Browns Ferry 3 2Q/2007 Plant Inspection Findings

Initiating Events

Significance: ^G Jun 30, 2007 Identified By: Self-Revealing Item Type: FIN Finding Inadequate Work Instructions For Isolating Condensate Demineralizer System Causes a Unit 3 Reactor Scram (Section 4OA3.5)

Green. A Green self-revealing finding was identified for use of an inadequate work order instructions during an online modification of the Unit 3 Condensate Demineralizer System control logic that caused an inadvertent isolation of condensate flow which directly resulted in a reactor scram. Condensate Demineralizer System operating procedures were subsequently revised to clarify manual operation of system controllers. This finding was entered into the licensee's corrective action program as PER 119490.

This finding is greater than minor because it is associated with the Initiating Event Cornerstone attributes of Human Performance and Procedure Quality, and adversely affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during at-power operations. The finding was determined to be of very low safety significance because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigating equipment or functions were not available. The cause of this finding was directly related to the aspect of "complete and accurate work packages" in the area of Human Performance (Resources component) because the necessary work order instructions for ensuring the condensate demineralizer system controllers remained in manual were inaccurate and/or incomplete. (Section 4OA3.5)

Inspection Report# : 2007003 (pdf)

Mitigating Systems

Significance: Dec 31, 2006 Identified By: NRC

Item Type: NCV NonCited Violation

Lack of Assured Cooling Water for Emergency Diesel Generators During SBO Conditions

The inspectors identified a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, Design Control, that affected Units 2 and 3. The licensee's calculations and procedures did not adequately implement the plant's licensing basis for Station Blackout (SBO), in that, they did not ensure the operating emergency diesel generators (EDGs) would have an adequate cooling water supply during a SBO with certain plant equipment configurations.

This finding is of greater than minor safety significance because it affected the objectives of the Mitigating Systems Cornerstone. It affected the availability and reliability of systems that mitigate initiating events to prevent undesirable consequences. The finding has very low safety significance due to the few very specific combinations of EDG failures that could lead to a loss of cooling water flow to all of the running EDGs. The licensee took prompt corrective action by revising procedures to add immediate operator actions to ensure adequate cooling water supply to the EDGs. Inspection Report# : 2006005 (pdf)

Significance: G Sep 15, 2006 Identified By: NRC Item Type: NCV NonCited Violation Cellular Phone Communications Unreliable for Alternate Shutdown in FA16 The team identified a non-cited violation (NCV) of Unit 2 Operating License Condition 2.C.14 and Unit 3 Operating License Condition 2.C.7 for failure to have adequate communications to implement alternate shutdown for a fire in fire area (FA) 16 using procedure 2/3-SSI-16.

This issue is a performance deficiency because the cell phone system was unreliable and the F4 portable radio system was not credited for a fire in FA 16. The finding is greater than minor because it affected the ability of the licensee to maintain communications for a fire in FA 16 and is associated with the mitigating systems cornerstone and respective attribute of protection against external factors, i.e., fire in that degraded communications would impact the ability to achieve SSD following a fire. This finding was determined to be a finding of very low safety significance (Green) because it only affected the ability to reach and maintain cold shutdown conditions due to the availability of alternate communications measures (F4 radios) for a time period sufficient to achieve hot shutdown conditions. Inspection Report# : 2006014 (pdf)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance: Mar 31, 2007 Identified By: Self-Revealing Item Type: NCV NonCited Violation

Failure to Properly Prepare a Radioactive Materials Package for Shipment

A Green self-revealing non-cited violation of 10 CFR 71.5 was identified for failure to properly package radiological material such that, under conditions normally incident to transportation, the radiation levels at the external surface of the package would not exceed applicable Department of Transportation (DOT) limits. When the two shipments arrived at a processing facility on April 21, 2005, the radiation dose rates measured on portions of the external surface of the packages were as high as 300 mrem/hr, which was in excess of the 200 mrem/hr limit specified by the regulation. The licensee established additional supervisory review and approval prior to shipping packages approaching DOT limits. This finding was entered into the licensee's corrective action program as PER 81364.

This finding is more than minor because it is associated with the Plant Facilities/ Equipment and Instrument attribute of the Public Radiation Safety cornerstone and adversely affected the cornerstone objective, in that, the improper transportation packaging resulted in a shipping container with external dose levels exceeding regulatory requirements. Using the Public Radiation Significance Determination Process, the finding was determined to be of very low safety significance because the areas on the packages with elevated radiation levels were inaccessible to the public and the radiation levels were less than two times the DOT limit. Inspection Report# : 2007002 (pdf)

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 <u>cover letters</u> to security inspection reports may be viewed.

Miscellaneous

Significance: Mar 31, 2007

Identified By: NRC Item Type: NCV NonCited Violation

Work Hours for I&C Mechanics Exceeded Overtime Limits Without Prior Authorization

The inspectors identified a Green non-cited violation of Technical Specification 5.2.2.d due to inadequate management oversight and awareness of the administrative requirements for controlling overtime which resulted in multiple instances of Instrumentation and Control personnel exceeding overtime limits without prior authorization and documentation. Management immediately changed work schedules to comply with the Technical Specification requirements and entered the issue into their corrective action program as PER 119016.

This finding was greater than minor because if left uncorrected it could become a more significant safety concern due to excessive fatigue by key maintenance personnel performing safety-related activities. An NRC management review determined that the finding was of very low safety significance because no specific performance deficiencies were identified for the individuals during the time they exceeded the established overtime limits Inspection Report# : 2007002 (pdf)

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