plan Implementing Procedures and the Emergency Plan located under ADAMS accession numbers ML12017A163, ML12040A180, ML12017A163 and ML12068A259, as listed in the attachment.

The licensee determined that in accordance with 10 CFR 50.54(q), the changes made in these revisions resulted in no reduction in the effectiveness of the Plan, and that the revised Plan and procedures continued to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR Part 50. This review was not documented in a safety evaluation report and did not constitute approval of licensee-generated changes; therefore, this revision is subject to future inspection. The specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of one sample as defined in Inspection Procedure 71114.04-05.

b. Findings

No findings were identified.

1EP6 Drill Evaluation (71114.06)

Emergency Preparedness Drill Observation

a. Inspection Scope

The inspectors evaluated the conduct of a routine licensee emergency drill on January 25, 2012, to identify any weaknesses and deficiencies in classification, notification, and protective action recommendation development activities. The inspectors observed emergency response operations in the control room, technical support center and the emergency operations facility to determine whether the event classification, notifications, and protective action recommendations were performed in accordance with procedures. The inspectors also attended the licensee drill critique to compare any inspector-observed weakness with those identified by the licensee staff in order to evaluate the critique and to verify whether the licensee staff was properly identifying weaknesses and entering them into the corrective action program. As part of the inspection, the inspectors reviewed the drill package and other documents listed in the attachment.

These activities constitute completion of one sample as defined in Inspection Procedure 71114.06-05.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

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

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 fourth quarter 2011 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 Unplanned Scrams per 7000 Critical Hours (IE01)

a. Inspection Scope

The inspectors sampled licensee submittals for the unplanned scrams per 7000 critical hours performance indicator for the period from the first quarter 2011 through the fourth quarter 2011. 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, event reports, and NRC integrated inspection reports for the period of January 2011 through December 2011, to validate the accuracy of the submittals. 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 unplanned scrams per 7000 critical hours sample as defined in Inspection Procedure 71151-05.

b. Findings

No findings were identified.

.3 Unplanned Power Changes per 7000 Critical Hours (IE03)

a. Inspection Scope

The inspectors sampled licensee submittals for the unplanned power changes per 7000 critical hours performance indicator for the period from the first quarter 2011 through the fourth quarter 2011. 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, maintenance rule records, event reports, and NRC integrated inspection reports for the period of January 2011 through December 2011, to validate the accuracy of the submittals. 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 unplanned transients per 7000 critical hours sample as defined in Inspection Procedure 71151-05.

b. Findings

No findings were identified.

.4 Unplanned Scrams with Complications (IE04)

a. Inspection Scope

The inspectors sampled licensee submittals for the unplanned scrams with complications performance indicator for the period from the first quarter 2011 through the fourth quarter 2011. 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, event reports, and NRC integrated inspection reports for the period of January 2011 through December 2011, to validate the accuracy of the submittals. 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 unplanned scrams with complications sample as defined in Inspection Procedure 71151-05.

b. Findings

No findings were identified.

40A2 Problem Identification and Resolution (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 identified a corrective action report documenting a mechanic receiving an unanticipated dose rate alarm in the reactor building 422' elevation residual heat removal A pump room. The licensee entered the issue into the corrective action program as Action Request AR 259217.

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

b. Findings

Introduction. The inspectors reviewed a Green, self-revealing, noncited violation of Technical Specification 5.7 "High Radiation Area" when a mechanic made an entry into a high radiation area without authorization and using required controls on March 7, 2012. Specifically, the mechanic entered the high radiation area without authorization and was not knowledgeable of the dose rates in the area.

Description. March 7, 2012, a supervisor requested a mechanic enter the radiological controlled area to verify that a cart used the previous day during work in the 422'

elevation high pressure core spray pump room was properly chocked. The mechanic entered the radiological control area on Radiation Work Permit RWP 30002767, "General RCA Access," because the mechanic would not be performing work. This radiation work permit has a special instruction that states, in part, that entry into a high radiation area is not allowed on this radiation work permit. The mechanic discussed the route that would be taken to the pump room with radiation protection personnel. The mechanic then entered the radiological controlled area and went into the reactor building through the northeast door. The mechanic had little experience on the site and was unfamiliar with the pump room configuration on the reactor building 422' elevation. When he reached the bottom of the stairwell he took an alternate route to the high pressure core spray pump room. Along the alternate route the mechanic entered the reactor 422' elevation residual heat removal A pump room, which was posted as a high radiation area. Instead of stopping, the mechanic proceeded past the high radiation area posting across the room and received an unanticipated dose rate alarm. The mechanic exited the room and noted that the dose rate alarm had stopped.

