

# Millstone 3

## 2Q/2011 Plant Inspection Findings

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### Initiating Events

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### Mitigating Systems

**Significance:**  Jun 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

**(NCV 05000423/2011003-01, Failure to Take Timely Corrective Actions for Dealloying of Aluminum Bronze Service Water Valves).**

• Green. The inspectors identified a Green NCV of 10 CFR 50 Appendix B, Criterion XVI, Corrective Action in that Dominion did not take timely corrective action to address repetitive failures of aluminum-bronze (Al-Br) service water valves that were installed in safety related support systems from the process of de-alloying. Specifically, Dominion did not implement a plan to replace 3SWP\*V699 (3HVQ\*ACUS1B Bypass Valve), 3SWP\*V018 (3HVQ\*ACUS2B Unit Cooler Inlet Valve) and 3SWP\*V696 (3HVQ\*ACUS2B Unit Cooler Outlet Valve) prior to failure despite identifying in March 2009, that these valves would likely fail within 12 to 18 months. Dominion entered the issue into their corrective action system and replaced the three valves. The finding is similar to example 4.f in NRC Inspection Manual Chapter 0612, Appendix E, “Examples of Minor Issues,” in that the failure to correct degraded conditions affected operability of the containment recirculation pumps. The finding is more than minor because it is associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective of ensuring 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 deficiency resulted in a loss of operability but did not represent a loss of system safety function, did not represent an actual loss of safety function of a single train, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The inspectors determined that this finding had a cross-cutting aspect in Problem Identification and Resolution, CAP component, because Dominion did not take appropriate corrective action in a timely manner to address the degraded condition commensurate with their safety significance. [P.1(d)](Section 71111.15)

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

**Significance:**  Mar 31, 2011

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**NCV 05000423/2011002-01, Failure to Prevent Safety Related Cables from Being Submerged**

Green. A self-revealing Green non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” was identified for Dominion’s failure to maintain safety related cables in an environment for which they were designed. Specifically, 480V safety related cables, which are not qualified for continuous submergence, were submerged in a cable vault for an undetermined length of time. Dominion took immediate corrective action to remove the water from the cable vault and entered the issue into their corrective action program (CAP).

The finding is more than minor because it was associated with the Protection Against External Events attribute of the Mitigating Systems cornerstone, and affected the cornerstone objective of ensuring 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 which resulted in a loss of operability or functionality, did not represent a loss of system safety function, did not represent an actual loss of safety function of a single train for greater than its technical specification 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 for greater than 24 hours, and was not potentially risk significant due to a seismic, flooding or severe weather initiating event. The inspectors determined that the performance deficiency had a cross-cutting aspect in the area of Problem Identification and Resolution, Operating Experience (OE), because Dominion did not implement OE through changes in the stations programs for inspecting underground cables. [P.2(b)] (Section 1R06)

Inspection Report# : [2011002](#) (pdf)

**Significance:**  Mar 31, 2011

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**NCV 05000423/2011002-02, Improper Restoration of Air Conditioning Equipment Following Maintenance Results in Inoperability of 'B' Train of Recirculation Spray System**

Green. A self-revealing Green non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for Dominion's failure to properly restore 3HVQ\*ACUS2B, Containment Recirculation Pumps and Coolers Area B Air Conditioning Unit, following maintenance. This resulted in an additional 24 hours of inoperability of the 'B' train of the recirculation spray system (RSS). Dominion's entered the issue into their corrective action program.

The finding is more than minor because it was similar to NRC Inspection Manual Chapter 0612, Appendix E, "Examples of Minor Issues," Example 4b in that not following written instructions in the tagging cover sheet caused the 'B' train of RSS to be inoperable for an additional 24 hours. The finding was associated with the Human Performance attribute of the Mitigating Systems cornerstone, and affected the cornerstone objective of ensuring 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 did not represent a loss of system safety function, did not represent an actual loss of safety function of a single train for greater than its technical specification 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 for greater than 24 hours, and was not potentially risk significant due to a seismic, flooding or severe weather initiating event. The inspectors determined that the performance deficiency had a cross-cutting aspect in the area of Human Performance, Work Practices, because operations personnel did not follow the instructions on the tagging cover sheet when returning the air conditioning unit to service. [H.4(c)] (Section 1R19)

