

# Duane Arnold

## 1Q/2012 Plant Inspection Findings

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### Initiating Events

**Significance:**  Feb 10, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Flammable Gas Bottles Installed in the Reactor Building (Section 1R05.11b)**

The inspectors identified a finding of very low safety significance and associated NCV of Title 10, Code of Federal Regulations (CFR) Part 50, Appendix B, Criterion III, "Design Control," for the failure to check the adequacy of design for flammable gas bottles installed in the reactor building and their impact on safety-related cables and safety-related equipment. Specifically, the licensee failed to evaluate how a failure of the flammable gas bottles and the resulting fire or explosion at the installed locations could impact nearby safety-related structures, systems, or components. The licensee entered this issue into their corrective action program to review the placement of the flammable gas bottles.

The inspectors determined that the finding was more than minor because the finding was associated with the Initiating Events cornerstone attribute of Protection against External Factors (Fire) and affected the cornerstone's objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The finding was of very low safety significance due to the low fire initiating frequency and the availability of remaining mitigating systems. This finding did not have a cross-cutting aspect because the finding was not representative of current performance.

Inspection Report# : [2012007](#) (*pdf*)

**Significance:**  Dec 31, 2011

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

#### **CANCELLATION OF RIVER SURVEY WORK ORDER CAUSES INOPERABILITY OF RIVER WATER SYSTEM.**

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self revealed on August 11, 2011, when both river water supply subsystems were rendered inoperable following a sediment intrusion event. Specifically, the cause of the event was attributed to the cancellation of a river bed survey that would have identified the increased sediment buildup requiring increased monitoring and corrective actions (dredging, sand pumping, and/or structural repairs). The cancellation of the river bed survey work order was contrary to the requirements of Administrative Control Procedure 1208.3, "Preventive Maintenance Program," that required management approval prior to cancelling the work order that was tied to the corrective action program. This issue of concern was documented in the licensee's corrective action program as condition report 01676836. Corrective actions included revision to affected river survey work orders to ensure that they could not be cancelled without adequate review and approval, and completion of river dredging and repairs to the upstream spur dikes.

The inspectors determined that the issue of concern represented a performance deficiency because it was the result of the licensee's failure to meet a procedural requirement, and the cause was reasonably within the licensee's ability to foresee and correct and should have been prevented. The performance deficiency was determined to be more than minor and a finding because it was associated with the Initiating Events Cornerstone attribute of equipment performance, and it affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. The inspectors applied IMC 0609, Attachment 4, "Phase 1 Initial Screening and Characterization of Findings," to this finding. Because the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available under the Initiating Events Cornerstone column of Table 4a, the finding was determined to be of very low safety

significance (Green). The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross cutting aspect of Human Performance, having Decision Making components, and involving the licensee making safety or risk significant decisions using a systematic process, including formally defining the authority and roles for decisions affecting nuclear safety. Specifically, several decisions were made with respect to spur dike repairs and river monitoring; however, the requisite organizational reviews and approvals associated with the river were not performed to ensure appropriate actions were taken.  
Inspection Report# : [2011005](#) (*pdf*)

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## Mitigating Systems

**Significance:**  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

### **LACK OF ACCEPTANCE CRITERIA WITHIN EMERGENCY CORE COOLING SYSTEM SURVEILLANCE PROCEDURE.**

A finding of very low safety significance (Green) and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures and Drawings,” was identified by the inspectors on February 2, 2012, for the licensee’s failure to prescribe a procedure appropriate to the circumstances and include appropriate acceptance criteria in Surveillance Test Procedure (STP) 3.5.1 15, “RHR System Water Fill Test,” Revision 1. Specifically, STP 3.5.1 15 did not provide guidance for quantifying the size of any voids within the system, such that the effect on system operability could not be readily evaluated, nor did the STP establish criteria for an acceptable as found condition. The licensee entered this issue into the corrective action program (CAP) as condition report (CR) 1731106 and initiated procedure revisions to provide appropriate acceptance criteria.

The inspectors determined that failing to establish appropriate acceptance criteria for a Technical Specification (TS) surveillance procedure was a performance deficiency. The performance deficiency was determined to be more than minor and a finding because it was associated with the procedure quality attribute of the Mitigating Systems Cornerstone, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding was evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Phase 1 Initial Screening and Characterization of Findings,” Table 4a for the Mitigating Systems Cornerstone. The finding screened as of very low safety significance (Green) because the finding was a qualification deficiency confirmed not to result in loss of operability or functionality. The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross cutting area of Problem Identification and Resolution, having Corrective Action Program components, such that issues potentially affecting nuclear safety are promptly identified (at a low threshold), fully evaluated, and that actions are taken to address safety issues in a timely manner.

