

## Duane Arnold 3Q/2013 Plant Inspection Findings

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### Initiating Events

**Significance:** G Mar 31, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

#### **AVERAGE POWER RANGE MONITOR CONDITION PROHIBITED BY TECHNICAL SPECIFICATIONS.**

A finding of very low safety significance and associated non-cited violation of Technical Specification (TS) 3.3.1.1, "Reactor Protection System (RPS) Instrumentation," Required Action A, was self-revealed on December 1, 2012, for the licensee's failure to place inoperable average power range monitors (APRMs) C and D in trip within 12 hours. Specifically, the licensee failed to identify a failed mode switch contact for local power range monitor (LPRM) 32-25A that rendered Surveillance Requirement (SR) 3.3.1.1.8 not met for periods when APRMs C and/or D were in service between November 27 and December 1, 2012; a condition prohibited by TS. The licensee entered the issue into the corrective action program (CAP) as condition report (CR) 01828842. Immediate corrective actions included bypassing APRMs C and D on December 1, 2012, bypassing LPRM 32-25A, and repairing the failed mode switch. Additional corrective actions included revisions to plant operating instructions to require removal of LPRMs from service if they are found to not be tracking with other LPRMs in service.

The inspectors determined that failing to properly evaluate the APRM operability impact of LPRM 32-25A indications on November 27, 2012, represented a performance deficiency because it was the result of the licensee's failure to meet a TS 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 evaluate the operability of APRMs would have the potential to lead to a more significant safety concern. The inspectors applied IMC 0609.04, "Initial Characterization of Findings," to this finding. Because the inspectors answered "No" to questions A through E in Table 3, the inspectors referenced IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Because the inspectors answered "No" to the applicable Section B (Transient Initiators) question under Exhibit 1 (Initiating Events Screening Questions) and "No" to applicable questions 1-3 under Section C (Reactivity Control Systems) of Exhibit 2 (Mitigating Systems Screening Questions), the finding screened as very low safety significance (Green). The inspectors determined that the performance characteristic of the finding that was the most significant causal factor of 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, especially when faced with uncertain or unexpected plant conditions, to ensure safety is maintained. Specifically, decisions regarding the operability impact of the degraded LPRM 32-35A indications were not made using the systematic operability evaluation procedure or other formal processes to include interdisciplinary input and reviews of the decision.

Inspection Report# : [2013002](#) (*pdf*)

**Significance:** G Dec 31, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**FAILURE TO ACCOMPLISH SAFETY/RELIEF VALVE TEST INSTRUCTIONS.**

A finding of very low safety significance and associated NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed on October 24, 2012, for the licensee's failure to accomplish instructions for functional testing of the main steam line safety/relief valve PSV-4402 pilot valve. Specifically, a model work order to perform testing of the pilot valve required the main steam lines to be drained; however, the decision was made to allow performance of the testing following removal of the main steam line plugs. Due to a minor leak of the closed safety/relief valve nitrogen accumulator isolation valve, the testing and the resultant brief opening of the pilot valve's solenoid valve caused nitrogen to reposition the pilot valve disc of the safety/relief valve. This then resulted in momentary opening of PSV-4402 and discharge of approximately 700 gallons of reactor cavity water into the drained suppression pool. The licensee entered the issue into the Corrective Action Program (CAP) as Condition Report (CR) 01816385. The licensee revised the model work orders for safety/relief valve pilot valve functional testing and was in the process of creating separate return-to-service tasks to ensure that testing of the pilot valves could not be performed unless the main steam lines were drained.

The inspectors determined that testing of PSV-4402 without the main steam line plugs installed 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 it was associated with the Initiating Events Cornerstone attributes of configuration control and human performance and adversely affected the cornerstone objective of limiting the likelihood of events that upset plant stability during shutdown operations. The inspectors applied IMC 0609.04, "Initial Characterization of Findings," to this finding. Because the finding pertained to an event while the plant was shutdown, Table 3 instructed reference of IMC 0609, Appendix G, "Shutdown Operations Significance Determination Process," and IMC 0609, Appendix G, Attachment 1, "Shutdown Operations Significance Determination Process Phase 1 Operational Checklists for Both PWRs and BWRs." Because all attributes IMC 0609, Appendix G, Attachment 1, Checklist 7 "BWR Refueling Operation with Reactor Coolant System (RCS) Level > 23'," were met throughout the event, the finding did not require a quantitative analysis and 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 using conservative assumptions in decision making and adopting a requirement to demonstrate that a proposed action is safe in order to proceed rather than a requirement to demonstrate that it is unsafe in order to disapprove an action.

