

Millstone 3

1Q/2007 Plant Inspection Findings

Initiating Events

Significance:  Mar 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO IMPLEMENT SURVEILLANCE PROCEDURES RESULTED IN A TEMPORARY LOSS OF CONTAINMENT COOLING AND HIGH PRESSURIZER LEVEL TSAS ENTRY

A Green self-revealing non-cited violation (NCV) of Technical Specification (TS) 6.8.1, "Procedures," was identified because Dominion did not adequately implement procedures while performing a surveillance to test containment isolation slave relays. This resulted in three containment isolation valves repositioning which caused pressurizer level to increase high out of the normal operating band and an isolation of containment cooling. Corrective actions for this issue included performing a level one root cause, revising the surveillance procedure to improve the Operations and Instrumentation & Control coordination of the missed critical step, coaching to the individuals involved in the missed step, and reinforcing good human error prevention techniques. This finding is more than minor because it was associated with the Initiating Event's cornerstone and affected the cornerstone's objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The inspectors determined this finding to be of very low safety significance (Green) through performance of a Phase 1 Significance Determination Process in accordance with Inspection Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations". Specifically, this finding did not contribute to both the likelihood of a reactor trip and that mitigating systems would not be available. This finding has a cross-cutting aspect in the area of Human Performance, Work Practice component, because Dominion's Work Practice techniques were not effective in ensuring personnel followed a slave relay testing surveillance procedure that resulted in a loss of containment cooling and caused pressurizer level to increase above the TS allowed value.

Inspection Report# : [2007002](#) (*pdf*)

Significance:  Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

DID NOT ADEQUATELY EVALUATE A REACTOR PROTECTION SYSTEM SET POINT MODIFICATION

The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion III, "Design Control," for an inadequate design change review for a steam generator low-low water level setpoint modification. Specifically, Dominion did not fully consider the impact of the modification on the ability of the steam generator to accommodate operational transients without exceeding a parameter threshold which would require automatic or manual protective action. This led to a reactor trip on December 1, 2005, while conducting a rapid downpower in response to a reactor coolant system leak from the packing of a loop maintenance stop valve that was collected in a drain tank inside primary containment. At 38 percent power, main turbine vibrations increased above allowable values and the turbine was manually tripped. Following the turbine trip, the reactor unexpectedly automatically tripped on the "C" steam generator low-low level trip setpoint. Dominion entered this condition into their corrective action program as CR-06-04788. Corrective actions for this issue included plans to conduct an engineering analysis to determine the new steam generator low-low level trip setpoints and revision of the design change notice and the 10 CFR 50.59 screening. This finding is more than minor because it is associated with the Initiating Events Cornerstone and affects the cornerstone objective to limit the likelihood of those events that upset plant stability. Specifically, an inadequate design change review led to an unanticipated reactor trip. This issue is of very low safety significance because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. This finding is related to the cross-cutting aspect of human performance in that Dominion's review and decision making process was not effective at identifying possible unintended consequences when making assumptions for a risk significant design change.

Inspection Report# : [2006003](#) (*pdf*)

Mitigating Systems

Significance:  Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

DID NOT EVALUATE AND CORRECT A SIGNIFICANT CONDITION ADVERSE TO QUALITY ASSOCIATED WITH GRAVITY FEED BORATION LINES

The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to fully evaluate and correct a significant condition adverse to quality which led to a repeat occurrence of air introduction in the gravity feed boration line. Specifically, following identification and documentation of air in the "A" gravity feed boration line on September 9, 2004, Dominion did not evaluate and correct the cause which then led to a repeat occurrence of air introduction in the "B" gravity feed boration line on April 13, 2006. The inspectors determined that the cause of both events was due to an inadequate chemical and volume control system (CVCS) fill and vent procedure. Dominion entered this condition into their corrective action program as CR-06-03730. Corrective actions for this issue included venting the air from the gravity feed boration line and plans to revise the CVCS fill and vent procedure. This finding is more than minor because it is associated with the Mitigating Systems Cornerstone and affects the cornerstone objective of ensuring the availability of systems that respond to initiating events to prevent undesirable consequences. Specifically, excessive air in the gravity feed lines has the potential to damage the operating charging pump if an emergency boration event were to occur. This finding was determined to be of very low safety significance (Green) since full mitigation credit was given for the availability of redundant emergency boration paths. This finding is related to the cross-cutting aspect of problem identification and resolution in that Dominion did not fully evaluate and correct an identified degraded condition discovered in September 2004, which then recurred in April 2006.

