

# Vogtle 1

## 1Q/2016 Plant Inspection Findings

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### Initiating Events

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### Mitigating Systems

**Significance:**  Dec 31, 2015

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

#### **Failure to Implement Preventive Maintenance Procedure for 7300 Process Protection and Control System Printed Circuit Board**

A Green self-revealing NCV of TS 5.4.1, "Procedures," was identified for the licensee's failure to implement replacement schedules for 7300 process protection and control (PP&C) system cards in accordance licensee fleet maintenance procedures. As a result, failure of a 7300 PP&C card rendered the Unit 2 B train of nuclear service water system (NSCW) inoperable. The violation was entered into the licensee's corrective action program as condition report (CR) 10124315 and corrective action report (CAR) 261373.

The failure to implement replacement schedules for 7300 PP&C system cards in accordance with maintenance procedure NMP-MA-015 was a performance deficiency. The performance deficiency was determined to be more than minor because it was associated with the equipment performance attribute of the mitigating systems cornerstone and adversely affected the cornerstone objective in that the failure of the 7300 PP&C card affected the availability of the Unit 2B train of NSCW. The finding screened as having very low safety significance (i.e. Green) because it did not represent an actual loss of function of at least a single train for greater than its TS allowed outage time. No cross-cutting aspect was assigned to this finding because the inspectors determined that the cause of the finding was not indicative of current licensee performance because the licensee has established a change management process that would prevent the Performance Deficiency from occurring.

Inspection Report# : [2015004](#) (*pdf*)

**Significance:**  Sep 30, 2015

Identified By: NRC

Item Type: FIN Finding

#### **NRC Biennial Written Examinations Did Not Meet Qualitative Standards**

An NRC-identified finding was identified when between 20 and 40 percent of the written examination questions administered to licensed operators during the biennial requalification examination did not meet the requirements of NMP-TR-424, "Licensed Operator Continuing Training Exam Development," and NUREG-1021, "Operator Licensing Examination Standards For Power Reactors," Revision 10

The inspectors determined that the failure to ensure that biennial written examinations met the qualitative standards for written examinations was a performance deficiency (PD). The PD was more than minor because it was associated with the Human Performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective in that the quality of biennial written examinations potentially impacted the licensee's ability to appropriately evaluate licensed operators. The significance of the finding was determined to be Green because

between 20 and 40 percent of the questions reviewed did not meet the standard. No cross-cutting aspect was identified that would be considered a contributor to the cause of the finding.

Inspection Report# : [2015003](#) (*pdf*)

**Significance:**  Sep 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

**Failure to Maintain Requalification Examination Integrity**

An NRC-identified Non-cited Violation (NCV) of 10 CFR 55.49, “Integrity of examinations and tests,” was identified for the licensee’s failure to adhere to requirements of NMP-TR-424, License Operator Continuing Training Exam Development, Version 3.1. NMP-TR-424 was the procedure that the licensee used to implement industry standard ACAD 07-001, Guidelines for the Continuing Training of Licensed Personnel. ACAD 07-001 is a methodology which can be used to fulfill 10 CFR 55.59(c), “Requalification program requirements” and 10 CFR 55.4, “Systems approach to training (SAT).” This violation has been entered into the licensee’s corrective action program (CAP) as condition report (CR) 10115484.

The inspectors determined that the licensee’s failure to adhere to overlap standards in NMP-TR-424 was a performance deficiency. The performance deficiency was determined to be more than minor because it was associated with the Human Performance attribute of the Mitigating Systems Cornerstone, and adversely affected the cornerstone objective in that the failure to adhere to examination overlap standards adversely affected the quality of the administration of the operating exams. The finding was determined to be of very low safety significance (Green) because there was no evidence that a licensed operator had actually gained an unfair advantage on an examination required by 10 CFR 55.59. The finding was directly related to the cross-cutting aspect of procedure adherence of the cross-cutting area of Human Performance because the training staff did not follow the guidance for all licensed operators’ 2014 annual operating exam [H.8].