The mechanic then exited the reactor building from the northeast door and instead of exiting the radiological controlled area and proceeding to radiological controlled area access point to inform radiation protection personnel that he had received a high dose rate alarm, the mechanic went to the southwest door to the reactor building and proceeded to the reactor building 422' elevation high pressure core spray pump room. The mechanic verified the cart was chocked, exited the reactor building and exited the radiological controlled area. As the mechanic was signing out of Radiation Work Permit RWP 30002767, he received a restricted access screen and notified radiation protection personnel. Radiation protection personnel determined the reason for the restricted access was due to a high dose rate alarm received on the mechanic's electronic dosimeter. An action request was generated and an electronic dosimeter alarm investigate form was completed. The licensee has restricted the mechanic's access to radiological controlled areas and radiological work. This issue was entered into the licensee's corrective action program as Action Request AR 259217.

Analysis. The entry into a high radiation area without authorization or knowledge of the dose rates was a performance deficiency. This finding was more than minor because it affected the human performance attribute of the Occupational Radiation Cornerstone and adversely affected the cornerstone objective to ensure the adequate protection of the worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. Using Manual Chapter 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," the finding was determined to have very low safety significance (Green) because: (1) the finding was not related to as-low-as-reasonably-achievable planning, (2) did not involve an overexposure, (3) did not involve a substantial potential for overexposure, and (4) did not compromise the licensee's ability to assess dose. The finding was determined to have a cross-cutting aspect in the area of human performance, associated with work practices component, self and peer checking. Specifically, the mechanic failed to perform self check techniques to ensure that the work activity was performed safely when encountering a high radiation area sign at the high radiation boundary and instead of stopping at the boundary, proceeded past [H.4(a)].

Enforcement. Technical Specification 5.7 states, in part, “that access to high radiation areas shall be controlled by means of a radiological work permit that includes specification of radiation dose rates in the immediate work areas and other appropriate radiation protection equipment and measures” and also states, in part, “that individuals not qualified in radiation protection or continuously escorted by such individuals, entry into high radiation areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them”. Contrary to this, on March 7, 2012, a mechanic entered a high radiation area without being signed in on a radiation work permit to allow entry to the high radiation area and was not made aware of or was not knowledgeable of dose rates in that high radiation area. Because this violation is of very low safety significance and was entered into the corrective action program as Action Request AR 259217, this violation is being treated as a non-cited violation consistent with the Enforcement Policy: NCV 05000397/2012002-004, “Unauthorized Entry into a High Radiation Area.”

4OA3 Followup of Events and Notices of Enforcement Discretion (71153)

.1 (Closed) Licensee Event Reports 2012-001-00 and 2012-001-01, DG-3 Inoperable for Longer than Allowed by TS due to Failed Governor

a. Inspection Scope

On February 28, 2010, the division 3 emergency diesel generator exhibited erratic behavior during testing which required the equipment to be secured. Troubleshooting by the licensee determined that foreign material within the governor was responsible for the erratic behavior and that the foreign material was introduced during maintenance activities on October 14, 2005. The resident inspectors reviewed this issue as part of a performance indicator review in October 2011 and questioned why a licensee event report was not submitted since the time of the introduction of the foreign material was known and indicated that the equipment was out of service for a period greater than its technical specification allowed completion time. Subsequent evaluation by the licensee concluded that there was not reasonable assurance the division 3 diesel generator could operate for its required mission time with the foreign material present in the governor and the event constituted a condition which was prohibited by the plant's technical specifications and was reportable per the requirements of 10 CFR 50.73(a)(2)(i)(b). The inspectors reviewed the licensee event reports associated with this event and determined that the reports adequately documented the summary of the event including the potential safety consequences and corrective actions required to address the performance deficiency. The inspectors determined that the licensee failed to follow procedures associated SWP-CAP-01, “Corrective Action Program” Revision 21 when evaluating past operability and reportability associated with this issue. A green non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures and Drawings” was identified; the enforcement aspects of this NCV are discussed below. The inspectors also identified a licensee identified non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action.” The enforcement aspects of this violation are discussed in Section 4OA7 of this report. These licensee event reports are closed.

b. Findings

Introduction. The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings", for the licensee's failure to follow Procedure SWP-CAP-01, "Corrective Action Program," Revision 21 when evaluating the past operability and reportability of the division 3 emergency diesel generator.