Inspection Report# : [2012005](#) (*pdf*)

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## Mitigating Systems

**Significance:**  Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

**EXTENT OF CONDITION NOT PROPERLY EVALUATED.**

A finding of very low safety significance and associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to accomplish safety-related procedure EN-AA-203-1001, "Operability Determinations/Functionality Assessments." Specifically, during the Fall 2012 refueling outage, the licensee failed to evaluate the extent of condition under a prompt operability determination (POD) for the 'A' residual heat removal service water (RHRSW) subsystem after identifying several locations of the 'B' RHRSW supply piping that was less than the minimum acceptable wall thickness. By not performing a POD, the operations shift manager (OSM) was not able to perform his or her responsibility to review, assess, and approve the operability call regarding the potential for wall thinning of the 'A'

RHRSW piping. The licensee entered the inspectors' concerns into the CAP as Condition Report (CR) 01892263. The licensee completed a POD to evaluate the extent of wall thinning condition for the 'A' RHRSW subsystem and determined that the 'A' RHRSW subsystem was operable but with reduced margin to design specifications. This was reviewed and approved by the OSM. 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 if left uncorrected, failing to properly assess the impact of extent of condition for operability on similar structures, systems, or components (SSCs) would have the potential to lead to a more significant safety concern. The inspectors applied IMC 0609, Attachment 4, "Initial Characterization of Findings," to this finding. Because the finding pertained to operations while the plant was both shutdown and operating, the inspectors referenced both IMC 0609, Appendix G, "Shutdown Operations Significance Determination Process," and IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power." Per IMC 0609, Appendix G, the inspectors determined that the finding did not require a quantitative assessment and therefore screened as very low safety significance (Green). Additionally, per IMC 0609, Appendix A, the inspectors determined that although the finding was a deficiency affecting the design and qualification of the SSC, the SSC maintained its operability and therefore also screened as very low safety significance (Green).

The inspectors determined that the performance characteristic of the finding that was the most significant causal factor of 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, especially when faced with uncertain or unexpected plant conditions, to ensure safety is maintained. Further, this includes formally defining the authority and roles for decisions affecting nuclear safety, and implementing these roles and authorities as designed. Specifically, the evaluation of extent of condition for the identified pipe wall thinning of the 'B' RHRSW subsystem was not performed under the systematic operability determination process which resulted in bypassing the OSM's role in assessing and approving operability following the identification of a degraded or non-conforming condition.

Inspection Report# : [2013004](#) (*pdf*)

**Significance:** TBD Sep 30, 2013

Identified By: Self-Revealing

Item Type: AV Apparent Violation

**RCIC TURBINE OVERSPEED TRIP.**

A finding and apparent violation of Technical Specification (TS) Limiting Condition for Operation (LCO) 3.5.3, Condition B was self-revealed for the licensee's failure to perform an immediate operability determination (IOD) in accordance with licensee procedures on June 21, 2013, when a RCIC system turbine speed indicator in the main control room was found degraded. Specifically, the licensee failed to consider the degraded speed indication indicative of a problem within the RCIC EG-M circuitry (failed voltage-dropping resistor) that resulted in the inoperability of RCIC on August 22, 2013, when the RCIC turbine tripped on overspeed during post-maintenance surveillance testing. The licensee documented the issue in CR 01898931. Corrective actions included the replacement of the voltage-dropping resistor for the RCIC EG-M power supply, a review of extent of condition, and performing appropriate post-maintenance testing.

The inspectors determined that the licensee's failure to perform an immediate operability determination in accordance with licensee procedures on June 21, 2013, when a RCIC system turbine speed indicator in the main control room was found degraded was a performance deficiency, because it was the result of the failure to meet a procedure 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 impacted the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the performance deficiency resulted in the inoperability of the RCIC system from June 21 through August 24, 2013.

