

# Millstone 3

## 2Q/2007 Plant Inspection Findings

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### Initiating Events

**Significance:**  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to Perform Evaluations on Boric Acid Leaks**

The inspectors identified that Dominion did not follow Boric Acid Corrosion Control program procedures. Specifically, plant personnel failed to adequately perform boric acid leak evaluations as required by Dominion procedure DNAP-1004, "Boric Acid Corrosion Control Program." This finding was determined to be an NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." Dominion's corrective actions for this issue included a general area cleaning program to remove boric acid residue from target components and ensuring the Boric Acid Corrosion Control program includes clear documentation of evaluations for both the leaking component and any associated target component(s).

This 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 limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The inspectors conducted a Phase 1 SDP screening in accordance with IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." The finding was determined to be of very low safety significance (Green) because the issue did not result in exceeding the Technical Specification limit for identified reactor coolant system (RCS) leakage or affect other mitigating systems resulting in a total loss of their safety function. Additionally, this finding is similar to IMC 0612, Appendix E example 4a, in that the licensee routinely failed to perform engineering evaluations on similar issues; i.e., boric acid leaks. The performance deficiency had a cross-cutting aspect in the area of human performance, work practices component, because Dominion did not ensure personnel followed procedures.

Inspection Report# : [2007003](#) (*pdf*)

**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*)

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## Mitigating Systems

**Significance:**  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Implement Safety-Related Surveillance Procedure Resulted in 'A' Safety Injection Accumulator Inoperability**

A self-revealing finding was identified when Dominion incorrectly performed a safety-related surveillance procedure. Specifically, Operations mistakenly performed a biennial surveillance test that verified remote vent valve position by opening a nitrogen vent path and verifying a decrease in accumulator pressure for the Unit 3 'A' safety injection (SI) accumulator instead of the planned quarterly surveillance. As a result, the 'A' SI accumulator was inadvertently depressurized to below the Technical Specifications value. This finding was determined to be an NCV of TS 6.8.1, "Procedures." Dominion's corrective actions for this issue included restoring accumulator pressure, performing an apparent cause evaluation to determine the underlying causes associated with the error, training the personnel involved, and scheduling human performance training for Operations during training cycle 07-03.

The finding was more than minor because it 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 inspectors conducted a Phase 1 SDP screening in accordance with IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." The finding was determined to be of very low safety significance (Green) because the issue is not a design or qualification deficiency, does not represent the loss of a system safety function or safety function of a single train, and does not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The performance deficiency had a cross cutting aspect in the area of human performance, work practice component, because Dominion's human error prevention techniques such as holding a pre-job brief and peer checking were not used to ensure the surveillance was properly performed.

Inspection Report# : [2007003](#) (*pdf*)

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## 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 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*)

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## Occupational Radiation Safety

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### 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*)

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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 : August 24, 2007