

Millstone 3

4Q/2008 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Fire Protection Deficiency Resulting in Potential Loss of All Charging Pumps

The inspectors identified a Green, NCV of the Millstone Unit 3 operating license condition 2.H, "Fire Protection," in that Dominion failed to correct a fire protection program deficiency and assure that one train of charging would remain free of fire damage for fire scenarios that could produce spurious closure of a Volume Control Tank (VCT) outlet or charging pump suction motor operated valve. This issue was first identified by Dominion on September 16, 2004, but corrective actions to thoroughly evaluate the issue relative to the fire protection program were extended on several occasions. For this issue Dominion initiated corrective actions to implement fire protection program compensatory measures, maximize the availability of the C charging pump, and identify and implement a long term resolution.

The inspectors determined that this finding was more than minor because it was associated with the external factors attribute (fire) of the mitigating systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the availability of the charging system for nine fire scenarios was not ensured. Phase 1, and a combination of Phase 2 and 3 of the NRC's IMC 0609, Appendix F, "Fire Protection Significance Determination Process" were used to determine that this finding was of very low safety significance (Green), with an estimated total core damage frequency (CDF) of 1 in 1,400,000 years in the range of $7E-7$ per reactor operating year. The inspectors determined that this finding has a cross-cutting aspect in the area of problem identification and resolution because Dominion, since September 16, 2004, did not thoroughly evaluate the issue regarding potential fire induced spurious closure of charging pumps suction valves which could cause damage to the running charging pump and potentially impact post-fire safe shutdown operation. This issue is reflective of current licensee performance because Dominion recently extended corrective action due dates to perform a thorough safe-shutdown evaluation of the issue. [P.1(c)]. (Section 1R05)

Inspection Report# : [2008003](#) (*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

Last modified : April 07, 2009