Inspection Report# : [2006003](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Significance:  Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO COMPLY WITH TECHNICAL SPECIFICATION REQUIRED ACTIONS FOR INOPERABLE CONTAINMENT HIGH RANGE RADIATION MONITORS

A Green NCV was identified regarding the site engineering organization's failure to evaluate, in a timely manner, the effects that thermally induced currents (TIC) have on the operability of the Unit 3 containment high range radiation monitors (HRRM) (RMS*RE-04A and RMS*RE-05A) during a design basis accident, as required by Technical Specification 3.3.3.6. On September 6, 2006, site engineering issued condition report (CR-06-08181), documenting that engineering calculations demonstrated that the Unit 3 containment HRRMs (RMS*RE-04A and RMS*RE-05A) would provide false indications due to TICs that would occur following a loss of coolant accident (LOCA). Upon review of the matter, Dominion declared both channels of the Unit-3 containment HRRM monitoring system inoperable on September 6, 2006, in accordance with Technical Specification Action Statement 3.3.3.6. Immediate corrective actions included submitting a Special Report as required by TS 3.3.3.6 and revision of operating procedures to identify alternative methods for monitoring Unit 3 containment radiological conditions, when required. Additionally, Dominion generated CR-06-08340 to identify its untimely response to this condition and affect corrective measures to prevent recurrence. This finding is more than minor because it is associated with the facilities and equipment attribute of the Emergency Preparedness Cornerstone and adversely affects the cornerstone objective to ensure that Dominion is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. This finding was evaluated using Sheet 1, Failure to Comply, of Inspection Manual Chapter 0609, Appendix B, Emergency Preparedness Significance Determination Process (SDP). The finding is of low safety significance because the performance deficiency was a failure to comply with a non-risk significant planning standard and no planning standard function failure occurred since other

parameters could be used to validate the indications from the Unit 3 containment HRRMs. The cause of the finding is related to the cross-cutting element of problem identification and resolution, in that, Dominion failed to adequately evaluate and correct the condition for impact on operability.

Inspection Report# : [2006004](#) (*pdf*)

Occupational Radiation Safety

Public Radiation Safety

Significance:  Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO ACCOUNT FOR ALL SHIPPED RADIOACTIVE MATERIAL ON THE UNIFORM MANIFEST

A self-revealing NCV of 10 CFR 20, Appendix G, "Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifest," was identified for failure to list on a shipping manifest all radioactive materials that were shipped to a waste processor. On February 24, 2006, Dominion shipped a spent filter liner (Shipment No. 06-019) to a waste processor. On March 2, 2006, the waste processor notified Dominion that upon opening the liner, two bags, containing contaminated rags and mop heads, were not accounted for on the manifest. This issue was entered into Dominion's corrective action program (CR 06-02234). Corrective action for this issue included informing the waste processor by phone of the correct activity, weight, and volume of this material and providing an amended uniform manifest. The finding is more than minor because it is associated with Public Radiation Safety Cornerstone and involves a failure to comply with NRC regulations. This finding is of very low safety significance because the quantity of radioactive material did not involve under-classifying the shipment's waste (Class C) or the Department of Transportation shipping category (LSA II). This finding is related to the cross-cutting aspect of human performance because Dominion did not adequately implement procedures for preparation of the manifest.

Inspection Report# : [2006004](#) (*pdf*)

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

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