Description. On February 28, 2010, the division 3 emergency diesel generator exhibited erratic behavior during testing which required the equipment be secured. Troubleshooting by the licensee determined that the governor actuator was responsible for the erratic behavior. Repairs and postmaintenance testing were completed and the licensee restored the diesel generator to operable on March 4, 2010. The licensee entered this issue into their corrective action program as Action Request 213502. On July 27, 2010, the licensee completed Revision 1 of the root cause evaluation which included a forensic examination of the diesel engine's governor actuator. The forensic examination report identified a large amount of foreign material within the governor actuator and concluded that this material interfered with the component's internal clearances causing the actuator to stick. The licensee's root cause evaluation identified that a large portion of the foreign material was introduced during maintenance activities on October 14, 2005. During that maintenance in 2005, a corner of the governor's shutdown solenoid terminal strip broke off and fell into the governor. Attempts to retrieve the foreign material were unsuccessful and the licensee evaluated the presence of the foreign material as a degraded or nonconforming condition but one that would not impact equipment operability. The justification for continued operation incorrectly concluded that the softness and relative small size of the broken terminal strip would not adversely impact the diesel governor's operation.

The resident inspectors reviewed Action Request 213502 including the licensee's revised root cause evaluation and vendor report and noted that the licensee did not submit a licensee event report for this event. The licensee's decision not to submit a licensee event report was based on an incorrect conclusion that past operability should be evaluated from the point when the diesel failed since there was no indication of prior performance issues with the governor actuator. The licensee's reportability evaluation was completed prior to receipt of the forensic analysis which provided new information that foreign material had been present in the governor actuator since October 2005. Contrary to licensee Procedure SWP-CAP-01, "Corrective Action Program", Revision 21, Step 4.2.8, no re-evaluation of past operability or reportability following receipt of this new information was performed. The inspectors identified that the conclusion about past operability and reportability was contradicted by the results of the licensee's root cause evaluation and the forensic analysis performed by the vendor. Specifically, the exact time of the introduction of the terminal strip material into the governor was known and the vendor report concluded that this foreign material caused the erratic behavior of the diesel's governor. The resident inspectors questioned if a licensee event report was required since the foreign material caused the diesel to be inoperable and the exact time of the introduction of the foreign material was known.

An evaluation by the licensee concluded that while there were other contributors to the February 28, 2010, diesel failure including inadequate maintenance and aging, there was not reasonable assurance the division 3 diesel generator could operate for its required mission time with the foreign material present. Since the foreign material was introduced in October 2005, the licensee concluded that the division 3 diesel generator was inoperable for a period greater than allowed by the plants technical specifications and the event was reportable per the requirements of 10 CFR 50.73(a)(2)(i)(b).

Following identification that a required report was missed, the licensee submitted Licensee Event Report 2012-001-00 on January 13, 2012. Following additional causal analysis and forensic analysis, the licensee submitted supplemental Licensee Event Report 2012-001-01 on March 13, 2012.

Analysis. The failure to follow requirements provided in Procedure SWP-CAP-01 was a performance deficiency. This finding was more than minor because, if left uncorrected, the failure to follow procedures associated with the corrective action program could become a more significant safety concern. Specifically, the failure to follow corrective action program procedures could result in unrecognized reportable conditions or unevaluated degraded or nonconforming conditions. The inspectors used Inspection Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," and determined that the findings was of very low safety significance (Green) because it did not result in the loss of a system safety function, did not represent the loss of safety function of a single train for greater than its allowed outage time, did not result in the loss of safety function of any non-technical specification equipment, and did not screen as potentially risk significant due to seismic, flooding, or severe weather initiating events. The inspectors determined that this finding had a cross-cutting aspect in the area of human performance associated with the decision making component because the conclusions drawn in the root cause evaluation were not communicated to personnel responsible for making decisions associated with reportability such that a required licensee event report could be submitted in a timely manner [H.1(c)].

