

Farley 1 2Q/2013 Plant Inspection Findings

Initiating Events

Significance: G Sep 30, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Loss of shutdown cooling due to an unplanned loss of Train A 4160v safety related switchgear

A Green self revealing non-cited violation (NCV) of Technical Specifications (TS) 5.4.1.a, Procedures, was identified for the failure to accomplish shutdown of the 1-2A emergency diesel generator (EDG) in accordance with station procedure FNP-1-STP-40.0. The failure resulted in a loss of all shutdown cooling to the Unit 1 reactor. The licensee correctly diagnosed the unplanned loss of shutdown cooling and promptly restarted the 1A residual heat removal (RHR) pump. This violation was entered into the licensee's corrective action program as condition report (CR) 434764.

Failure to accomplish shutdown of the 1-2A EDG in accordance with station procedure FNP-1-STP-40.0, is a performance deficiency. The performance deficiency was more-than-minor because it adversely affected the Initiating Events 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. Specifically, all shutdown cooling to the reactor was lost when 1A RHR pump stopped operating due to loss of electrical power. This finding was assessed using IMC 0609 Attachment 4, Initial Characterization of Findings; Appendix G, Shutdown Operations Significance Determination Process; and Appendix G, Attachment 1, Phase 1 Operational Checklist for Both PWRs and BWRs. The finding was determined to be of very low safety significance (Green) because the inadvertent change in RCS temperature due to loss of RHR was less than 20 percent of the temperature margin time to boil and did not trip any of the criteria of Appendix G, Attachment 1, Checklist 4. The inspectors determined this performance deficiency has a cross-cutting aspect in the area of human performance and resources component because the licensee did not ensure that personnel, equipment, procedures, and other resources were available and adequate to assure nuclear safety. Specifically, step 5.36.4 of FNP-1-STP-40.0, was inadequate and confusing which resulted in a failure to comply with the procedure. [H.2(c)] (Section 40A3)

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

Mitigating Systems

Significance: G Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform 50.59 Evaluation for Replacement of TDAFW Pump Governor

Green. An NRC-identified Green finding and associated Severity Level IV, NCV, of 10 CFR 50.59(d)(1), were identified for the failure to perform an evaluation of a turbine-driven auxiliary feed water (TDAFW) pump governor modification on Units 1 and 2 against the criteria in 10 CFR 50.59(c)(2), as directed by site procedure NMP-AD-010 and the self-imposed industry guidelines in Nuclear Energy Institute document NEI 96-07, Revision 1, for the implementation of 10 CFR 50.59. The licensee entered the issue in the corrective action program as condition report

(CR) 606427 and addressed the operability of the TDAFW pumps. In addition, one of the corrective actions of the CR is the completion of the required 50.59 evaluation.

The licensee's failure to perform a 50.59 evaluation as required by 10 CFR 50.59(d)(1) was a performance deficiency. This performance deficiency was more-than-minor because it is 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 (i.e., core damage). Specifically, the licensee did not fully demonstrate that the availability, reliability, and capability of the TDAFW pump would be maintained through the modification of the pump governor. Additionally, the failure to perform a 50.59 evaluation was determined to be more-than-minor in accordance with the guidance in the NRC Enforcement Manual for traditional enforcement violations because there was a reasonable likelihood that the change could require Commission review and approval prior to implementation. The inspectors evaluated the significance of the finding using Inspection Manual Chapter 0609, "Significance Determination Process (SDP)," and determined the finding was of very low safety significance (Green). In accordance with the NRC Enforcement Policy, the violation of 10 CFR 50.59 was determined to be a Severity Level IV violation because it resulted in a condition evaluated as having very low safety significance (i.e., Green) by the SDP. This finding has a cross cutting aspect in the decision making component of the human performance area because the most significant causal factor of the performance deficiency was that the licensee did not use conservative assumptions in the determination of whether the TDAFW governor modification introduced adverse effects that required a 50.59 evaluation. [H.1(b)].

