Arkansas Nuclear 2
2Q/2006 Plant Inspection Findings

Initiating Events

Significance: G Sep 23, 2005
Identified By: Self-Revealing
Item Type: FIN Finding
INADEQUATE MAINTENANCE PROCEDURE RESULTS IN DROPPED CEA
The inspectors reviewed a self-revealing finding for an inadequate maintenance procedure, which resulted in Control Element Assembly 50 dropping into the core with Unit 2 operating at 100 percent rated thermal power. During troubleshooting efforts for a missing phase on the upper gripper for Control Element Assembly 56, power to the only gripper holding Control Element Assembly 50 fully withdrawn (the lower gripper) was removed by instrumentation and control technicians. The procedure failed to contain detailed guidance to ensure that Control Element Assembly 50 was properly being held by the upper gripper. The licensee performed a thorough root cause of the event to determine the short and long term corrective actions. The cause of the finding is related to the crosscutting element of human performance.

This finding is greater than minor because it affected the procedure quality attribute under the initiating events cornerstone objective of limiting those events that upset plant stability. Using the significance determination process, the finding was determined to have very low safety significance because this transient initiator does not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available.

Inspection Report# : 2005004*(pdf)*

Mitigating Systems

Significance: G Mar 24, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO ENSURE FIRE DOORS WERE LATCHED
Four examples of an NRC identified noncited violation of Unit 1 License Condition 2.C.(8), “Fire Protection,” and ANO Unit 2 License Condition 2.C.(3)(b), “Fire Protection,” were identified for the failure of licensee personnel to ensure fire doors were latched. On various days in January 2006, four fire doors were found unlatched. These four failures degraded the doors’ fire confinement capability assumed in the fire hazards analyses. This issue was entered into the licensee's corrective action program as Condition Report ANO-C-2006-0067.

The finding is greater than minor because it is associated with the mitigating systems cornerstone attribute of protection against external factors and affects the associated cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using the fire protection significance determination process, the finding was determined to have very low safety significance because the fire areas adjacent to the unlatched doors either were covered by an automatic suppression system, did not contain redundant equipment, or were only unlatched for a very short time. The cause of the finding is related to the crosscutting element of human performance in that licensee personnel did not ensure fire doors were being maintained shut and latched.

Inspection Report# : 2006002*(pdf)*

Barrier Integrity

Significance: G Dec 31, 2005
Identified By: NRC
Item Type: FIN Finding
FOREIGN MATERIAL CAUSES LEAK IN A UNIT 2 SG
The inspectors reviewed a self-revealing finding which occurred when a Unit 2 steam generator developed a tube leak (February 2005). A metallic piece of foreign material fretted a hole in one steam generator tube and wore away some thickness of two others. The licensee identified several more pieces of foreign material after conducting more thorough searches in both of the Unit 2 steam generators. The licensee performed a thorough review of the event to determine the short and long term corrective actions.

This issue is more than minor because it affected the reactor coolant system barrier performance attribute under the Barrier Integrity Cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The finding was determined to be of very low safety significance after management review, because the affected tubes could have withstood three times the differential pressure across them during normal full power, steady state operation.
Inspection Report# : 2005005*(pdf)*

Significance: G Sep 23, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
INADEQUATE PROCEDURE LEADS TO REACTOR COOLANT PUMP SEAL DAMAGE
The inspectors reviewed a self-revealing noncited violation of Unit 2 Technical Specification 6.4.1, "Procedures," when reactor coolant pump seal injection flow was established with the reactor coolant pump uncoupled from its motor. This activity led to damage of the seal for Reactor Coolant Pump 2P-32C. This damage required conducting an additional reduced reactor coolant system inventory maintenance period to replace the seal. The licensee performed a thorough root cause of the event to determine the short and long term corrective actions. The cause of the finding is related to the crosscutting element of problem identification and resolution.

This finding is greater than minor because it affected the procedural quality attribute under the barrier integrity cornerstone objective of providing reasonable assurance that physical design barriers (reactor coolant pump seals) protect the puublic from radionuclide releases caused by accidents or events, such that the licensee had to enter a higher risk plant operating state to repair the seal. Using the shutdown operations Significance determination process, the inspectors determined the finding required a Phase 2 analysis. In the Phase 2 analysis, risk analysts determined the finding to be of very low safety significance because (1) the seal replacement activity required establishing reduced inventory conditions and not to midloop conditions and (2) the time needed to replace the seal was not extensive.

This entry was revised based on the letter from NRC to Entergy Operations dated April 13, 2006. The licensee missed several opportunities to ensure that the procedure was adequate for the unusual plant configuration prior to and during use.

Inspection Report# : 2005004*(pdf)*

Emergency Preparedness

Significance: G Jun 23, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO MEET IMMEDIATE NOTIFICATION REQUIREMENTS DURING TRANSIENT EVENTS
A noncited violation of 10 CFR 50.54(q), 10 CFR 50.47(b)(5), and 10 CFR 50, Appendix E.IV.D.3. was identified for programmatic and procedure inadequacies that allow the licensee to not make immediate offsite notifications for certain situations after a valid emergency classification was made. Specifically, following certain transient events, the licensee developed a practice of not completing immediate notifications to local authorities if the emergency action level conditions cleared before the notifications were completed. The licensee entered the deficiency into their corrective action program as condition report CR-ANO-C-2006-00665 for resolution.

The finding was assessed through the Emergency Preparedness Significance Determination Process. The finding is a performance deficiency in that the current interpretation and implementation of Emergency Plan Implementing Procedure 1903.010, "Emergency Action Level Classification," could result in failure to conduct a 15 minute notification following declaration of an emergency condition, potentially delaying offsite emergency response. Because the finding affected the reactor safety emergency preparedness cornerstone objective, the finding is greater than minor. The finding was determined to have very low safety significance because it represented a degradation and not a loss of the notification emergency planning standard function.
Inspection Report# : 2006003*(pdf)*

Occupational Radiation Safety

Significance: G Dec 31, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
FAILURE TO BARRICADE AND CONSPICOUSLY POST AN HRA
The inspector reviewed a self-revealing noncited violation of Technical Specification 6.7.1.a because the licensee failed to control a high radiation area by not barricading and conspicuously posting the area. Specifically, on March 15, 2005, the licensee removed a temporary barrier (scaffold

boards) creating an entrance to a high radiation area without the proper radiological controls in place for a high radiation area. It was not until two radiaiton workers entered the area that a radiation protection technician identified the unposted entry and took appropriate actions to control the area. The finding was entered into the licensee's corrective action program as Condition Report ANO-2-2005-0574.

The failure to control a high radiation area as per Technical Specification requirements is a performance dificiency. The finding is greater than minor because it is associated with the Occupational Radiaiton Safety Cornerstone attribute of program and process and affected the cornerstone objective, to ensure the adequate protection of the worker health and safety from exposure to radiation, in that not controlling high radiaiton areas could increase worker exposure. The findng was evaluated using the Occupational Radiation Safety Significance Determination Process and is of very low safety significance because it does not involve: (1) ALARA planning and controls, (2) an overexposure, (3) a substantial potential for overposure , or (4) an impaired ability to assess dose. In addition, this finding has crosscutting aspects associated with human performance because poor coordination and communication between the scaffold crew and radiation protection personnel directly contributed to the finding.
Inspection Report# : 2005005*(pdf)*

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Last modified : August 25, 2006