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 be accomplished in accordance with these instructions, procedures, or drawings. Licensee procedure SWP-CAP-01, "Corrective Action Program", Revision 21, Step 4.2.8 requires the licensee to re-evaluate reportability as new information becomes available. Contrary to the above, on July 27, 2010, the licensee failed to re-evaluate AR 213502 for reportability after new information became available as documented in the root cause evaluation for AR 213502, Revision 1. Consequently, the licensee the failed to submit a required licensee event report for the failure of the February 28, 2010 Division 3 emergency diesel generator. Because this violation was of very low safety significance and it was entered into the licensee's corrective action program as Action Requests AR 251950 and 255926, this violation is being treated as a non-cited violation, consistent with the Enforcement Policy: NCV 05000397/2012002-05, "Failure to Evaluate Reportability Associated with Division 3 Diesel Generator Inoperability"

40A6 Meetings

Exit Meeting Summary

On January 4, 2012, the inspectors discussed the results of the licensed operator annual requalification examination with Mr. R. Hayden, Exam Developer and SAT Coordinator. A telephonic exit meeting was held with Mr. Hayden on January 12, 2012. The licensee acknowledged the results of the inspection presented in the final exit meeting. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

On April 2, 2012, the inspectors presented the inspection results to Mr. W. Hettel, Vice President Operations, and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

On May 3, 2012, the inspectors presented the final inspection results to Mr. D. Gregoire, Manager, Regulatory Affairs. The licensee acknowledged the issues presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

40A7 Licensee-Identified Violations

The following violations of very low safety significance (Green) were identified by the licensee and are violations of NRC requirements which meet the criteria of the NRC Enforcement Policy for being dispositioned as non-cited violations.

- .1 Title 10 CFR 50.65(a)(4) states, in part, that before performing maintenance activities, the licensee shall assess and manage the increase in risk that may result from the proposed maintenance activities. Contrary to the above, on February 27, 2012, the high pressure core spray system was made unavailable during surveillance testing without performing a risk assessment prior to conducting testing. The licensee documented the issue in the corrective action program as Action Request AR 258712. This violation is of very low safety significance because the risk deficit during the time of the surveillance was calculated to be less than $1.0E-6$.

- .2 Title 10 CFR, Part 50, Appendix B, Criterion XVI, "Corrective Actions," requires, in part, that measures shall be established to assure that conditions adverse to quality are promptly identified and corrected. Contrary to the above, on October 14, 2005, the licensee identified a condition adverse to quality in that foreign material was present within the governor actuator for the division 3 emergency diesel generator but no corrective actions were implemented to retrieve the identified foreign material. This finding was entered in the licensee's corrective action program as Action Request AR 213502. This finding was evaluated by a senior reactor analyst and determined to be of very low safety significance.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

D. Brown, Manager, Operations
C. Sondona, Regulatory Affairs, Licensing Engineer
M. Davis, Manager, Radiological Services
Z. Dunham, Supervisor, Licensing
C. England, Manager, Chemistry
A. Fahnestock, Manager, Emergency Preparedness
C. Golightly, Root Cause Analyst
D. Gregoire, Manager, Regulatory Affairs
R. Hayden, Exam Developer and SAT Coordinator
W. Hettel, Vice President, Operations
C. King, Assistant Plant General Manager
B. MacKissock, Plant General Manager
D. Mand, Manager, Design Engineering
C. Moon, Manager, Training
R. Parmelee, Operations Support Manager
M. Pezzetti, Assistance Operations Manager, Work Control
B. Sawatzke, Vice President Nuclear Generation/Chief Nuclear Officer
D. Swank, Assistant Vice President, Engineering
S. Wood, Manager, Organizational Effectiveness

NRC Personnel

J. Groom, Senior Resident Inspector
M. Hayes, Resident Inspector
W. Schaup, Acting Senior Resident Inspector
M. Haire, Chief, Operations Branch, Division of Reactor Safety

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None.

Opened and Closed

05000397-2012002-01	NCV	Failure to Take Corrective Actions to Address Hardened Lubricant Safety-Related Disconnect Switches (Section 1R04)
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Opened and Closed

05000397-2012002-01	NCV	Failure to Take Corrective Actions to Address Hardened Lubricant Safety-Related Disconnect Switches (Section 1R04)
05000397-2012002-02	NCV	Failure to Update Combustible Loading Calculation (Section 1R05)
05000397-2012002-03	NCV	Failure to Validate Compensatory Measures During Maintenance (Section 1R19)
05000397-2012002-04	NCV	Unauthorized Entry into a High Radiation Area (Section 4OA2)
05000397-2012002-05	NCV	Failure to Evaluate Reportability Associated with Division 3 Diesel Generator Inoperability (Section 4OA3)

Closed

05000397-2012-001-00	LER	DG-3 Inoperable for Longer than Allowed by TS Due to Failed Governor
05000397-2012-001-01	LER	DG-3 Inoperable for Longer than Allowed by TS Due to Failed Governor

Discussed

None.

