

Browns Ferry 1 4Q/2015 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Dec 18, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to develop a PM schedule that specified inspection of the EDG neutral grounding resistor

A NRC-identified non-cited violation (NCV) of Technical Specifications (TS)

5.4.1 was identified for the failure to develop a preventive maintenance (PM) schedule that specified inspection of the Emergency Diesel Generators (EDG) neutral grounding resistor as recommended by Regulatory Guide (RG) 1.33, 9.b. Specifically, procedures failed to provide proper guidance to maintain the grounding resistor in accordance with design basis as described in the UFSAR and electrical calculations. Upon identification of the issue, the licensee performed a visual inspection of the resistor and determined that it was functional based on no signs of physical degradation or damage. The licensee entered this issue into the corrective action program (CAP) as CR1114779 to evaluate and implement appropriate corrective actions.

This performance deficiency was more than minor because if left uncorrected it could result in a more significant safety concern. Specifically, lack of inspections of the secondary grounding resistor could allow for an undetected condition which would cause transient voltages capable of damaging safety related equipment. The finding was screened for significance using the Mitigating Systems cornerstone column of IMC 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," dated June 19, 2012, and was determined to be of very low safety significance (Green) using IMC 0609 Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated June 19, 2012, because the finding affected the design or qualification of a Mitigating SSC, and the SSC maintained its operability as documented in CR 1114779. No cross-cutting was assigned because it is not indicative of current licensee performance.

Inspection Report# : [2015007](#) (*pdf*)

Significance: G Mar 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to provide Adequate Acceptance Criteria for ECCS Venting Surveillance

Green. An NRC identified non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the licensee's failure to maintain adequate procedure acceptance criteria and cautions to verify operability of the HPCI system in accordance with Technical Specification Surveillance procedure SR 3.5.1.1. As immediate corrective action the licensee performed a prompt operability determination to

verify the system remained operable, and plans to make changes to the TS surveillance procedure using the corrective action program. This violation was entered into the licensee's corrective action program as PER 989728.

The performance deficiency was more than minor because, if left uncorrected, it had the potential to lead to a more significant safety concern. Specifically the operability and availability of the HPCI system could be challenged by having procedural guidance which allows acceptable test results when the limiting void conditions may not be met. The finding was associated with the Mitigating Systems cornerstone. Using NRC Inspection Manual 0609, Appendix A, the finding screened as green because it did not represent an actual loss of function of at least a single train for greater than its technical specification allowed outage time, and 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 the licensee's maintenance rule program for greater than 24 hours. This finding has a crosscutting aspect in the area of Human Performance because the licensee did not challenge the unknown when, both, establishing the venting procedure acceptance criteria and when observing significant bubbles during the venting procedure. [H.11]. (1R04.2) Inspection Report# : [2015001](#) (*pdf*)

Significance:  Mar 31, 2015

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Failure to have Simulator Fidelity with D EDG Control Switch

Green. A Self Revealing NCV of 10 CFR 55.46(c)(1), "Simulation Facilities," was identified because the licensee failed to demonstrate simulator fidelity associated with D EDG control switch. The licensee's immediate corrective actions were to replace the switch with one that matched the original design. This violation was entered into the licensee's corrective action program as PER 990793.

The performance deficiency was more than minor because it adversely affected the mitigating systems cornerstone objective of Human Performance. Specifically, the simulator fidelity issue contributed to a Human Error (Pre-Event) resulting in the D EDG being inoperable for 8 days and 9 hours. In accordance with NRC Inspection Manual Chapter 0609, Appendix I, the finding was determined to be of very low safety significance (Green) using the simulator fidelity flowpath (blocks 13 through 15). Specifically, Manual Chapter 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process," block 15, established a Green finding because although the deficient simulator fidelity negatively affected operator performance, this did not occur during a reportable event. No cross-cutting aspect was assigned because the issue occurred greater than three years ago and is not indicative of current licensee performance. (1R11.1)

Inspection Report# : [2015001](#) (*pdf*)

Significance:  Mar 31, 2015

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Failure to Maintain an Operating Procedure Resulted in the D EDG Exceeding its Technical Specification Allowed Outage Time

Green. A Self Revealing NCV of 10 CFR Part 50 Appendix B, Criterion V "Instructions, Procedures, and Drawings" was identified for the licensee's failure to maintain an adequate operating procedure for the D Emergency Diesel Generator (EDG) that resulted in inoperability that exceeded the allowed outage time. The licensee's immediate corrective actions were to restore the D EDG to operability and to replace the D EDG control switch 4 with one that matched the other seven EDGs. The violation was entered into the licensee's corrective action program as PER 990793.