Inspection Report# : [2015003](#) (*pdf*)

**Significance:**  Jul 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

**Failure to Fully Close and Latch Plant Fire Doors**

An NRC-identified Green non-cited violation of Vogtle Units 1 and 2 Operating License Conditions 2.G, was identified for the licensee’s failure to ensure that fire doors V22108L1A67, V12111L1238, and V12111L1A41 in 3-hour rated fire barriers were fully closed and latched, as required by the approved fire protection program (FPP) and National Fire Protection Association (NFPA) Code 80-1983, Fire Doors and Windows (Vogtle NFPA Code of Record). The licensee took corrective actions and declared fire door V22108L1A67 inoperable and established a roving fire watch. The inoperable door was entered into the licensee’s corrective action program as condition report (CR) 10067247 and was repaired the next day. For doors V12111L1238 and V12111L1A41, the licensee immediately removed materials that were interfering with the latching of the doors and entered these into their corrective action program as CR 10096004 and CR10096008 respectively. Because these two conditions were corrected as soon as they were brought to the licensee’s attention by the inspectors, no fire watch was required to be established.

The licensee’s failure to ensure the three fire doors were fully closed and latched as required by the approved FPP and NFPA Code 80-1983 was determined to be a performance deficiency. This performance deficiency was more than minor because it affected the reactor safety mitigating systems cornerstone attribute of protection against external events (i.e., fire) and adversely affected the fire protection defense-in-depth element involving fire confinement and control of fires that do occur to protect systems important to safety. The finding was screened in accordance with NRC Inspection Manual Chapter (IMC) 0609, “Significance Determination Process,” Attachment 4, “Initial Characterization of Findings,” which determined that an IMC 0609, Appendix F, “Fire Protection Significance

Determination Process,” review was required as the finding involved the ability to confine a fire. The finding category of “Fire Confinement” was assigned, based upon that element of the FPP being impacted. Using IMC 0609, Appendix F, Attachment 1, “Fire Protection Significance Determination Process Worksheet,” the inspectors determined that the finding was of very low safety significance (Green) at Task 1.4.3, Question C, based upon observation that a fully functioning, automatically actuated, fire suppression system was installed on both sides of fire doors V12111L1238 and V12111L1A41 and on one side of fire door V22108L1A67. The inspectors determined that the finding had a cross-cutting aspect of “Procedure Adherence” in the Human Performance area because individuals did not follow processes and procedures for ensuring that fire doors were properly closed and latched after passing through the doors [H.8]. [Section 1R05.02.b(1)]

Inspection Report# : [2015007](#) (pdf)

**Significance:** G Jul 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

#### **Failure to Identify and Repair a Degraded Fire Penetration Seal**

An NRC-identified Green non-cited violation of Vogtle Unit 1 Operating License Condition 2.G was identified for the licensee’s failure to identify and repair degraded fire penetration seal 1-11-759A, as required by the approved fire protection program (FPP). The licensee took corrective actions to declare the penetration seal inoperable, entered the issue in their corrective action program as condition report 10102010 and established a roving fire watch.