Inspection Report# : [2011002](#) (pdf)

**Significance:**  Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

**(NCV 05000423/2010005-01, Failure to Take Adequate Corrective Actions for a Broken JW Banjo Bolt on the 3B EDG).**

Green. The inspectors identified a finding of very low safety significance involving a non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," in that, Dominion did not take adequate corrective action following the identification of a degraded condition. Maintenance personnel identified a broken jacket water fitting (banjo bolt) on the 3'B' emergency diesel generator (EDG), but a condition report (CR) was not initiated. Subsequently, an additional similarly degraded fitting resulted in extended unavailability on the 3'B' EDG. In response, Dominion entered the issue into the corrective action program and implemented acceptable corrective actions.

The finding is more than minor because it is associated with the equipment performance 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 inspectors determined the finding was of very low safety significance (Green) because it was not a design or qualification deficiency, did not represent an actual loss of system safety function of a single train for greater than its technical specification allowed outage time, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding has a cross-cutting aspect in the area of Problem Identification and Resolution, Corrective Action Program Component, because Dominion did not ensure that issues potentially impacting nuclear safety were promptly

identified, fully evaluated, and that actions were taken to address safety issues in a timely manner, commensurate with their safety significance. Specifically, Dominion did not initiate a CR in September 2009 for a degraded condition on the safety-related 3'B' EDG (IMC 0310, Aspect P.1(a)). (Section 4O5A)

Inspection Report# : [2010005](#) (*pdf*)

**Significance:**  Sep 22, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

**NCV 05000336/2010008-01; 05000423/2010008-01, Failure to Properly Control Fire Fighting Strategies.**

Green. The team identified a non-cited violation of Millstone Unit 2 Operating License Condition 2.C.(3), and Unit 3 Operating License Condition 2.H, for the failure to implement all provisions of the approved Fire Protection Programs. Specifically, Dominion did not implement adequate review, approval and distribution of fire fighting strategies to provide for the adequate development and maintenance of effective strategies. As a result, the team found that Dominion did not provide adequate guidance in the fire fighting strategies for several areas that included the Unit 2 "8" emergency diesel generator (EDG) room, and the Unit 3 west switchgear room. This issue was entered into Dominion's corrective action program as condition report (CR) 388786.

The team determined that the failure to administratively control fire fighting strategies as required by the fire protection program was a performance deficiency. This finding was more than minor because it adversely affected the availability and capability objectives of the protection against external events (i.e., fire) attribute under the Mitigating Systems Cornerstone. Specifically, the above examples would likely cause delays in manual fire fighting activities and, therefore, adversely affected the defense-in-depth aspect of the fire protection program to limit fire damage by quick suppression of those fires that occur. The team performed a Phase 1 SDP screening, in accordance with NRC IMC 0609, Appendix F, "Fire Protection Significance Determination Process." This finding affected fire prevention and administrative controls, and was screened to very low safety significance (Green) because this failure to control fire fighting strategies was determined to represent a low degradation rating. This finding had a cross-cutting aspect in the area of human performance because Dominion failed to ensure complete and accurate fire fighting strategies were available to the fire brigade to support timely extinguishment of fires. [H.2(c)] (Section 1 R05.03)

Inspection Report# : [2010008](#) (*pdf*)

**Significance:**  Sep 22, 2010

Identified By: Self-Revealing

Item Type: VIO Violation

**Failure to develop a mitigation strategy for depressurization of the Unit 3 steam generators and use a portable pump for injection make-up.**

This finding, affecting the Mitigating Systems Cornerstone, is related to developing a strategy to maintain core cooling and mitigate fuel damage, under the circumstances associated with loss of large areas of the plant due to explosions or fire; in response to Section B.5.b. of the February 25, 2002, Interim Compensatory Measures (ICM) Order (EA-02-026) and related NRC guidance. This finding has been designated as "Official Use Only - Security-Related Information;" therefore, the details of this finding are being withheld from public disclosure. This finding has a cross-cutting aspect in the area of Problem Identification and Resolution (Corrective Action Program). [P.1(c)]. See inspection report for more details.

Inspection Report# : [2010011](#) (*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

Last modified : October 14, 2011