Inspection Report# : [2012002](#) (*pdf*)

**Significance:**  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

### **BATTERY CONDITIONS ADVERSE TO QUALITY NOT PROMPTLY IDENTIFIED.**

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action,” was identified by the inspectors on January 23, 2012, for the licensee’s failure to promptly identify and correct safety related direct current (DC) battery system conditions adverse to quality. Specifically, several through lid cracks on the 1D1 and 1D2 125 volts direct current (VDC), and 1D4 250 VDC batteries, that were considered degraded conditions, were not promptly identified by the licensee. The susceptibility and progression of lid cracking was a known condition; however, monitoring of the condition was not adequate to ensure correction of the conditions prior to impacting the qualification of the batteries. The licensee entered the inspector’s issues into the CAP as CRs 01727026, 01727028 and 01727030. The licensee performed prompt operability determinations (PODs) that determined the affected DC electrical subsystems were operable, but degraded, pending restoration of the

batteries to full qualification (epoxy repairs).

The inspectors determined that failing to promptly identify and correct battery lid cracking that impacted qualification represented a performance deficiency because it was the result of the licensee's failure to meet a regulatory requirement, and the cause was reasonably within the licensee's ability to foresee and correct and should have been prevented. The performance deficiency was determined to be more than minor and a finding because, if left uncorrected, failing to promptly identify and evaluate the operability of a degraded condition would have the potential to lead to a more significant safety concern. The inspectors evaluated the finding in accordance with IMC 0609.04, Table 4a. Because the finding was a qualification deficiency confirmed not to result in loss of operability (Question 1 under the Mitigating Systems Cornerstone column), the finding screened as very low safety significance (Green). The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross cutting aspect of Human Performance, having Resources components, and involving the licensee maintaining long term plant safety by maintenance of design margin and minimization of long standing equipment issues.

Inspection Report# : [2012002](#) (pdf)

**Significance:**  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

**INADEQUATE CAUSAL EVALUATION AND CORRECTIVE ACTIONS FOR LOSS OF RHR SYSTEM LPCI SAFETY FUNCTION DUE TO INOPERABLE ECCS INSTRUMENTATION.**

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action" was identified by the inspectors on March 7, 2012, following review of apparent cause evaluation (ACE) 01720033 associated with the loss of Low Pressure Coolant Injection (LPCI) loop select capability. Specifically, the inspectors identified several concerns with the implementation of the licensee's corrective action program characterization of CR 01720033 that resulted in the inadequate evaluation of cause, extent of cause and condition; and incomplete corrective actions to prevent recurrence. The licensee entered the issue into the CAP as CR 01742201, and was in the process of revising the original causal evaluation and performing an additional ACE to investigate the CAP implementation issues.

The inspectors determined that failing to properly determine the cause and take corrective actions to prevent recurrence for LPCI loop select instrument failures represented a performance deficiency. The performance deficiency was determined to be more than minor and a finding because, if left uncorrected, failing to properly determine the cause and take corrective actions to prevent recurrence for significant conditions adverse to quality would have the potential to lead to a more significant safety concern. The inspectors evaluated the finding in accordance with IMC 0609.04, Table 4a. Because the inspectors answered "No" to all five screening questions under the Mitigating Systems Cornerstone column, the finding screened as very low safety significance (Green). The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross cutting aspect of Human Performance, having Decision Making components, and involving the licensee making safety significant or risk significant decisions using a systematic process, especially when faced with uncertain or unexpected plant conditions, to ensure safety is maintained.

Inspection Report# : [2012002](#) (pdf)

**Significance:**  Sep 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

**DEGRADED OR NON-CONFORMING CONDITIONS NOT PROPERLY EVALUATED.**

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure on two occasions to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments," when degraded or non conforming conditions were identified. Specifically, in one case, the duty Shift Manager incorrectly concluded that an immediate determination of operability for the Ultimate Heat Sink (UHS) was not applicable when a degraded wing dam condition was identified upstream of the intake structure. In another case, the duty Shift Manager incorrectly concluded that immediate determinations of operability for Residual Heat Removal (RHR) and Residual Heat Removal Service Water (RHRSW) thermal relief valves were not applicable when it was identified that several

valves had not been tested in accordance with American Society of Mechanical Engineers (ASME) Code requirements. For each issue, the conclusions were contrary to the requirements of procedure EN AA 203 1001 which requires all degraded or non conforming conditions be evaluated under an immediate operability determination and prompt operability determination (POD) if warranted. The licensee entered the inspector's concerns into the Corrective Action Program (CAP) as Condition Report (CR) 01679373 and 01684521, for the UHS and RWS system, and RHR and RHRSW systems, respectively. The licensee performed PODs that determined the affected structures, systems, and components (SSCs) were operable but degraded or non conforming pending restoration of the SSCs to full design and licensing basis qualification.