The licensee’s failure to identify and repair the degraded fire penetration seal 1-11-759A was a performance deficiency. This performance deficiency was more than minor because it affected the reactor safety mitigating systems cornerstone attribute of protection against external events (i.e., fire) and adversely affected the fire protection defense-in-depth element involving fire confinement and control of fires that do occur to protect systems important to safety. The finding was screened in accordance with NRC Inspection Manual Chapter (IMC) 0609, “Significance Determination Process,” Attachment 4, “Initial Characterization of Findings,” which determined that an IMC 0609, Appendix F, “Fire Protection Significance Determination Process,” review was required as the finding involved the ability to confine a fire. The finding category of “Fire Confinement” was assigned, based upon that element of the FPP being impacted. Using the criteria contained in IMC 0609 Appendix F, Attachment 2, Table A2.2, the inspectors concluded that the seal degradation level was low because the silicone foam seal depth and a fully intact damming board on one side of the barrier would have been sufficient to provide at least two hours of fire resistance. In addition, it was noted that the fire zones on each side of the degraded fire penetration seal were protected with an automatic fire suppression system. Using IMC 0609, Appendix F, Attachment 1, “Fire Protection Significance Determination Process Worksheet,” the inspectors determined that the finding was of very low safety significance (Green) at Task 1.4.3, Question C. The inspectors determined that the finding had a cross-cutting aspect of “Avoid Complacency” in the Human Performance area because individuals inspecting the seals failed to recognize and plan for the possibility of the penetration seal being damaged. [H.12] [Section 1R05.02.b(2)]

Inspection Report# : [2015007](#) (pdf)

**Significance:** G Jun 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

#### **Failure to Identify and Correct Degraded Foreign Material Cover Plates for the NSCW Pump Wells**

An NRC-identified, Green non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action,” was identified for the licensee’s failure to identify and correct conditions adverse to quality associated with the cover plates for the nuclear service cooling water (NSCW) system pumps’ shaft well access openings. Specifically, the licensee failed to identify degraded conditions on the NSCW pump well cover plates (e.g. openings from uncovered holes and degraded periphery) that could result in foreign material (FM) entering the pumps’ well and impact cooling water flow to safety related heat exchangers. The licensee entered the issue into their corrective action

program (CAP) under CR10033287, CR10085803 and CR10091171, installed temporary FM exclusion covers, and removed debris near the pump cover wells.

The finding was more than minor because, if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, the openings in the degraded pump well covers could allow FM to enter the NSCW system and adversely affect cooling water flow to essential component coolers. The finding was evaluated using the mitigating systems cornerstone column of Attachment 4 and Exhibit 2 of Appendix A to Inspection Manual Chapter 0609, "Significance Determination Process," (SDP) dated April 29, 2015. The finding was of very low safety significance (i.e. Green) because the inspectors answered "No" to all of the screening questions in the exhibit. The inspectors determined the finding had a cross-cutting aspect of "Evaluation" in the Problem Identification and Resolution (PI&R) area because the organization did not thoroughly evaluate the NSCW debris-blocking event of the 1B safety injection (SI) lube oil (LO) cooler, in February 27, 2015, to ensure that resolutions addressed causes and extent of conditions commensurate with their safety significance (P.2). (Section 1R12)  
Inspection Report# : [2015002](#) (*pdf*)

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## Barrier Integrity

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## Emergency Preparedness

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## Occupational Radiation Safety

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## Public Radiation Safety

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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

**Significance:** N/A Apr 03, 2015

Identified By: NRC

Item Type: FIN Finding

### **Biennial PI&R Summary**

The inspectors concluded that, in general, problems were properly identified, evaluated, prioritized, and corrected. The licensee was effective at identifying problems and entering them into the corrective action program (CAP) for resolution, as evidenced by the relatively few number of deficiencies identified by external organizations (including the NRC) that had not been previously identified by the licensee, during the review period. Generally, prioritization and evaluation of issues were adequate, formal root cause evaluations for significant problems were adequate, and corrective actions specified for problems were acceptable. Overall, corrective actions developed and implemented for issues were generally effective and implemented in a timely manner.

The inspectors determined that overall, audits and self-assessments were adequate in identifying deficiencies and areas for improvement in the CAP, and appropriate corrective actions were developed to address the issues identified. Operating experience usage was found to be generally acceptable and integrated into the licensee's processes for performing and managing work and plant operations.

Based on discussions and interviews conducted with plant employees from various departments, the inspectors determined that personnel at the site felt free to raise safety concerns to management and use the CAP to resolve those concerns.

Inspection Report# : [2015008](#) (*pdf*)

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