# Vogtle 2
# 3Q/2010 Plant Inspection Findings

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## Initiating Events

**Significance:** G Jun 30, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
**Failure to inspect tube R1C2 of steam generator 2 during the steam generator eddy current examination in 2007**
•Green: An NRC identified non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, Instructions, Procedures, and Drawings, was identified for failure to adhere to steam generator eddy current examination procedures during the 2007 Unit 2 refueling outage. As a result, a tube inspection was missed. The missed tube inspection was completed during a March 2010 inspection and was found to be without significant degradation. The licensee entered the issue into their corrective action program as CR 2010103680.

The inspectors determined that the finding was more than minor because it was associated with the human performance attribute of the Initiating Events cornerstone and affected the cornerstone objective of assuring that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, the failure to adhere to steam generator tube inspection procedures resulted in a missed tube inspection and affected the assurance that barrier integrity was maintained. The finding was determined to be of very low safety significance because subsequent testing of the missed tube in March 2010 did not indicate tube degradation. This finding was determined to not have a cross-cutting aspect associated with it due to the timeframe of the event and that the cause of the event is not indicative of current plant performance. (Section 1R08.4)

Inspection Report# : 2010003 *(pdf)*

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## Mitigating Systems

**Significance:** G Sep 30, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
**Failure to correct instrument uncertainty associated with the ECCS accumulators**
An NRC-identified Green NCV of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, was identified for failure to promptly correct an equipment deficiency. Specifically, in February 2006, the licensee identified an issue with the instrument uncertainty associated with the pressure transmitters installed on the emergency core cooling system (ECCS) accumulators. However, several outages later, the design change packages requiring the transmitter change out had been inexplicably deleted and the instrument uncertainty issue remains uncorrected.

This issue was more than minor because it was associated with a cornerstone attribute and adversely affected the objective of the Mitigating Systems cornerstone. Specifically, the performance deficiency was an equipment performance issue which affected the availability, reliability, and capability of the ECCS accumulators to respond to a loss of coolant accident. The finding was determined to be of very low safety significance (Green) because the finding did not result in the actual loss of safety function of a single train for greater than its technical specification (TS) allowed outage time. The inspectors determined that the cause of this finding was related to the Work Control component of the Human Performance cross-cutting area due to the licensee's failure to appropriately coordinate work activities by incorporating actions to address the impact of changes to the work scope on the plant and human performance [H.3(b)]. (Section 4OA2.2)

Inspection Report# : 2010004 *(pdf)*

**Significance:** G Jun 30, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
**Failure to verify purchased equipment conformed to design specifications**
Green: A self revealing, non-cited violation of 10 CFR Part 50, Appendix B, Criterion VII, Control of Purchased Material, Equipment, and Services, was identified for failure to establish measures to assure that purchased material, equipment, and services conform to the procurement documents. More specifically that safety-related EMAX breaker closing coils were capable of performing their safety related function. All affected EMAX breaker closing coils were replaced with a qualified 90V closing coil capable of continuous duty cycle.

This finding is more than minor because if left uncorrected, the failure to establish measures to assure that purchased material, equipment, and services conform to procurement documents could become a more significant safety concern. Additionally, it impacted the Reactor Safety Cornerstones of Mitigating Systems and Barrier Integrity in that, the failure to establish measures to assure that purchased material, equipment, and services conform to procurement documents to ensure that safety-related breakers are assembled and functionally tested correctly, impacted the design control and equipment performance (availability and reliability) attributes. This finding was determined to be of very low safety significance (Green) because it did not result in a loss of operability or functionality. This finding was determined to not have a cross-cutting aspect associated with it due to the timeframe of the event and that the cause of the event is not indicative of current plant performance. (Section 1R18)
Inspection Report# : 2010003 *(pdf)*

**Significance:** G Mar 31, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
**Ineffective corrective action renders Unit 2 CCW pump #4 inoperable**
A self-revealing non-cited violation (NCV) for failure to meet the requirements of 10 CFR 50, Appendix B, Criterion XVI was identified. Specifically, for ineffective corrective maintenance performed on the Unit 2 Component Cooling Water (CCW) Pump #4. The corrective maintenance actions performed on CCW pump #4 in October 2009 to repair damage due to contact between the throttle bushing and the shaft sleeve on the inboard mechanical seal were ineffective, and consequently, the same damage to the inboard mechanical seal occurred in January 2010 when the pump was again operated. As a result, the Unit 2 CCW pump #4 was rendered inoperable for the second time in three months due to the same mechanical seal issue.