The inspectors determined that the issues of concern represented a performance deficiency because they were the result of the licensee's failure to meet a procedural requirement, and the cause was reasonably within the licensee's ability to foresee and correct and should have been prevented. The performance deficiency was determined to be more than minor and a finding because, if left uncorrected, failing to properly assess the operability of degraded or non conforming conditions would have the potential to lead to a more significant safety concern. The inspectors applied IMC 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings," to this finding. Because the finding was a qualification deficiency confirmed not to result in loss of operability (Question 1 under the Mitigating Systems Cornerstone column of Table 4a), the finding screened as very low safety significance (Green). The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross cutting aspect of Human Performance, having Decision Making components, and involving the licensee making safety significant decisions using a systematic process. Specifically, by deciding that systematic evaluations of operability were not required to assess the impact of the conditions on the design and licensing bases of the SSCs, the licensee did not ensure that the impact was clearly understood and whether compensatory measures were necessary. [H.1(a)] (Section 1R15)  
Inspection Report# : [2011004](#) (pdf)

**Significance:**  Apr 28, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Ensure Sufficient Thrust Margins for the 480 VAC Safety-Related MOVs.**

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the licensee's failure to ensure sufficient thrust margins for 480 VAC safety-related motor operated valves (MOV). Specifically, when the Electrical Transient Analysis Program (ETAP) AC power analysis was made the calculation of record, the results in some cases reduced the safety-related MOV terminal voltages, which were not incorporated into the MOV thrust calculations. The licensee entered this finding into their corrective action program and verified that the safety-related MOVs had positive thrust margins.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of Equipment Performance, and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, there was reasonable doubt as to whether the subject MOVs would have sufficient thrust margins to perform their safety function during a design basis accident. The finding screened as very low safety significance (Green) because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding had a cross-cutting aspect in the area of human performance because the licensee did not plan and coordinate work activities consistent with nuclear safety. Specifically, the licensee failed to appropriately coordinate and interface with other departments while performing the ETAP calculation.

Inspection Report# : [2011009](#) (pdf)

**Significance:**  Apr 28, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Test Eight Valves in Accordance with the IST Program.**

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of

Technical Specification 5.5.6, "Inservice Testing Program," for the failure to perform the required testing in accordance with the American Society of Mechanical Engineers Code for eight valves that had active safety functions. Specifically, these valves were required to operate in Mode 3 to return the residual heat removal system from the shutdown cooling mode to the low pressure coolant injection mode of operation. The licensee entered this finding into their corrective action program and verified that the valves were operable based on recent exercising of the valves during the last refueling outage.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of Equipment Performance, and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee would be unable to trend the performance of the valves due to inadequate testing, which could result in not identifying degraded valve performance. The finding screened as very low safety significance (Green) because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding had a cross-cutting aspect in the area of problem identification and resolution because the licensee failed to identify a condition adverse to quality. Specifically, when the licensee identified the concern with additional valves during an extent of condition review, the licensee failed to initiate a new action request to ensure the condition adverse to quality was adequately evaluated.

Inspection Report# : [2011009](#) (*pdf*)

**Significance:**  Apr 28, 2011

Identified By: NRC

Item Type: FIN Finding

#### **Inadequate Evaluation of RCIC Operation during an SBO.**

The inspectors identified a finding of very low safety significance (Green) in that, the licensee did not adequately ensure the operation of the reactor core isolation cooling (RCIC) system was within the capability of the 125 VDC station batteries under station blackout (SBO) conditions. Specifically, the inspectors determined that the station battery design calculation was based on a different number of pump starts and stops and different pump operating times than the extended power uprate project report and the expected operating practices during a postulated SBO event. As a result the battery analysis was non-conservative with regard to the capability of the batteries to cope with an SBO. The licensee entered this finding into their corrective action program and verified that the batteries would still have sufficient capacity to supply the required loads during an SBO event.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of Design Control, and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the battery design calculation did not ensure that the capability of the 125 VDC station batteries to support operation of the RCIC system under SBO conditions. The finding was screened as very low safety significance (Green) because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding had a cross-cutting aspect in the area of human performance because the licensee did not have accurate and up-to-date design documentation. Specifically, the licensee included information regarding RCIC system operation from the previous battery design calculation without ensuring it represented the bounding analysis.

