

Millstone 2

4Q/2005 Plant Inspection Findings

Initiating Events

Significance:  Mar 31, 2005

Identified By: NRC

Item Type: FIN Finding

FAILURE TO ADEQUATELY ADDRESS CONCERNS RELATED TO FREEZE PROTECTION OF THE OUTDOOR TEMPORARY AIR COMPRESSOR

The inspectors identified a self-revealing finding for the failure to adequately address issues related to the operation of an outdoor temporary air compressor and associated air dryer skid during cold weather conditions. On November 11, 2004, Dominion had identified that additional freeze protection actions were required to ensure the availability of the compressor during cold weather. Subsequently, the inspectors identified two occasions where actions taken to ensure availability of the compressor were not adequate. On December 17, 2004, the inspectors identified that a heat trace for the system dryer was deenergized. On February 1, 2005, the temporary air compressor failed causing the "B" instrument air compressor to start. Following the air transient, Dominion conducted an investigation and concluded that the cause of the temporary air compressor failure was freezing of the pre-filter on the air dryer skid. Dominion replaced the compressor, installed a tent around the air-dryer towers, and placed a heating unit inside the tent. The finding was more than minor because it affected the equipment performance attribute of the Initiating Events cornerstone objective of limiting the likelihood of events that upset plant stability at power. The performance issue associated with this finding was the failure to take adequate actions to ensure that adverse weather conditions did not affect the availability of the temporary instrument air system. The risk of this finding was determined to be of very low safety significance (Green), because, although the temporary air compressor system became unavailable, the standby instrument air compressor restored instrument air system pressure. The instrument air system pressure stabilized and recovered such that the instrument air header pressure did not cause a reactor trip. This finding was related to the cross-cutting area of Problem Identification and Resolution in that Dominion failed to take adequate corrective actions to prevent the air dryer skid from freezing.

Inspection Report# : [2005002\(pdf\)](#)

Mitigating Systems

Significance:  Oct 15, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO TAKE TS ACTION WITH THE "B" EDG INOPERABLE

The inspectors identified a non-cited violation of Technical Specification (TS) 3.8.1.1, "AC Sources," since Dominion did not perform the required TS action (TS 3.8.1.1.b.3) after they discovered the "B" emergency diesel generator (EDG) was inoperable on May 18, 2005. Specifically, Dominion failed to verify that the steam-driven auxiliary feedwater pump was operable after declaring the "B" EDG inoperable. In addition, Dominion did not identify in the Licensee Event Report (LER) documenting this occurrence that TS 3.0.5, "Limiting Conditions for Operation," was also not entered during the time that the "B" EDG was inoperable. Dominion has entered this condition into their corrective action program (CR-05-11468) and updated the LER to reflect TS 3.0.5 applicability. This finding was more than minor because it affected the human performance attribute and the availability, reliability, and capability objective of the Mitigating System cornerstone. Specifically, Dominion did not verify the steam-driven auxiliary feedwater pump was operable upon the discovery that the "B" EDG was inoperable. This finding was determined to be of very low safety significance (Green) since the steam-driven auxiliary feedwater pump was subsequently determined to have been available to perform its function. This finding is related to the cross-cutting area of Human Performance in that operations personnel did not perform the required actions of TS 3.8.1.1.b.3 after they declared the "B" EDG inoperable on May 18, 2005.

Inspection Report# : [2005004\(pdf\)](#)

Significance:  Oct 15, 2005

Identified By: NRC

Item Type: FIN Finding

FAILURE TO ADEQUATELY IMPLEMENT OPERABILITY DETERMINATION PROCEDURE ON THREE OCCASIONS

The inspectors identified a finding where Dominion did not adequately implement their Operability Determination (OD) procedure on three occasions which affected the basis for operability for degraded conditions identified on safety-related systems. Dominion has initiated corrective actions to conduct an assessment of their current operability determination process, evaluate the assessment results, and implement corrective actions to improve their process. Specifically;

- Dominion did not perform a prompt operability determination for approximately 8 days to evaluate whether a fence installed over the Unit 2

turbine-driven auxiliary feedwater pump (TDAFWP) cubicle high energy line break blowout panel adversely impacted the panel's ability to perform its design function. After investigation, Dominion determined that a supporting engineering evaluation did not exist, declared all three auxiliary feedwater pumps inoperable, and took prompt action to reroute the fencing around the blowout panel.