Inspection Report# : [2013004](#) (*pdf*)

**Significance:** **W** Sep 05, 2013

Identified By: NRC

Item Type: VIO Violation

**'A' STANDBY DIESEL GENERATOR LUBE OIL HEAT EXCHANGER GASKET FAILURE.**

A finding and violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the licensee's failure to prescribe a work instruction of a type appropriate to the circumstances for the re-assembly of the 'A' standby diesel generator (SBDG) lube oil (LO) heat exchanger (HX), an activity affecting quality. Specifically, on October 18, 2012, work order 40132858 was performed to replace the 'A' SBDG LO HX tube bundle assembly. On March 8, 2013, the LO HX tube bundle sheet-to-shell gasket catastrophically failed, rendering the 'A' SBDG unavailable. The gasket failure was attributed, in part, to the work order not containing sufficient detail and acceptance criteria, appropriate torque values, and operating experience information to ensure the gasket was properly compressed. The licensee documented the issue in condition report (CR) 01855032 and immediate corrective actions included a replacement of the 'A' SBDG LO HX gasket.

The inspectors determined that the licensee's failure to prescribe a work order appropriate to the circumstances was a performance deficiency, because it was the result of the failure to meet regulatory requirements, 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 impacted the Mitigating Systems cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the performance deficiency resulted in the failure of the 'A' SBDG LO HX gasket during a maintenance run of the engine on March 8, 2013. This finding was assessed based on the best available information using the applicable Significance Determination Process (SDP) and based on the risk evaluation, the significance determination was White or low to moderate safety significance.

Inspection Report# : [2013011](#) (*pdf*)

Inspection Report# : [2013010](#) (*pdf*)

**Significance:** **G** Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

**FAILURE TO ENSURE OPERABILITY OF LOW PRESSURE COOLANT INJECTION FOLLOWING A POSTULATED LOCA IN MODE 3.**

A finding of very low safety significance (Green) and associated non-cited violation 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the failure to ensure the low pressure coolant injection (LPCI) mode of operation of residual heat removal (RHR) would be capable of performing its mitigating function while in Mode 3 following a postulated loss of coolant accident (LOCA).

The licensee documented the issue in the CAP as CRs 01625023, 01626334, and 01776321. Corrective actions included the development of mitigating actions to manually realign RHR to LPCI mode should a LOCA occur while in Mode 3 to ensure system operability.

The performance deficiency was determined to be more than minor because the finding was associated with Mitigating System Cornerstone attribute of Equipment Performance and affected the cornerstone objective of ensuring the capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, under the postulated conditions, steam voiding could occur within the RHR system and impact the ability of LPCI to respond during a postulated Mode 3 LOCA. The finding required a Phase II SDP evaluation because the operability of the LPCI system was determined to be impacted. Based on the Phase II SDP risk-analyses and SAPHIRE analysis

developed by the regional senior risk analyst (SRA), the inspectors determined the finding was of very low safety significance. The inspectors determined this finding had a cross-cutting aspect in the area of Problem Identification and Resolution, having Operating Experience (OE) components, and involving the licensee systematically collecting and evaluating relevant internal and external OE. Specifically, the licensee's evaluation of Information Notice 2010-11 did not result in a detailed evaluation for potential issues related to the OE.

Inspection Report# : [2013002](#) (*pdf*)

**Significance:**  Mar 31, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**CORRECTIVE ACTIONS ASSOCIATED WITH POTENTIAL CABLE SUBMERGENCE IMPROPERLY CLOSED.**

A finding of very low safety significance (Green) and associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed on October 12, 2012, for the licensee's failure to meet corrective action program procedural requirements associated with the correction of a contributing cause and the evaluation of the extent of condition of potentially submerged, degraded, and non-conforming safety-related electrical cables. The licensee entered the issue into the CAP as CR 01824467. Planned corrective actions included creating a cable monitoring program, establishing periodic inspections and dewatering of embedded conduits, and establishing periodic insulation resistance testing of safety-related electrical cables located within embedded conduits.