Inspection Report# : [2011009](#) (*pdf*)

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## **Barrier Integrity**

**Significance:**  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

#### **SECONDARY CONTAINMENT AIRLOCK DOOR INTERLOCK SYSTEM CONDITIONS ADVERSE TO QUALITY NOT PROMPTLY CORRECTED.**

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI,

“Corrective Action,” was identified by the inspectors on February 21, 2012, for the licensee’s failure to promptly correct secondary containment (SCT) airlock door interlock system conditions adverse to quality. Specifically, the inspectors identified several instances during 2010 and 2011 where the licensee did not adequately correct interlock system conditions resulting in simultaneous opening of SCT airlock doors. For each occurrence, the interlock system conditions resulted in unplanned inoperability of secondary containment and entries into short term limiting condition for operation (LCO) action statements. The licensee entered the inspector’s concerns into the CAP as CR 01716446 and CR 01737495, and was in the process of performing a condition evaluation and apparent cause evaluation.

The inspectors determined that the licensee’s failure to promptly correct SCT airlock door interlock system conditions adverse to quality represented a performance deficiency. The performance deficiency was determined to be more than minor and a finding because, if left uncorrected, failing to promptly correct conditions adverse to quality would have the potential to lead to a more significant safety concern. The inspectors evaluated the finding in accordance with IMC 0609.04, Table 4a. Because the inspectors answered “No” to all questions under the Containment Barrier column, the finding screened as very low safety significance (Green). The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross cutting aspect of Human Performance, having Decision Making components, and involving the licensee making safety significant or risk significant decisions using a systematic process, especially when faced with uncertain or unexpected plant conditions, to ensure safety is maintained.

Inspection Report# : [2012002](#) (pdf)

**Significance:**  Dec 31, 2011

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**PROCEDURAL NON-COMPLIANCE RESULTS IN REACTOR BUILDING CRANE COLLIDING WITH ISFSI INSPECTION STAND.**

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was self revealed on October 31, 2011, when operators failed to follow Operating Instruction 999, “Reactor Building Crane.” Specifically, this error resulted in the reactor building (RB) crane striking the Independent Spent Fuel Storage Installation (ISFSI) inspection stand. Immediate corrective actions included performing inspections of the dry storage container transfer cask, ISFSI inspection stand, and reactor building crane.

The inspectors determined that attempting to move the crane over the ISFSI work platform while the hand rails were installed was contrary to the RB crane operating instruction and was an issue of concern. Failing to follow the RB crane operating instruction was a performance deficiency because it was the result of the licensee’s failure to meet a procedural requirement, and the cause was reasonably within the licensee’s ability to foresee and correct and should have been prevented. The performance deficiency was determined to be more than minor and a finding because, if left uncorrected, the performance deficiency would have the potential to lead to a more significant safety concern. Specifically, not following the RB crane operating instructions could lead to a more significant event or cause damage to safety-related equipment. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Phase 1 Initial Screening and Characterization of Findings,” Table 4a for the Barrier Integrity Cornerstone. Because the finding only affected the fuel barrier, the finding was determined to be of very low safety significance (Green). The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross cutting aspect of Human Performance, having Work Control components, and involving appropriately coordinating work activities by incorporating actions to address the need to keep personnel apprised of work status, the operational impact of work activities, and plant conditions that may affect work activities. Specifically, the licensee did not implement appropriate work controls to ensure the hand rails of the ISFSI inspection stand were removed prior to moving the crane for an activity that was not associated with the ISFSI project.

Inspection Report# : [2011005](#) (pdf)

**Significance:**  Sep 30, 2011

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**MISPLACED SPENT FUEL ASSEMBLY IN SPENT FUEL POOL.**

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self revealed on August 16, 2011, for the failure of the licensee to place a spent fuel assembly in its correct location in the spent fuel pool (SFP) in accordance with Refueling Procedure (RFP) 301, "Refueling Bridge Operations." Specifically, the fuel handling team failed to move spent fuel assembly JLE323 to its intended location in the SFP in accordance with Item Control Area (ICA) Transfer Report, Plan Number 11 002. This error was contrary to the requirement of step 4.3.13 of procedure RFP 301 which required movement of spent fuel assemblies in accordance with the ICA Transfer Report. The issue was documented in the licensee's corrective action program as CR 01678733. A prompt evaluation of JLE323 being placed into the incorrect location was performed and determined that the assembly could remain in the incorrect location with no reduction in safety margin. Additional corrective actions included a work stand down, and enhanced fuel handler training and briefings with additional management oversight.