LIST OF DOCUMENTS REVIEWED

Section 1RO1: Adverse Weather Protection

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
ABN Site-Access Routes	Loss/Restriction of Site Access Routes	0
SOP-COLDWEATHER-OPS	Cold Weather Operations	21

Section 1RO4: Equipment Alignment

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
1.5.12	Preventative Maintenance Optimization Living Program	9

Section 1RO4: Equipment Alignment

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
1.5.12	Preventative Maintenance Optimization Living Program	10
10.25.187	Motor Control Center Starter (Bucket) Maintenance	16
SOP-ELEC- BKR-OPS	AC Electrical Breaker Racking	6
SOP-DG1-STBY	Emergency Diesel Generator (Div 1) Standby Lineup	14
SOP-DG3-STBY	High Pressure Core Spray Diesel Generator Standby Lineup	12
SWP-CAP-01	Corrective Action Program	19

ACTION REQUEST/CONDITION REPORTS

00206698 00237196 00238361 00251704 00253985
00255019

PROBLEM EVALUATION REQUETS

204-0842 204-0858 205-0499 206-0603 207-0020

Section 1RO5: Fire Protection

MISCELLANEOUS DOCUMENTS

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
FSAR	CGS FSAR, Appendix F	61

ACTION REQUEST/CONDITION REPORTS

255802

Section 1R11: Licensed Operator Requalification Program

MISCELLANEOUS DOCUMENTS

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
TDI-08	Licensed Operator Requalification program	8

Section 1R11: Licensed Operator Requalification Program

MISCELLANEOUS DOCUMENTS

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
PPM 13.1.1	Classifying the Emergency	41
OI-15	EOP and EAL Clarifications	21
LR0022008	HIT/CYCLE 12-1 Evaluated scenario	1

ACTION REQUEST/CONDITION REPORTS

253944 253946 254020 254771

Section 1R12: Maintenance Effectiveness

ACTION REQUEST/CONDITION REPORTS

00211433 00213179 00213232 00213370 00213483
00213488 00213502 00213507 00213688 00214704
00214708 00214711 00214713 00214917 00216977
00219914 00220093 00220575 00223206 00223317
00236699 00228522 00228530 00229745 00231738
00240115 00240566 00241002 00242490 00243837
00245363 00246222 00251778 00256860 00256748
00256960

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
PPM 1.3.57	Barrier Impairment	26
PPM 10.20.14	Diesel Generator Alternative Refuel Cycle (2 year and 4 year) Preventative Maintenance	13

Section 1R13: Maintenance Risk Assessment and Emergent Work Controls

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
1.3.68	Work Management Process	24

Section 1R13: Maintenance Risk Assessment and Emergent Work Controls

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
1.3.76	Integrated Risk Management	30

WORKORDER/WORK REQUESTS

29092473	29095735	29095645
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Section 1R15: Operability Evaluations and Functionality Assessments

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
DES-2-9	Technical Evaluations	18
PPM 1.3.66	Operability and Functionality Evaluation	20
PPM 1.3.67	Operational Decision Making Process	10
PPM 10.25.105	Motor Control Center and Switchgear Maintenance	31
SWP-CAP-01	Corrective Action Program	24

DRAWINGS

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
E507-3	Main Three Line Diagram	34
E514-20	Diesel Generator DG-2 Relay Settings List	10
E543-6B	Connection Wiring Diagram 4160V Switchgear DG 2-8 Cubicle Aux (Unit 2)	11
EWD-47E-005	Electrical Wiring Diagram Standby AC Power System Diesel Generator 2 Breakers E-CB-8/DG2 and E-CB-DG2/8	26
EWD-47E-033	Electrical Wiring Diagram Standby AC Power System Diesel Generator 2 Excitation System	6
EWD-47E-041	Electrical Wiring Diagram Standby AC Power System Diesel Generator 2 Generator Instrumentation and Protection	15

