Millstone 2
4Q/2007 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Jun 30, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Work Procedure for the Unit 2 'C' Charging Pump Results in Pump Failure
A self-revealing finding was identified when Dominion did not ensure an adequate work procedure was available for maintenance performed on the Unit 2 ‘C’ charging pump on May 5, 2007, resulting in a failure of the pump on June 11, 2007. Specifically, the work procedure did not give specific guidance for assembly and installation of the suction poppet valve in accordance with direction provided in the vendor technical manual. On June 11, 2007, the ‘C’ charging pump failed and was declared inoperable due to a seized plunger shaft. 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 repair and retest of the ‘C’ charging pump, revising the work procedure to include vendor recommendations, and training for maintenance personnel on assembly and installation of charging pump poppet valves.

The finding was more than minor because it was associated with the procedural quality 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, resources component, because Dominion did not ensure that a complete, accurate, and adequate work procedure was available for maintenance performed on a safety-related component. [H.2(c)]
Inspection Report# : 2007003 *(pdf)*

Significance: G Jun 30, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Adequately Evaluate Surveillance Test Data
The inspectors identified that Dominion did not adequately evaluate surveillance test results to ensure test acceptance criteria had been met on May 10, 2007. Specifically, the inspectors identified that the 'C' charging pump pulsation dampener surveillance test had cited incorrect data and had been accepted as satisfactorily complete, though the test data was outside of the surveillance acceptance criteria. This finding was determined to be an NCV of 10 CFR 50, Appendix B, Criterion XI, "Test Control." The surveillance was successfully re-performed on May 13, 2007. Dominion's corrective actions for this issue included revising the surveillance to clarify test requirements and required reading for operations personnel on how to adequately document and review surveillance test data.

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 of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to identify out of specification data could result in the failure to identify inoperable equipment. The inspectors also concluded that if the failure to properly evaluate charging pump discharge dampener data was not corrected, a more significant concern could exist

in that failure of the dampener has previously resulted in a loss of all charging due to the migration of nitrogen from a failed discharge pulsation dampener to the common suction piping for all three charging pumps (as described in NRC inspection reports 05000336/2006002 and 05000336/2006006). 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 signficance (Green) because the issue is not a design or qualification deficiency, does not represent the loss of a system safety function of 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 problem identification and resolution, corrective action program component, because Dominion did not identify out of specification test data. [P.1.(a)]
Inspection Report# : 2007003 *(pdf)*

Significance: G Mar 31, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROMPTLY CORRECT A DEGRADED CONDITION OF THE 480V MCCS PER CRITERION XVI OF APPENDIX B TO 10 CFR PART 50
A Green NRC-identified NCV of 10 CFR 50, Appendix B, Criterion XVI, ACorrective Action,@ was identified for failure to promptly correct a degraded condition associated with the air conditioning (A/C) for the B61 480 volt alternating current (VAC) motor control center (MCC). Corrective actions included the B51 and B61 A/C units, implementation of compensatory cooling, restoring both A/C units by adding freon, and changing the vendor technical manual and equipment drawings to reflect the proper amount of freon charge.

The finding is more than minor because the equipment performance attribute of the Mitigating Systems cornerstone and the objective of ensuring the availability and capability of systems that respond to initiating events to prevent undesirable circumstances was affected. Specifically, the 480 VAC MCCs provide vital power to a number of safety-related systems designed to mitigate design basis events. The inspectors determined this finding to be of very low safety significance (Green) through performance of a Phase 1 SDP, in accordance with IMC 0609, Appendix A, ASignificance Determination of Reactor Inspection Findings for At-Power Situations.@ Specifically, the finding did not result in a loss of function because the 480 VAC MCCs would have been able to perform their function of providing electrical power to their respective emergency loads over a probablistic risk assessment mission time of 24 hours. This finding is related to the cross-cutting aspect of Problem Identification and Resolution in that Dominion did not take appropriate corrective actions to address the degraded A/C units in a timely manner, commensurate with the safety significance and complexity of the issue. (Section 4OA5.1) [P.1(d)]
Inspection Report# : 2007002 *(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

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.

Miscellaneous

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