The performance deficiency was more than minor because it adversely affected the mitigating systems cornerstone objective of equipment performance. This violation required a Phase II analysis because the 0612 Appendix A

mitigating Systems Exhibit question of whether the finding represented an actual loss of a single train's function for greater than its technical specification allowed outage time was answered "yes". The regional Senior Reactor Analyst performed a detailed risk analysis for the performance deficiency using the NRC's risk software, and the Unit 2 model. Assumptions included using a conservative screening value for the operator recovery, and the assumption that a common cause failure was not involved. The dominant risk sequences were the loss of offsite power, failures of suppression pool cooling, failure to recover power within 4 hours, and failure of alternate low pressure injection. The short period the EDG was unavailable, and the lack of a common cause resulted in a Green finding. The performance deficiency was assigned a crosscutting aspect of Resources because the licensee did not properly prioritize procedure upgrade resources to ensure that procedures for the D EDG were adequate (H.1). (1R15.1)
Inspection Report# : [2015001](#) (*pdf*)

Barrier Integrity

Significance:  Dec 18, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Specify Adequate Instrument Ranges for MSIV Leakage Testing

A NRC identified NCV of 10 Code of Federal Regulations (CFR) Part 50, Appendix B, Criterion XI, "Test Control," was identified for the failure to specify adequate test instrumentation for performing MSIV leak rate testing. Specifically, the licensee test procedure allowed the use of high range test instruments to measure low leakage rates while performing the combined leak rate testing on the Unit 1 B Main Steam Line. This resulted in instrument uncertainties large enough to impact the validity of the test results. The licensee immediately entered this issue into their corrective action program as CR 1117381. The licensee performed an evaluation and determined that the latest test results provided reasonable assurance of operability.

This performance deficiency was more than minor because if left uncorrected had the potential to lead to a more significant safety concern by masking the failure to meet test acceptance criteria. The finding was screened for significance using the Barrier Integrity cornerstone column of IMC 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," dated 7/1/2012, and IMC 0609 Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated 7/1/2012, and was determined to be of very low safety significance (Green) because the finding did not represent an actual open pathway in the physical integrity of reactor containment.

This finding was assigned a cross-cutting aspect in the area of Problem Identification and Resolution because the licensee did not initiate a corrective action to identify the cause of the negative leak rate results obtained during the recent performance of the test procedure (P.1).

Inspection Report# : [2015007](#) (*pdf*)

Emergency Preparedness

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:  Mar 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Reflect Changes to Facility and Procedures in Final Safety Analysis Report Periodic Revisions

Severity Level IV. An NRC identified non-cited violation (NCV) of 10 CFR 50.71(e)(4) was identified for the licensee's failure to reflect all changes made in the facility or procedures as described in the Final Safety Analysis Report (FSAR) up to a maximum of six months prior to the date of filing the periodic updates to the FSAR with the NRC. The licensee's immediate corrective action was to enter this issue into their CAP as PER 1008424 to update areas in the FSAR identified by the NRC.

The inspectors determined that traditional enforcement per NRC Enforcement Policy was applicable since this finding reflects an impact on the regulatory process in the form of timely and accurate reports to the NRC. Section 6.1.d.3 of the enforcement policy states, in part, that a failure to update the FSAR as required by 10 CFR 50.71(e) in cases where the information is not used to make an unacceptable change to the facility or procedures is a SL IV violation. The inspectors did not identify any occurrence where the lack of timely updates to the UFSAR resulted in an unacceptable change to the facility or procedures. Crosscutting aspects are not assigned for traditional enforcement violations. (Section 1R18)

Inspection Report# : [2015001](#) (*pdf*)

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