

# Millstone 2

## 2Q/2012 Plant Inspection Findings

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### Initiating Events

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### Mitigating Systems

**Significance:** **G** May 11, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

#### **NCV 05000336/2012007-01, Inadequate Assumptions used in Emergency Motor Control Center Control Circuit Voltage Drop Calculation**

•Green: The team identified a finding of very low safety significance (Green) involving a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, Design Control, because Dominion had not verified the adequacy of their design with respect to the Unit 2 emergency motor control center (MCC) control circuit voltage drop calculation. Specifically, Dominion did not account for various parameters that affect available voltage at motor starter contactors including fuse resistance, minimum control power transformer (CPT) size, maximum control circuit cable length, actual quantity of control circuit contacts, and containment temperature during a design basis accident (DBA). As a result, the worst case circuit conditions for determining acceptable contactor voltage were not evaluated. Dominion entered the issue into the corrective action program and performed an operability assessment of the most bounding circuit and determined that sufficient voltage would be available to meet its design basis function.

The performance deficiency was determined to be more than minor because it was associated with the design control attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The team evaluated the finding in accordance with IMC 0609, Significance Determination Process, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings." The finding was determined to be of very low safety significance because the design deficiency was confirmed not to result in loss of operability or functionality. The team determined that this finding had a cross-cutting aspect in the area of Problem Identification and Resolution, Corrective Action Program because Dominion did not thoroughly evaluate the problem when it was identified and entered into the corrective action program in 2009. [IMC 0310, Aspect P.1(c)] (Section 1R21.2.1.1)

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

**Significance:** **G** Sep 30, 2011

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

#### **NCV 05000336/2011004-01, Failure to Electrically Isolate a Dissimilar Metal Flanged Joint Leads to Forced Shutdown Due to Service Water Leak**

Green. A self-revealing NCV of 10 CFR 50, Appendix B Criterion V, "Instructions, Procedures, and Drawings," was identified for Dominion's failure to properly electrically isolate service water (SW) flanged joints of dissimilar metals. This caused a more rapid corrosion rate when a defect occurred in the lining of the carbon steel pipe and eventually led to a SW leak. On September 3, 2011, Dominion was forced to shut down Unit 2 when the spool leaked in excess of the limit allowed in the authorized relief. Dominion repaired the spool and electrically isolated the flanged joint. Dominion entered this issue into their corrective action program (CAP) CR441302.

The finding is more than minor because it is associated with the Human Performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of

systems that respond to initiating events to prevent undesirable consequences. The finding was of very low safety significance (Green) because the finding was not a design or qualification deficiency that did not result in loss of operability, did not represent an actual loss of system safety function, did not represent an actual loss of safety function of a single train for greater than its technical specification (TS) allowed outage time, did not represent an actual loss of safety function of one or more non-technical specification trains of equipment designated as risk significant per 10 CFR 50.65, and did not screen as risk significant due to a seismic, flooding, or severe weather initiating event. The inspectors determined that this finding had a cross-cutting aspect in Human Performance, Work Practices component, because Dominion personnel proceeded in the face of uncertainty and/or unexpected circumstances when they had difficulty installing the isolating sleeves in the flanged joint. [H.4(a)] (Section 71111.20)

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

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