Grand Gulf 1
2Q/2004 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2004
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failute to Implement Surveillance Procedure Resulting in the Inadvertent Initiation of HPCS System
The inspectors reviewed a self-revealing noncited violation of Technical Specification 5.4.1.a for failure of maintenance technicians to comply with a surveillance procedure for performing maintenance on the reactor vessel water level control system. This failure resulted in the high pressure core spray system inadvertently initiating and injecting into the reactor vessel.

This finding is greater than minor because it affected the human performance attribute (human error) of the Initiating Events Cornerstone and affected the cornerstone objective of limiting events that challenge plant stability. The finding was of very low safety significance because it did not contribute to the likelihood of a primary or secondary loss of coolant accident initiator; did not contribute to both the likelihood of a reactor trip and the likelihood of the mitigation equipment or functions being unavailable; nor did it increase the likelihood of a fire or internal/external flooding.

Inspection Report# : 2004003*(pdf)*

Significance: G Mar 27, 2004
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Implement Tagging Procedure Resulting in Shutdown of Reactor Water Cleanup System (Section 40A2)
The inspectors reviewed a self-revealing noncited violation of Technical Specification 5.4.1.a for failure of maintenance personnel to comply with a protective tagging procedure while performing work on the reactor water cleanup system. This failure resulted in a leak of reactor coolant requiring an unplanned isolation and shutdown of the reactor water cleanup system.

This finding was greater than minor because it affected the human performance attribute of the Initiating Event Cornerstone and affected the cornerstone objective of limiting events that challenge plant stability. The finding was of very low safety significance because it did not increase the likelihood of a loss of coolant accident initiator, did not increase the likelihood of both a reactor trip and unavailability of mitigation equipment, and did not increase the likelihood of a fire or flooding event as described in the significance determination process Phase 1 screening worksheet.

Inspection Report# : 2004002*(pdf)*

Significance: G Sep 27, 2003
Identified By: NRC
Item Type: FIN Finding
Failure to identify and resolve a single failure vulnerability contributed to a loss of feedwater event and reactor scram.
The inspector identified a self revealing finding because identification and resolution of a single failure vulnerability associated with the condensate system demineralizer isolation valve control circuit was inadequate and contributed to a loss of feedwater event and reactor scram. The licensee documented this finding in their corrective action program as condition report GGNS-CR-2003-300.

The finding is greater than minor because it was viewed as a precursor to a significant event and increased the likelihood of an initiating event such as a reactor scram. The finding is of very low safety significance because, although it caused a loss of feedwater event, it did not contribute to the likelihood of a primary or secondary system loss of coolant accident initiator; did not contribute to a combination of a reactor trip and loss of mitigation equipment functions; and it did not increase the likelihood of a fire or internal/external flood.

Inspection Report# : 2003003*(pdf)*

Mitigating Systems

Significance: G Jun 30, 2004
Identified By: Self Disclosing
Item Type: NCV NonCited Violation

Improper Valve Lineup Results in Isolation of RHR Pump Minimum Flow Line
A self-revealing Green noncited violation of Technical Specification 5.4.1.a involved the failure of operators to comply with a valve lineup procedure prior to restoring the residual heat removal system to operation. This failure resulted in the isolation of the minimum flow line for the Train B residual heat removal pump, rendering one low pressure emergency core cooling system inoperable for 14 days, which violated the requirements of Technical Specification 3.5.1 prohibiting power operation with one low pressure emergency core cooling system out of service for greater than 7 days.

This finding is greater than minor because it affected the configuration control and human performance attributes of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability of systems that respond to initiating events. Using the Inspection Manual Chapter 0609 Significance Determination Process Phase 1 screening worksheet, this performance deficiency required a Phase 2 evaluation since it resulted in the actual loss of a single train for longer than its Technical Specification Allowed Outage Time. The Phase 2 and Phase 3 evaluations determined this finding to result in a core damage frequency change of less than 1.0E-6 and a change in Large Early Release Fraction of less than 1.0E-7. Therefore, the finding was considered to be of very low safety significance.