The inspectors determined that the issue of concern represented a performance deficiency because it was the result of the licensee's failure to meet a procedural requirement, and the cause was reasonably within the licensee's ability to foresee and correct and should have been prevented. The performance deficiency was determined to be more than minor and a finding because it was associated with the Barrier Integrity Cornerstone attributes of configuration control and human performance, and it affected the cornerstone objective of providing reasonable assurance that physical design barriers (i.e., fuel cladding) protect the public from radionuclide releases caused by accidents or events. The inspectors applied IMC 0609, Attachment 4, "Phase 1 Initial Screening and Characterization of Findings," to this finding. Because the inspectors answered "No" to all questions under "Spent Fuel Pool Issues," under the Barrier Integrity Cornerstone column of Table 4a, the finding as very low safety significance (Green). The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross cutting aspect of Human Performance, having Work Practices components, and involving the licensee using human performance error prevention techniques commensurate with the risk of the assigned task. Specifically, the fuel handling team made the error when they did not correctly apply human performance error prevention tools which were required, expected and appropriate for an activity involving the movement of irradiated fuel and classified as a "high risk" activity. [H.4(a)] (Section 4OA2.3)

Inspection Report# : [2011004](#) (pdf)

**Significance:**  Jun 30, 2011

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

### **WORK INSTRUCTIONS DID NOT INCLUDE REACTIVITY IMPACT EVALUATION FOR PREVENTATIVE MAINTENANCE ACTIVITY.**

.A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self revealed when opening MO 1044 (main steam line drain orifice valve) to conduct preventive maintenance on its associated control breaker led to an unanticipated increase in core thermal power. Specifically, reactor core thermal power exceeded the facility's maximum licensed steady state power level [LPL] of 1912 megawatts thermal (MWth) during the conduct of model work order (WO) 1282557. Although the WO identified that opening MO 1044 had a reactivity impact; Form NG 008R, "Reactivity Management Screening Checklist", was not performed which would have required a more rigorous consideration of the impact of the activity on current plant conditions and whether any compensatory measures were needed. Therefore, conservative actions to reduce reactor power prior to opening MO 1044 to preclude the temperature transient and subsequent positive reactivity addition were not taken by the operating crew. The licensee entered the issue into the corrective action program (CAP) as condition report (CR) 01643412, revised station procedures, and reviewed existing model WOs to ensure that the reactivity impact would be considered and evaluated prior to performance of the reactivity impacted activities.

The inspectors determined that the issue was a performance deficiency because it was the result of the failure to meet a requirement, and the cause was reasonably within the licensee's ability to foresee and correct and should have been prevented. The inspectors determined that the performance deficiency was more than minor and a finding because the performance deficiency was sufficiently similar to Example 8.a of IMC 0612, Appendix E, "Examples of Minor Issues." The inspectors applied IMC 0609, Attachment 4, "Phase 1 Initial Screening and Characterization of Findings," to this finding. Because the finding was only associated with the fuel barrier under the Reactor Coolant System (RCS) or Fuel Barrier Column, the finding screened as Green. The inspectors determined that the contributing cause that provided the most insight into the performance deficiency affected the cross cutting area of Human

Performance, having work control components, and involving aspects associated with appropriately planning work activities by incorporating compensatory actions.

Inspection Report# : [2011003](#) (*pdf*)

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## Emergency Preparedness

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## Occupational Radiation Safety

**Significance:**  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

### **FAILURE TO PROPERLY LABEL AND MAINTAIN LABELS ON CONTAINERS IN THE RADIOACTIVE WASTE FACILITY.**

A finding of very low safety significance and associated NCV of 10 CFR 20.1904(a) was identified by the inspectors on January 31, 2012, due to the licensee's failure to label several containers holding radioactive material in the radioactive waste facility and two sea land containers inside the radiologically controlled area (RCA). In some cases, the licensee also failed to assure that labels were affixed and readable to support the function of providing information to radiation workers in the vicinity. The licensee entered the inspector's issues into the CAP as CR 01730867.