MISCELLANEOUS DOCUMENTS

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
Report number 2-12-17-1	Liquid Penetrant Examination Data Sheet, Weld 6, RHR-V-145C	2/27/12
Report number 2-12-17-9	Liquid Penetrant Examination Data Sheet, Weld 6, RHR-V-145C	2/29/12

ACTION REQUEST/CONDITION REPORTS

00035680	00056990	00189426	00198936	00214109
00217166	00243837	00255400	00255720	00255797
00258629				

WORK ORDER

01190211

Section 1R18: Plant Modifications

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
4.DG3	DG3 Annunciator Panel Alarms	16
4.601.A1	601.A1 Annunciator Panel Alarms	25
PPM 1.3.9	Temporary Modifications	49
PPM 1.3.68	Work Management Process	24

ENGINEERING CHANGES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
EC 0000010772	Bypass HPCS-GEN-DG3 High Temperature Shutoff Switch	2/25/2012

WORK ORDER

02022168

Section 1R19: Postmaintenance Testing

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
SWP-TST-01	Post Maintenance Testing Program	14
OSP-SGT-M701	Standby Gas Treatment System A Operability	14
MSP-SGT-B101	Standby Gas Treatment System Unit A HEPA Filter Test	4
MSP-SGT-B103	Standby Gas Treatment Filtration System Unit A Carbon Absorber Test	8
OI-41	Operations Work Control Expectations	40
OSP-ELEC-M701	Diesel Generator 1 Monthly Operability Test	49
PPM 10.20.12	Division 1 and 2 Diesel Generator 2, 4, & 6 Year Preventative Maintenance	18
PPM 10.20.1	Diesel Engine Refuel Cycle (2 Year) Preventive Maintenance Division 1 and Division 2	24

DRAWINGS

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
EWD-7E-004C	Electrical Wiring Diagram High Pressure Core Spray System HPCS Diesel Engine DG-ENG-1C Controls	2

ACTION REQUEST/CONDITION REPORTS

00259108	00259255	00259354	00260061	00259677
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WORK ORDERS

02004422	02004423	01167407
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Section 1R22: Surveillance Testing

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
OSP-INST-H101	Shift and Daily Instrument Checks (Modes 1, 2, 3)	74
OSP-RCIC/IST-Q701	RCIC Operability Test	44
OSP-SW/IST-Q703	HPCS Service Water Operability	16

PPM 3.2.1	Normal Plant Shutdown	68
PPM 9.3.12	Plant Power Maneuvering	28
TSP-CRD-C101	CRD Scram Timing with Auto Scram timer System	21

MISCELLANEOUS DOCUMENTS

Reactivity Control Plan	Sequence Exchange and STT March 4, 2012	2/29/12
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WORK ORDERS

02011404	02013224
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Section 1EP4: Emergency Action Level and Emergency Plan Changes

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
13.10.1	Control Room Operation and Shift Manager Duties	034
	Emergency Plan Columbia Generating Station	56
13.1.1	Classifying the Emergency	040 and 041
13.1.1A	Classifying the Emergency – Technical Bases	024 and 025

Section 1EP6: Drill Evaluation

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
PPM 5.1.1	RPV Control	19
PPM 13.1.1	Classifying the Emergency	37
PPM 5.1.2	RPV Controls – ATWS	20
PPM 5.2.1	Primary Containment Control	19
PPM 5.3.1	Secondary Containment Control	18

ACTION REQUESTS/CONDITION REPORTS

00256621

Section 40A1: Performance Indicator Verification

MISCELLANEOUS DOCUMENTS

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
NEI 99-02	Regulatory Assessment Performance Indicator Guideline	6

Section 40A2: Identification and Resolution of Problems

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
1.3.81	Maintaining Plant Component Status Control	4
SWP-CAP-01	Corrective Action Program	24

MISCELLANEOUS DOCUMENTS

RWP 30002767	General RCA Access for Tours and Inspections	0
Drawing D-14182	Seal System Schematic	December 2, 1971

ACTION REQUEST/CONDITION REPORTS

00254575 00259217

Section 40A3: Event Follow-Up

ACTION REQUEST/CONDITION REPORTS

00251950 00255926

WORK ORDERS

01149113	01149114	01111045	01070193	01038767
01135070	01135069	01066716	01036936	01010891

Section 40A7: Licensee-Identified Violations

ACTION REQUEST/CONDITION REPORTS

00213502 00251950 00255926 00258712