The inspectors determined that failing to meet corrective action program procedural requirements 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 correct the contributing causes and evaluate the extent of condition of conditions adverse to quality would have the potential to lead to a more significant safety concern. The inspectors applied IMC 0609.04, "Initial Characterization of Findings," to this finding. Because the finding pertained to an event while the plant was shut down, Table 3 instructed reference of IMC 0609, Appendix G, "Shutdown Operations Significance Determination Process." Because the finding did not require a quantitative assessment, the finding screened as very low safety significance (Green). The inspectors determined that the performance characteristic of the finding that was the most significant causal factor of the performance deficiency was associated with the cross-cutting aspect of Problem Identification and Resolution, having Corrective Action Program components, and involving the licensee thoroughly evaluating problems such that the resolutions address causes and extents of conditions, as necessary, including, for significant actions, conducting effectiveness reviews of corrective actions to ensure that the problems are resolved. Specifically, the licensee inappropriately postponed, cancelled, or closed significant corrective actions that likely would have identified and promptly resolved additional instances of submerged degraded and non-conforming safety-related electrical cables.

Inspection Report# : [2013002](#) (*pdf*)

**Significance:**  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

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

A finding of very low safety significance and associated NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors on October 17, 2012, for the licensee's failure to accomplish procedure EN-AA-203-1001, "Operability Determinations/Functionality Assessments," when degraded or non-conforming conditions were identified. Specifically, the duty Shift Manager approved Prompt Operability

Determination (POD) 01812339 that was performed following the identification of submerged power and control cables associated with the 'A' Standby Diesel Generator (SBDG). The POD did not discuss the fact that the applicable cables were not qualified for submergence, incorrectly concluded that the cables conformed to the Updated Final Safety Analysis Report (UFSAR), and did not evaluate whether compensatory actions were required. The POD conclusions were contrary to the requirements of procedure EN-AA-203-1001 that required all degraded or non-conforming conditions be evaluated for compensatory actions. The licensee documented the inspector's concerns in CR 01813800, revised POD 01812339, and assigned compensatory actions for the degraded and non-conforming conditions.

The inspectors determined that failing to evaluate a degraded or non-conforming condition for compensatory actions 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 properly assess the operability of degraded or non-conforming conditions and evaluating the necessity for compensatory actions would have the potential to lead to a more significant safety concern. The inspectors applied IMC 0609.04, "Initial Characterization of Findings," to this finding. Because the finding pertained to an event while the plant was shutdown, Table 3 instructed reference of IMC 0609, Appendix G, "Shutdown Operations Significance Determination Process." Because the finding did not require a quantitative assessment, 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 Problem Identification and Resolution, having Operating Experience (OE) components, and involving the licensee implementing and institutionalizing OE through changes to station processes and procedures.  
Inspection Report# : [2012005](#) (*pdf*)

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## Barrier Integrity

**Significance:**  Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

### **FAILURE TO REPORT CHANNEL CHECKS.**

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 to prescribe a procedure with appropriate qualitative acceptance criteria to ensure that CHANNEL CHECKS were satisfactorily accomplished in accordance with TS Surveillance Requirement (SR) 3.3.6.2 prior to September 12, 2013. Specifically, Surveillance Test Procedure (STP) 3.0.0-01 did not perform a qualitative assessment of channel behavior, nor did it require comparisons to other channel indications measuring the same parameter. Had STP 3.0.0-01 contained appropriate acceptance criteria, the main steam line area temperature indicating switch (TIS)-4480 would have been considered inoperable based on trending prior to switch anomalies resulting in declaring TIS-4480 inoperable on June 22, 2013. The licensee documented the issue in CR 01903528, briefed operators on the requirement to perform qualitative checks of the applicable instruments, and initiated a procedure change to restore compliance of the STP to meet the requirements of SR 3.3.6.2.

The inspectors determined the licensee's failure to prescribe an STP with appropriate acceptance criteria was a performance deficiency because it was the result of the 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 it impacted the Barrier Integrity Cornerstone attribute of procedure quality and adversely affected the Cornerstone objective of providing reasonable assurance that

physical design barriers (i.e., containment) protect the public from radionuclide releases caused by accidents and events. The inspectors applied IMC 0609, Appendix A, Exhibit 3 for the Barrier Integrity Cornerstone. Because the finding did not represent an actual open pathway in the physical integrity of the reactor containment or containment isolation system, the finding screened as very low safety significance (Green).