The inspectors determined that the licensee's failure to appropriately affix labels to containers storing radioactive material in the radioactive waste facility and perform periodic reviews of labeling conditions was a performance deficiency. The inspectors determined that the performance deficiency was more than minor and a finding because, if left uncorrected, failing to ensure labeling of radioactive material would have the potential to lead to a more significant safety concern. The inspectors evaluated the finding in accordance with IMC 0609 Appendix C, "Occupational Radiation Safety Significance Determination Process." The finding was determined to be of very low safety significance (Green) because the performance deficiency did not affect As Low As Is Reasonably Achievable Planning or Work Controls, did not involve an overexposure, there was not a substantial potential for overexposure, and the ability to assess dose was not compromised. The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross cutting aspect of Problem Identification and Resolution, having Self and Independent Assessment components, and involving the licensee not conducting self assessments at an appropriate frequency and with sufficient depth, objectivity, and critical assessment.

Inspection Report# : [2012002](#) (*pdf*)

**Significance:**  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

### **FAILURE TO MAINTAIN TYPE A CONTAINER DESIGN TESTS.**

A finding of very low safety significance and associated NCV of 10 CFR 71.5 was identified by the inspectors on February 2, 2012, due to the licensee's failure to maintain a licensed material shipment on file for at least one year after the latest shipment, and not providing on request, complete documentation of tests supporting the engineering evaluation or comparative data showing that the construction methods, packaging design, and materials of construction complied with the Type A specification. Specifically, the licensee maintained a container certificate from the owner of a container that stated the container complied with the specification testing of 49 CFR 173.465, but upon further review, the testing basis for the engineering evaluation could not be produced by the package owner for the use of the shipper and review by the NRC. The licensee entered this issue into the CAP as CR 01730713.

The inspectors determined that the licensee's failure to maintain a licensed material shipment on file for at least one

year after the latest shipment, and not providing on request, complete documentation of tests supporting the engineering evaluation or comparative data showing that the construction methods, packaging design, and materials of construction comply with the Type A specification, was a performance deficiency. The inspectors determined that the performance deficiency was more than minor and a finding because, if left uncorrected, failing to maintain and provide licensed material shipment documentation would have the potential to lead to a more significant safety concern. The inspectors evaluated the finding in accordance with IMC 0609 Appendix D, "Public Radiation Safety Significance Determination Process." The finding was determined to be of very low safety significance (Green) because the performance deficiency did not involve exceeding a radiation limit, a breach of package during transit, a certificate of compliance, low level ground burial, or failure to make notification or provide emergency information. The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross cutting aspect of Human Performance, having Work Practices components, and involving the licensee not ensuring supervisory and management oversight of work activities, including contractors, such that nuclear safety is supported.

Inspection Report# : [2012002](#) (pdf)

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## Public Radiation Safety

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## Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

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## Miscellaneous

**Significance:** SL-IV Dec 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

**FAILURE TO MAKE REQUIRED EIGHT HOUR EVENT REPORT PER 10 CFR 50.72 (b)(3)(v)(B).**

A Severity Level (SL) IV NCV of 10 CFR 50.72(b)(3)(v)(B) was identified by the inspectors for the licensee's failure to report within eight hours a condition that, at the time of discovery, could have prevented the fulfillment of the Residual Heat Removal (RHR) system Low Pressure Coolant Injection (LPCI) safety function. Specifically, on December 2, 2011, a sizable void was identified in the 'B' LPCI discharge injection line resulting in the LPCI mode of RHR being declared inoperable. The licensee documented the issue into their corrective action program (CAP), reported the condition to the NRC on December 8, 2011, and, was in the process of reviewing the cause of the issue to determine additional corrective actions.

The inspectors determined that the issue of concern represented a performance deficiency because it was the result of the licensee's failure to meet a regulatory requirement, and the cause was reasonably within the licensee's ability to foresee and correct and should have been prevented. Because the performance deficiency is considered to potentially impede or impact the ability of the NRC to perform its regulatory oversight function, the performance deficiency was dispositioned using the traditional enforcement process. Per NRC Enforcement Policy, Section 6.9.d.9, failing to make a report required by 10 CFR 50.72 is categorized as an example of a Severity Level IV violation. Additionally, because the violation was entered into the licensee's CAP, compliance was restored in a reasonable period of time, and was not repetitive or willful; this violation is being treated as a non cited SL IV violation, consistent with Section 2.3.2 of the NRC Enforcement Policy. Because the performance deficiency was not considered a finding using IMC 0612, Appendix B, "Issue Screening," and did not impact the Reactor Oversight Process Cornerstones of Safety, a cross cutting aspect was not assigned.

Inspection Report# : [2011005](#) (pdf)