Inspection Report# : 2004003*(pdf)*

Significance: G Mar 27, 2004
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Store Hydrolazer in Accordance with Design Instructions (Section 1R05)
The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," for storage of heavy equipment in the containment building in excess of a floor grating capacity contrary to station engineering instructions.

This finding was similar to Manual Chapter 0612, Appendix E, Example 4(a). The finding was greater than minor because it adversely affected the containment floor grating yield stress design margin. The licensee's civil engineering staff had to reperform containment structure loading calculations to determine if the subject steel grating could have supported the machine under all loading conditions, including accident conditions. The finding was of very low safety significance because, although the specified grating load rating was exceeded, the new analysis demonstrated that the maximum stresses under accident conditions were below ultimate stress values and the grating would have been capable of supporting the machine under accident conditions.

Inspection Report# : 2004002*(pdf)*

Significance: G Mar 27, 2004
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Maintain Adequate System Operating Instruction to Prevcent Rendering a Required Decay Heat Removal System Inoperable (Section 1R15)
The inspectors reviewed a self-revealing noncited violation of Technical Specification 5.4.1.a for failure to have an adequate electrical bus outage procedure, which resulted in rendering one of two required decay heat removal systems inoperable.

This finding was greater than minor because it affected the configuration control attribute of the Mitigating System Cornerstone and affected the cornerstone objective of equipment availability. The finding was of very low safety significance because it did not represent an actual loss of a decay heat removal safety function, did not represent an actual loss of a single train for greater than its allowed Technical Specification outage time, and was not potentially risk significant due to an external initiating event as described in the significance determination process Phase 1 screening worksheet.

Inspection Report# : 2004002*(pdf)*

Significance: G Mar 27, 2004
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Inadequate Corrective Action Results in Through-Wall Corrosion of Ultimate Heat Sink Piping (Section 40A2)
The inspectors reviewed a self-revealing noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for failure to correct areas of known localized corrosion prior to the formation of a through-wall leak in the submerged piping of the standby service water system.

This finding was greater than minor because it affected the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. The finding was of very low safety significance because it did not represent an actual loss of the ultimate heat sink safety function, did not represent an actual loss of a single train for greater than its allowed Technical Specification outage time, and was not potentially risk significant due to an external initiating event as described in the significance determination process Phase 1 screening worksheet.
Inspection Report# : 2004002*(pdf)*

Barrier Integrity

Significance: G Jun 30, 2004
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Implement Reactor Startup Procedure Resulting in the Inadvertent Misalignment of the Control Rod Pattern
The inspectors reviewed a self-revealing noncited violation of Technical Specification 5.4.1.a as a result of reactor operators failing to comply with an operating procedure used to establish a required rod pattern configuration during a reactor startup. This failure resulted in the reactor operators inadvertently withdrawing a control rod out of sequence.

This finding is greater than minor because it involved the configuration control attribute (reactivity control) of the Barrier Integrity Cornerstone and affected the cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The finding was of very low safety significance because it only affected the fuel barrier and not the reactor coolant system barrier.

Inspection Report# : 2004003*(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Significance: G Jun 27, 2004
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Follow a Radiation Work Permit Requirement
A self-revealing noncited violation of Technical Specification 5.4.1.a was evaluated for a worker who failed to follow a radiation work permit requirement. On March 15, 2004, a worker alarmed the personnel contamination monitors upon exiting the Radiologically Controlled Area because the individual had become contaminated. A follow-up survey of the work area identified contamination levels of up to 180,000 disintegrations per minute per 100 cm2 inside a drain pipe and 500,000 disintegrations per minute per 100 cm2 inside the valve housing. The licensee determined that the worker did not follow the radiation work permit requirement to contact Radiation Protection for approval before commencing cutting activities.

This finding is greater than minor because it is associated with the program and process attribute of the Occupational Radiation Safety Cornerstone and affected the cornerstone objective to ensure adequate protection of worker health and safety from exposure to radiation. Using the Occupational Radiation Safety Significance Determination Process, the inspector determined the finding was of very low safety significance because it did not involve ALARA planning and controls, an overexposure, a substantial potential for overexposure, or an impaired ability to assess dose.
Inspection Report# : 2004003*(pdf)*

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

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