Inspection Report# : [2013004](#) (*pdf*)

**Significance:**  Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

**FUEL POOL RADIATION MONITOR CORRECTIVE ACTIONS.**

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for two examples of the failure to follow procedures associated to the troubleshooting and repair of RIS4131A Refuel Floor Exhaust Radiation Monitor. The licensee initiated WO 40190702-01, "RIS4131A Refuel Floor Exhaust Rad Mon Upscale and Group 3," to troubleshoot and repair the power supplies. The licensee was still evaluating planned corrective actions for the failure to follow the work order instructions.

The performance deficiency was determined to be more than minor because it was associated with the Barrier Integrity Cornerstone attribute of providing reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. Specifically, RIS4131A failing to operate in conjunction with a single additional failure (RIS4131B) could allow the release of radioactive contamination due to preventing an automatic secondary containment isolation (Group 3). The finding screened as having very low safety significance (Green) because the inspectors answered "Yes" to question C.1 of IMC 0609, Appendix A, Exhibit 3. 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 that support long-term equipment reliability by performing maintenance that is more preventive than reactive

Inspection Report# : [2013007](#) (*pdf*)

**Significance:**  Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

**FAILURE TO CONDUCT ADEQUATE POST-MAINTENANCE TESTING.**

The inspectors identified a finding of very low safety significance (Green) and associated non-cited violation of 10 CFR 50, Appendix B, Criterion XI, "Test Control," for the licensee's failure to conduct post maintenance testing in accordance with procedure Maintenance Directive (MD)-024, "Post-Maintenance Testing," following maintenance on secondary containment damper 1VAD017B1. Specifically, the testing that the licensee performed was not adequate to verify that the damper could perform its intended function and resulted in the damper subsequently failing in service. The licensee entered the issue into their CAP as CR 01862900. Immediate corrective actions included declaring secondary containment inoperable, determining if any other dampers were not fully closed (none were identified), and rebuilding and retesting damper 1VAD017B1.

The performance deficiency was determined to be more than minor because it was associated with the Barrier Integrity Cornerstone attribute of Procedure Quality and adversely affected the cornerstone objective of ensuring that physical design barriers (secondary containment) protect the public from radionuclide releases caused by accidents. The finding screened as having very low safety significance (Green) because it represented a degradation of the radiological barrier provided for the secondary containment building and the inspectors answered "No" to Questions

B.1 and B.2 in IMC 0609, Appendix A, Exhibit 3, "Barrier Integrity Screening Questions." The inspectors determined that the most significant causal factor of the performance deficiency was associated with the cross-cutting aspect of Problem Identification and Resolution, having Corrective Action Program Components, and involving the licensee thoroughly evaluating problems such that the resolutions address causes and extent of conditions, as necessary. Specifically, for the damper of concern, the licensee did not implement corrective actions from root cause evaluation (RCE) 01739467, which stated "Create a maintenance procedure for rebuilding and adjusting secondary containment dampers and operators that directs the following: provide guidance on adjusting over travel of damper blades [aka stop rod adjustment]," and "limit switch verification."

Inspection Report# : [2013002](#) (pdf)

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## Emergency Preparedness

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## Occupational Radiation Safety

**Significance:**  Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

### **FAILURE TO IMPLEMENT AND MAINTAIN PROCEDURES REGARDING BREATHING AIR QUALITY.**

A finding of very low safety significance and associated non-cited violation of 10 CFR 20.1703 was identified by the inspectors on January 18, 2013, for the licensee's failure to implement and maintain written procedures regarding breathing air quality and self-contained breathing apparatus (SCBA) inspections. These issues were entered into the licensee's CAP as CRs 01840046, 01839697, and 01839666. Corrective actions included air quality tests that were subsequently performed resulting in Grade "D" or better, and completing breathing air and monthly SCBA inspections. Additionally, the licensee was in the process of establishing a tracking mechanism to ensure these tests and inspections were appropriately scheduled for completion.