• Dominion did not revise an operability determination on the Unit 2 charging system when new information discovered during system troubleshooting showed that the basis for the operability determination was in question. Dominion ultimately decided to close the operability determination to previous troubleshooting and maintenance activities associated with the degraded condition.

Dominion described as the basis for operability in a condition report (CR) that a technical evaluation existed that showed that a Unit 3 high pressure safety injection (SIH) pump could meet its mission time with an oil leak of up to six drops per minute. The referenced technical evaluation however, did not discuss mission time, but calculated the time to deplete a high pressure safety injection pump oil reservoir in the presence of a four drop per minute and six drop per minute leak.

This finding was more than minor because it affected the equipment performance attribute and the availability, reliability, and capability objective of the Mitigating System cornerstone. Specifically, Dominion did not adequately evaluate the availability of Mitigating Systems with degraded conditions to ensure their availability to perform the intended safety function. This finding was determined to be of very low safety significance (Green) since there was not a loss of function for the TDAFW and charging system examples and since the SIH pump would have completed its safety function within the Probabilistic Risk Assessment 24 hour evaluation time. This finding is related to the cross-cutting area of Problem Identification and Resolution (PI&R) because of the failure to conduct timely and adequate evaluations of degraded and non-conforming conditions.

Inspection Report# : [2005004\(pdf\)](#)

G

Significance: Mar 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO IMPLEMENT PROCEDURES TO CORRECTLY INSTALL TEMPORARY COOLING TO THE EAST 480 VOLT SWITCHGEAR

The inspectors identified a self-revealing non-cited violation of Technical Specification 6.8.1a, "Procedures and Programs," for the failure to adequately implement the procedure for installing temporary ventilation through the East 480 volt vital switchgear room when normal cooling was disabled for maintenance. The procedure establishes the required flow path in the switchgear room when compensatory cooling measures were required. On January 12, 2005, operators failed to perform the procedure step that opens doors to provide for an exhaust path to allow warm air to leave the switchgear room. The finding was greater than minor because the failure to install the compensatory cooling system, per the procedure, caused the air flow through the East 480 volt switchgear room to be below the minimum required to support cooling of the 480 volt system for initiating events (transients), mitigating systems, and barrier integrity systems. The finding was associated with the equipment performance attribute of the initiating events and mitigating systems cornerstones, and the containment structures, systems, and components and barrier performance attribute of the barrier integrity cornerstone. Since more than one cornerstone was affected, a Reactor Safety Significance Determination Process Phase 2 analysis was performed. The analysis resulted in a finding of very low safety significance (Green) because the improper installation of the compensatory measures did not result in an actual loss of the supported 480 volt AC system or electro hydraulic control functions. This finding was related to the cross-cutting area of Human Performance in that both Engineering and Operations personnel failed to correctly implement the procedure for compensatory cooling.

Inspection Report# : [2005002\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

G

Significance: Dec 31, 2005

Identified By: NRC

Item Type: FIN Finding

INEFFECTIVE CORRECTIVE ACTIONS TO PREVENT SERO QUALIFICATION LAPSES

The inspector identified a Green finding for the failure to take effective corrective actions in that since 2004, on several occasions, staff assigned to the site emergency response organization (SERO) did not maintain their qualifications current. The corrective actions taken to prevent recurrence of this problem were not effective as highlighted by repeat examples of lapsed SERO qualifications. Individuals identified during the inspection with the lapsed qualifications were immediately removed from the SERO callout system until their training was completed. The cause of the finding is related to the cross-cutting element of problem identification and resolution in that the corrective actions taken were not effective in preventing reoccurrence. The finding is more than minor because it is associated with the EP cornerstone attribute of emergency response organization readiness (training). It affects the cornerstone objective of ensuring the capability to implement measures to protect the health and safety of the public during an emergency. Specifically, Dominion's corrective actions to ensure personnel maintained their SERO qualifications current were ineffective and did not prevent recurrence. This finding is not suitable for SDP evaluation, but has been reviewed by NRC management and is determined to be a finding of very low safety significance.

Inspection Report# : [2005005\(pdf\)](#)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

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

Miscellaneous

Last modified : March 03, 2006