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

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Significance: Sep 30, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Damaged wiring and resistors in the static exciter and voltage regulator circuit of 1C EDG

A Green self revealing NCV of TS 5.4.1.a, Procedures, was identified for the failure to accomplish the installation of the auxiliary contacts of the K1 relay associated with the 1C emergency diesel generator (EDG) in accordance with station work order SNC92235. The improper installation resulted in a direct short of control circuitry wiring and damage to installed resistors and wiring. Local annunciator panels alarmed and the licensee promptly shutdown the engine. The licensee replaced damaged wiring and resistors. This violation was entered into the licensee's corrective action program as condition report (CR) 467468.

Failure to accomplish the installation of the auxiliary contacts of the K1 relay associated with the 1C EDG in accordance with station work order SNC92235 is a performance deficiency. The performance deficiency adversely affects the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the equipment performance objective of availability was adversely affected due to the damage caused to the static exciter and voltage regulator circuit of the generator and the additional unavailability time accrued to effect repairs. This finding was assessed using IMC 0609 Attachment 4, Initial Characterization of Findings; and IMC 0609 Appendix A, The Significance Determination Process (SDP) for Findings At-Power. The IMC 0609 Appendix A review, determined that the finding was of very low safety significance (Green) because the performance deficiency resulted in additional EDG unavailability that did not exceed the period of the TS Limiting Condition for Operation. The inspectors determined this performance deficiency has a cross-cutting aspect in the area of human performance and resources component because the licensee did not ensure that personnel, equipment, procedures, and other resources were available and adequate to assure nuclear safety. Specifically, station work order SNC92235 only provided high level guidance for replacing the K1 relay which was insufficient to ensure proper replacement of the relay and was therefore inadequate. [H.2(c)] (Section 1R12)

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

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance:  Jun 30, 2012

Identified By: NRC

Item Type: FIN Finding

Failure to monitor for auxiliary building airborne radioactivity levels as described in the FSAR

The inspectors identified a Green finding for failure to meet the FSAR continuous online radiation monitor design bases as described in FSAR Section 12.2.4, Airborne Radioactivity Monitoring. Specifically, six of the nine continuous online radiation monitors, R-30 series, provided to monitor airborne radiation concentrations within select Unit 1 and Unit 2 Auxiliary Building locations have been out of service (OOS) for extended periods of time over the past two and half years. Further, no reviews were completed to evaluate the significance of the OOS monitors nor were compensatory sampling activities performed during the extended OOS periods. The licensee entered this issue into their corrective action program as Condition Report (CR) 44407, and CR 463051, and implemented compensatory activities.

The inspectors determined that the failure to monitor airborne radioactivity levels as described in FSAR Section 12.2.4 was a performance deficiency. The finding is greater than minor because it is associated with the Occupational Radiation Safety Cornerstone attribute of Plant Facilities/Equipment and Instrumentation and adversely affects the cornerstone objective of ensuring the adequate protection of the worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. Inadequate monitoring of areas with the potential for airborne radioactivity could lead to worker contamination and increased exposure. The finding was assessed using the Occupational Radiation Safety Significance Determination Process (SDP). Based on the facts that this was not an ALARA planning issue, there were no overexposures nor substantial potential for overexposures, and the licensee's ability to assess worker dose was not compromised, the finding was determined to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of Human Performance [H.2(d)] because the licensee did not ensure that equipment was adequate and available to assure nuclear safety. (Section 2RS5)

Inspection Report# : [2012003](#) (*pdf*)

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: N/A Dec 31, 2012

Identified By: NRC

Item Type: VIO Violation

Deliberate Failure to Conduct Fire Watches

10 CFR 50.48, Fire Protection, requires that a licensee must have a fire protection plan that, in part, outlines the plans for fire protection, fire detection, suppression capability, and limitation of fire damage. Site Procedure FNP-0-SOP-0.4 requires that hourly fire watches be conducted for degraded fire barriers or increase in combustibles in an area. Contrary to the above, from September 2011 through December 2011, roving fire watch patrols assigned to monitor specific fire protection (FP) areas with degraded barriers for indication of the presence of a fire, in the non-radiological portions of the plant, failed to conduct hourly fire watch patrols as required by FNP-0-SOP-0.4.

AVs 2012008-01 and 2012008-02 are now VIO 2012008-01

Inspection Report# : [2012008](#) (*pdf*)

Inspection Report# : [2013009](#) (*pdf*)

Last modified : September 03, 2013