

Millstone 2

1Q/2013 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

NCV 05000336/2013002-01: Inadequate Post Maintenance Testing Following PORV Maintenance

Green. The inspectors identified a Green NCV of 10 CFR 50 Appendix B, Criterion XI, "Test Control," for Dominion's failure to perform an adequate post maintenance test (PMT) on 2-RC-404, the Unit 2 'B' power operated relief valve (PORV). Specifically, a stroke test of the valve under hot conditions was not performed prior to entering Mode 3. Since the valve was observed to be leaking, Dominion cooled down the plant to repair the PORV and performed the specified PMTs including the valve stroke under hot conditions. Dominion entered the issue into their corrective action program (CAP), CR506539.

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. Specifically, Dominion's PMT of the PORV did not adequately demonstrate the valve's capability to stroke under all operating conditions. The finding was of very low safety significance (Green) because the finding 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 function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with Dominion's maintenance rule program for greater than 24 hours, and did not involve a loss or degradation of equipment designed to mitigate a seismic, flooding, or severe weather initiating event. The finding had a cross-cutting aspect in Human Performance, Work Control, because Dominion did not adequately incorporate actions to address the impact of work activities on plant operation. Specifically, Dominion incorrectly concluded that the PORV functional test was not required prior to entering Mode 3 [H.3(b)]. (Section 4OA2)

Inspection Report# : [2013002](#) (*pdf*)

Significance: G Sep 30, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

NCV 05000336/2012004-02, Corrective Action to Prevent Recurrence Ineffective to Preclude Repetition of a Significant Condition Adverse to Quality

Green. A self-revealing Green NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified when the corrective action to prevent recurrence of a significant condition adverse to quality did not preclude repetition of the event. Specifically, Dominion generated a corrective action to prevent recurrence during a root cause evaluation (RCE) for a reactor power transient that occurred in February 2011 and a similar event occurred

in November 2011, which was determined to be a repeat of the February 2011 event. Dominion entered this issue into their corrective action program (CAP) as condition report (CR) 488587.

This finding was more than minor because if left uncorrected, it has the potential to lead to a more significant safety concern. The inspectors determined that this finding was associated with the Mitigating System Cornerstone and was reactivity control systems degradation related to reactivity management due to command and control issues identified in Dominion's RCEs for both the February and November 2011 events. Additional screening through the SDP directed the inspectors to Appendix M "Significance Determination Process Using Qualitative Criteria." Based upon the results of this evaluation and taking into account mitigating factors associated with additional corrective actions taken following the November 2011 event, and Dominion's acceptable performance during the November 2011 through September 2012 time period, regional management concluded that the finding was of very low safety significance (Green). This finding has a cross-cutting aspect in the area of Problem Identification and Resolution, Corrective Action Program, because Dominion did not take appropriate corrective actions to address significant conditions adverse to quality and preclude their repetition. [P.1(d)] (Section 4OA3)

Inspection Report# : [2012004](#) (*pdf*)

Significance:  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*)

Barrier Integrity

Emergency Preparedness

Significance:  Oct 29, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

NCV 05000336/2012005-01 and 05000423/2012005-01, Failure to Adequately Implement Flooding EALs

Green. The inspectors identified an NCV associated with emergency preparedness (EP) planning standard 10 CFR 50.47(b)(4), and the requirements of Sections IV.B and IV.C of Appendix E to 10 CFR Part 50. Specifically, Dominion did not maintain in effect the Millstone Units 2 and 3 emergency action level (EAL) schemes by failing to provide an effective measuring instrument for determining flooding water levels. These deficiencies adversely affected the ability of the licensee to properly classify events involving a major flood condition. Dominion entered the issue into their corrective action system (CR501482) and provided additional means to determine flood water levels.

The finding is more than minor because it is associated with the Facilities and Equipment attribute of the EP Cornerstone and affected the cornerstone objective to ensure that the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The inspectors determined the finding to be of very low safety significance (Green) because an EAL has been rendered ineffective such that a Notification of Unusual Event (NOUE) would not be declared for a flooding event, but because of other EALs, an appropriate declaration could be made in a degraded manner. The finding has a cross-cutting aspect in the area of Human Performance, Resources, in that Dominion personnel did not take provide appropriate procedures to address a Risk-Significant Planning Standard (RSPS) issue completely, accurately, and in a timely manner commensurate with the safety significance because Dominion did not provide a means of reliably and accurately assessing flooding levels that could reach 19 feet above mean sea level. [H.2(d)] (Section 1R01)

Inspection Report# : [2012005](#) (*pdf*)

Occupational Radiation Safety

Public Radiation Safety

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.

Miscellaneous

Significance:  Aug 03, 2012

Identified By: NRC

Item Type: FIN Finding

FIN 05000336&423/2012010-03 Failure to Perform Effectiveness Reviews for Formal Self-Assessments

Green. The inspectors identified a finding (FIN) of very low safety significance (Green) for Dominion's failure to perform procedurally required effectiveness reviews for numerous formal self-assessments. Consequently, Dominion missed opportunities to identify potential corrective actions for resolution in the corrective action program. Dominion has entered the issue into the corrective action program (CR482135).

The inspectors determined that this finding was more than minor because it is similar to IMC 0612, "Power Reactor Inspection Reports," Appendix E, "Examples of Minor Issues," example 3.j; in that, it represents a programmatic deficiency that could lead to worse errors if uncorrected. This finding was of very low safety significance (Green) because the finding does not represent a loss of system and/or function, does not represent an actual loss of function of at least a single train for greater than its technical specification allowed outage time or two separate safety systems out-of-service for greater than its technical specification allowed outage time, and does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's Maintenance Rule program for greater than 24 hrs. This finding is not associated with an NRC Reactor Oversight Process cornerstone. The inspectors determined that this finding had a cross-cutting aspect in the Human Performance cross-cutting area, Work Practices component, because Dominion personnel failed to follow procedures. [H.4(b)].

Inspection Report# : [2012010](#) (*pdf*)

Significance: N/A Aug 03, 2012

Identified By: NRC

Item Type: FIN Finding

FIN 05000336&423/2012010-04 Millstone 2012 Biennial PI&R Inspection Summary

The inspectors concluded that Dominion was generally effective in identifying, evaluating, and resolving problems. In most cases, Dominion personnel identified problems, entered them into the corrective action program at a low threshold, and prioritized issues commensurate with their safety significance. Dominion appropriately screened issues for operability and reportability, and performed causal analyses that appropriately considered extent of condition, generic issues, and previous occurrences. The inspectors also determined that Dominion typically implemented corrective actions to address the problems identified in the corrective action program in a timely manner. However, the inspectors identified two violations of NRC requirements in the areas of Prioritization and Evaluation of Issues, and Effectiveness of Corrective Actions.

The inspectors concluded that Dominion adequately identified, reviewed, and applied relevant industry operating experience to Millstone Power Station operations. In addition, based on those items selected for review, the inspectors determined that in general, Dominion's self-assessments and audits were thorough. However, the inspectors identified one finding in the area of Self-Assessments and Audits that was determined not to be a violation of NRC requirements.

Based on the interviews the inspectors conducted over the course of the inspection, observations of plant activities, and reviews of individual corrective action program and employee concerns program issues, the inspectors did not identify any indications that site personnel were unwilling to raise safety issues, nor did they identify any conditions that could have had a negative impact on the site's safety conscious work environment.

Inspection Report# : [2012010](#) (*pdf*)

Last modified : June 04, 2013