

Browns Ferry 1

2Q/2007 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Jun 30, 2007

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Non-Conservative APRM/LPRM Gain Settings Result in Neutron Flux Setdown Setpoint in Excess of TS Limit (Section 1R15)

Green. A self-revealing Green noncited violation was identified for a violation of Unit 1 Technical Specifications 3.3.1.1.A.1 and Table 3.3.1.1-1, Function 2a, Reactor Protection System Instrumentation, on two separate occasions when Unit 1 entered Mode 2 on May 21 and 26, 2007, with non-conservative Average Power Range Monitor (APRM) and Local Power Range Monitor (LPRM) Gain Adjustment Factor (GAF) settings that resulted in the APRM Neutron Flux - High Setdown trip function exceeding the allowed TS setpoint limits. The nonconservative LPRM/APRM GAF settings were discovered as a result of the licensee's inability to adjust APRMs beyond the current indicated power level during a calibration, but were properly set prior to Mode 1 operation. This finding was entered into the licensee's corrective action program as PER 125408.

This finding was considered to be greater than minor because it was associated with the configuration control attribute of the Mitigating Systems Cornerstone due to loss of control of critical gain settings that adversely affected operability of the high neutron flux trip (setdown) function of the neutron monitoring system. Furthermore, this finding exceeded a Technical Specifications limit. This finding was determined to be of very low safety significance because the APRM Neutron Flux - High Setdown trip function was only a backup or secondary scram function to the Intermediate Range Monitor (IRM) Neutron Flux - High function while in Mode 2, and no safety analyses took credit for the APRM Setdown function. Consequently, the finding did not result in a loss of a safety function (high neutron flux scram at low power) for a system or train. The cause of this finding was directly related to the aspect of "appropriately coordinating work activities" in the cross-cutting area of Human Performance (Work Control component) because the LPRM work scope for conducting the necessary post maintenance testing to ensure the gain settings were properly set was deferred without considering the potential operational impact. (Section 1R15)

Inspection Report# : [2007003](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance:  Mar 31, 2007

Identified By: Self-Revealing
Item Type: NCV NonCited Violation

Two Examples of Failure to Perform Adequate Surveys.

Two examples of a Green self-revealing non-cited violation of 10 CFR 20.1501(a)(2)(i) were identified for failure to conduct surveys that were reasonable under the circumstances to evaluate the magnitude and extent of radiation levels in areas where work was performed. On February 9 and 16, 2007, investigation into electronic dosimeter dose rate alarms, received during work activities, revealed dose rates in excess of those measured during pre-job surveys. Since the new dose rates exceeded the criteria for posting as a high radiation area, the licensee immediately posted and controlled these areas as high radiation areas. This finding was entered into the licensee's corrective action program as PERs 119482 and 119829.

This finding is more than minor because it is associated with the Occupational Radiation Safety Cornerstone attribute of Program and Process, and it adversely affected the cornerstone objective because the failure to conduct adequate surveys did not ensure adequate protection of worker health and safety from exposure to radiation. Using the Occupational Radiation Safety Significance Determination Process, the finding was determined to be of very low safety significance because the failures to survey did not pose a substantial potential for over exposure and did not affect the ability to assess doses. The cause of the finding was directly related to the work activity coordination aspect of the human performance cross-cutting area because pre-job radiological surveys were inadequate to apprise personnel of plant conditions that affected work activities.

Inspection Report# : [2007002](#) (*pdf*)

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 [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : August 24, 2007