This issue was greater than minor because it was associated with a cornerstone attribute and adversely affected the objective of the Mitigating Systems cornerstone. Specifically, the performance deficiency was an equipment performance issue which affected the availability, reliability, and capability of the B train emergency core cooling system (ECCS) to respond to a loss of coolant accident (LOCA). The finding was determined to be of very low safety significance (Green) because the event did not represent in an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time. The inspectors determined that the cause of this finding was related to the Corrective Action Program component of the Problem Identification and Resolution cross-cutting area due to less-than-adequate problem evaluation [P.1(c)]. Specifically, the corrective maintenance actions used to resolve the mechanical seal issue on CCW pump #4 were less than adequate. (Section 1R12)

Inspection Report# : 2010002 *(pdf)*

**Significance:** G Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
**Operation of NSCW system with tower return valves in open bypass**
•Green. A NRC-identified NCV for failure to enter TS LCO 3.7.8 Condition A as required was identified. Specifically, the licensee’s failure to follow the requirements of TS LCO 3.0.2 and enter TS LCO 3.7.8 Condition A when the NSCW tower return valves are placed in a position other than that required by TS SR 3.7.8.1. The licensee

has entered the issue into their corrective action program and began procedure revisions to ensure operation of the NSCW system in accordance with Technical Specifications and the UFSAR at all times.
This issue is more than minor because it is associated with a cornerstone attribute and adversely affected the objective of the Mitigating Systems cornerstone. Specifically, the performance deficiency is a configuration control error which affected the operability of an entire train of emergency core cooling system equipment, and thus impacts the equipment's automatic function to respond to a loss of coolant accident. The finding was determined to be of very low safety significance (Green) because the event did not represent an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time. The inspectors determined that this issue does not have a cross-cutting aspect. The issue centers on differing interpretations of the Technical Specifications and the UFSAR, and does not align itself with any cross-cutting aspect. (Section 4OA5.1)

Inspection Report# : 2009005 *(pdf)*

**Significance:** G Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
**Inadequate surveillance procedures for TS SR 3.7.8.2**
•Green. A NRC-identified NCV for inadequate surveillance procedures was identified. Specifically, TS SR 3.7.8.2 requires the licensee to periodically verify that each NSCW system automatic valve in the system flow path actuates to the correct position on an actuation signal. The current procedures used to meet the requirements of TS SR 3.7.8.2 do not verify that the tower return header valves actuate to the correct position when demanded during an automatic actuation signal. As a result, the NSCW systems do not currently meet the requirements of TS SR 3.7.8.2. The licensee has entered the issue into their corrective action program and began procedure revisions necessary to support operation of the NSCW system in accordance with Technical Specifications and the UFSAR at all times.

This issue is more than minor because it is associated with a cornerstone attribute and adversely affected the objective of the Mitigating Systems cornerstone. Specifically, the performance deficiency is an equipment performance error which affected the reliability of the NSCW systems. The finding was determined to be of very low safety significance (Green) because the finding did not represent the actual loss of safety function of a single train for greater than its technical specification allowed outage time. The inspectors determined that this issue does not have a cross-cutting aspect. The issue centers on differing interpretations of the Technical Specifications and the UFSAR, and does not align itself with any cross-cutting aspect. (Section 4OA5.2)

Inspection Report# : 2009005 *(pdf)*

**Significance:** G Dec 31, 2009
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
**Human performance error results in manual reactor trip section**
•Green. A self-revealing non-cited violation (NCV) of Technical Specification 5.4, Procedures was identified. Specifically, a human performance error associated with inadvertently isolating instrument air to the turbine building, auxiliary building, and control building, resulted in an automatic trip of the B main feed pump and a subsequent manual reactor trip. The licensee immediately restored instrument air and stabilized the plant in Mode 3. The licensee has entered the issue into their corrective action program and is in the process of implementing enhanced human error reduction techniques and improving procedural rigor and compliance throughout the site organization.

This issue is more than minor because it is associated with a cornerstone attribute, and it adversely affected the objective of the Initiating Events cornerstone. Specifically, the performance deficiency is a human performance error which led to a reactor trip and adversely impacted plant stability. The finding was determined to be of very low safety significance (Green) because the event did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. The inspectors determined that the cause of this finding was related to the Work Practices component of the Human Performance cross-cutting area. [H.4(c)] Specifically, due to less-than-adequate supervisory and management oversight of the work activity i.e., no in-field supervisory oversight for 'first-time' performers and inadequate pre-job brief. (Section 4OA3.2)

Inspection Report# : 2009005 *(pdf)*

**Significance:** G Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
**Failure to properly maintain the approved fire protection program with regard to the relocation of the plant the fire alarm annunciation signal outside of the MCRs.**
•Green. NRC identified a NCV of Vogtle Nuclear Plant Units 1 & 2 Operating License Condition 2.G, "Fire Protection," for failure to properly maintain the NRC-approved fire protection program with regard to the location of the fire alarm computer audible and visual annunciation notification signal. Specifically, the licensee had implemented a plant change, in December 2006, for the fire alarm computer which relocated the fire alarm computer annunciation signal outside the continuously manned main control room to a clearance and tagging office which was not continuously manned. The plant change could have resulted in a delay of up to 2 minutes before the alarm would have been relayed to the main control room for actions to dispatch the fire brigade and initiate safe shutdown actions.

The finding is more than minor because it is associated with the reactor safety, mitigating systems, cornerstone attribute of protection against external factors, i.e. fire, and it affected the objective of ensuring reliability and capability of systems (i.e., fire detection) that respond to initiating events. The finding was determined to be of very low safety significance (Green) in a Significance Determination Process Phase 1 analysis because the two minute delay had only minimum impact on the feasibility or reliability of the time critical operator actions and fire brigade performance in response to a fire. This violation was entered into the licensee's corrective action program as Condition Report 2007110797. No cross cutting issue was identified, because the finding is not indicative of current plant performance. (Section 4OA5.3).

Inspection Report# : 2009005 *(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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## 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

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