The inspectors determined that not consistently performing the Grade "D" air quality tests or SCBA monthly inspections was a performance deficiency, the cause of which was reasonably within the licensee's ability to foresee and correct, and should have been prevented. The performance deficiency was determined to be of more than minor safety significance because if left uncorrected, not performing testing of breathing air quality and SCBAs would have the potential to lead to a more significant safety concern. In accordance with IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," the inspectors determined that the finding had very low safety significance (Green) because the finding did not involve: (1) as-low-as-is-reasonably-achievable (ALARA) planning and controls, (2) a radiological overexposure, (3) a substantial potential for an overexposure, or (4) a compromised ability to assess dose. The inspectors determined that the performance characteristic of the finding that was the most significant causal factor of the performance deficiency was associated with the cross cutting aspect of Human Performance, having Work Practices components, and involving the licensee ensuring supervisory and management oversight of work activities, including contractors, such that nuclear safety is supported. Specifically, ownership and accountability to perform air quality testing was not well established or controlled within the work schedule process to ensure the tests would be performed as required.

Inspection Report# : [2013002](#) (pdf)

**Significance:**  Dec 31, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**FAILURE TO MAKE SURVEYS TO EVALUATE THE POTENTIAL RADIOLOGICAL HAZARDS IN THE TORUS.**

A finding of very low safety significance and associated NCV of 10 CFR 20.1501 was self-revealed on October 16, 2012, for the licensee's failure to make surveys to evaluate the potential radiological hazards during work inside the torus. Specifically, ten workers were externally contaminated and nine workers were assigned low level unintended internal radiation doses after installing rigging and fall protection inside the torus proper. The issues were entered into the licensee's CAP as CR 01813761. Immediate corrective actions included performance of radiological dose assessments on the individuals involved and performance management coaching of the individuals in accordance with station management protocols.

The inspectors determined that failing to effectively maintain radiological control of work activities in the torus proper 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, the performance deficiency had the potential to lead to a more significant safety concern (additional unplanned or more significant radiological exposures). The inspectors applied IMC 0609.04, "Initial Characterization of Findings," to this finding. Per Table 3, because the finding was associated with a programmatic weakness in the licensee's Occupational Radiation Safety Cornerstone, IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," was used. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve As-Low-As-Is-Reasonably-Achievable (ALARA) planning or work controls, there was no overexposure or substantial potential for an overexposure, nor was the licensee's ability to assess worker dose 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 Human Performance, having Work Practices components, and involving the licensee defining and effectively communicating expectations regarding procedural compliance and personnel follow procedures.

Inspection Report# : [2012005](#) (pdf)

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## Public Radiation Safety

**Significance:**  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

**LACK OF PROCEDURE LEADS TO OVER FILLING CONDENSATE STORAGE OVERFLOW TANK.**

A finding of very low safety significance and associated NCV of Technical Specification (TS) 5.4.1, "Procedures," was identified by the inspectors for the licensee's failure to establish a procedure for filling the condensate storage tanks (CSTs) from multiple sources. Specifically, the lack of procedural instructions or guidance for controlling the CST filling process resulted in over filling the CST overflow tank on October 8, 2012, and subsequent leakage past a missing CST pit penetration seal to the nearby soil. The licensee entered the inspector's concerns into the CAP as CR 01812345. The licensee repaired the penetration seal and revised the applicable Annunciator Response Procedures and Operating Instructions.

The inspectors determined that failing to establish a written procedure for filling the CSTs represented a performance deficiency because it was the result of the licensee's failure to meet a TS 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 Public Radiation Safety Cornerstone attribute of programs and processes and adversely affected the cornerstone objective of ensuring the adequate protection of public health and safety from exposure to radioactive materials released into the public domain as a result of civilian nuclear reactor operation. The inspectors applied IMC 0609.04, "Initial Characterization of Findings," to this finding. Because the finding and associated programmatic weakness was in the licensee's Public Radiation Safety Cornerstone, Table 3 instructed reference of IMC 0609, Appendix D, "Public Radiation Safety Significance Determination Process." Because the finding was related to the effluent release program, did not constitute a substantial failure to implement the effluent program, and did not result in any public dose, 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 Work Control components, and involving the licensee appropriately planning the work activity by incorporating the need for planned contingencies, compensatory actions, and abort criteria.

Inspection Report# : [2012005](#) (*pdf*)

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## Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

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## Miscellaneous

Last modified : December 20, 2013