Grand Gulf 1
1Q/2005 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)*

Mitigating Systems

Significance: G Mar 31, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to follow Operability Dertmination Procedure
The inspectors identified a Green noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for a failure to follow procedures that resulted in an inadequate operability determination. Specifically, operators failed to adequately implement the provisions of their operability determination to evaluate a degraded condition in the control room air conditioning system.
This finding was greater than minor since it is associated with the equipment performance attribute of the mitigating systems cornerstone and directly affects the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Using the Phase 1 worksheet in Manual Chapter 0609, "Significance Determination Process," the finding was of very low safety significance since: (1) it did not represent an actual loss of system safety function for the control room air conditioning system, (2) it did result in a loss of function for a single train of Technical Specification equipment, but for less than the Technical Specification allowed outage time, and (3) it did not represent a loss of function of non-technical specification risk significant equipment or screen as potentially risk significant due to a seismic, flooding or severe weather event. This finding has crosscutting aspects associated with human performance in that the control room operators failed to implement the operability determination procedure.
Inspection Report# : 2005002*(pdf)*

Significance: G Mar 25, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate corrective actions to address degraded control room air conditioning unit
(Green) The inspectors identified a 10 CFR 50, Appendix B, Criterion XVI violation for the failure to take prompt corrective actions to address a degraded control room air conditioning unit (a condition adverse to quality). Since 1999, Grand Gulf engineers were aware that the Division I control room emergency air conditioning unit could not remove the required heat load under design basis conditions. The engineers failed to take prompt corrective measures to address the problem, because they did not have an accurate understanding of system requirements. The inspectors also identified that the licensee failed to properly address system operability on two occasions, as operability justifications were based on inaccurate or non-applicable information. This issue had cross-cutting aspects in the area of problem evaluation and prioritization.

The failures to: 1) promptly correct a condition adverse to quality; and 2) properly evaluate equipment operability were performance deficiencies. The finding had more than minor significance because it affected the reactor safety mitigating systems objective to ensure the availability of systems that respond to initiating events. The finding was of very low risk significance because it was a design/qualification deficiency that did not result in a loss of function per Generic Letter 91-18, "Information to Licensees Regarding NRC Inspection Manual

Section on Resolution of Degraded and Nonconforming Conditions," Revision 1.

Inspection Report# : 2005009*(pdf)*

Significance: G Dec 31, 2004
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to retain safety related records for installation and testing of diesel generator starting air storage tank relief valves
The inspectors identified a noncited violation of 10 CFR Part 50.71, "Maintenance of Records, Making of Reports," for failure of the licensee to retain safety related records relating to the periodic testing of the high pressure core spray emergency diesel generator starting air storage tank relief valves.
This finding is more than minor because it is analogous to example 1.b of Appendix E of IMC 0612, "Power Reactor Inspection Reports," in that the safety related records were irretrievably lost. Using the Significance Determination Process Phase 1 worksheet, the inspectors determined the finding affected the mitigating systems cornerstone and was of very low safety significance because it did not represent an actual loss of system function.
Inspection Report# : 2004005*(pdf)*

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)*

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 Mar 16, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to barricade and conspicuously post a high radiation area.
The inspector identified a noncited violation of Technical Specification 5.7.1 because the licensee failed to barricade and conspicuously post a high radiation area. On March 16, 2005, during walkdowns of the reactor containment building 185-foot elevation, the inspector noted that a high radiation area posting in the reactor water clean-up sample sink area was not properly positioned across the access to the high radiation area. Radiation surveys taken in the area documented general area dose rates as high as 150 millirem per hour.
This finding is greater than minor because it was associated with the cornerstone attribute (human performance) and affected the cornerstone objective because not posting a high radiation area with dose rates greater than 100 millirem per hour could increase personnel dose. Using the Occupational Radiation Safety Significance Determination Process, the inspector determined that the finding was of very low safety significance because it did not involve (1) ALARA planning and controls, (2) an overexposure, (3) a substantial potential for overexposure, or (4) an impaired ability to assess dose. Additionally, this finding had crosscutting aspects associated with human performance. When licensee personnel exited the high radiation area and failed to ensure that the entrance was properly barricaded and conspicuously posted, their actions directly contributed to the finding.
Inspection Report# : 2005002*(pdf)*

Significance: G Dec 31, 2004
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to follow a source calibration procedure resulting in a worker receiving an unplanned, unintended dose.
The inspectors reviewed a self-revealing noncited violation of Technical Specification 5.4.1(a) for a worker who failed to follow a source calibration procedure and removed a lead attenuator while the radioactive source was in the up (exposed) position. As a result, the worker unintentionally exposed himself to a dose rate of approximately 330 millirem/hour, received an unplanned dose of one millirem and had the potential to receive additional unnecessary dose.
This finding is greater than minor since it involves a worker's unplanned, unintended dose resulting from actions contrary to licensee procedures, which is associated with the Program and Process attribute of the Occupational Radiation Safety cornerstone and directly affects the cornerstone objective to ensure adequate protection of the worker's health and safety from exposure to radiation. The inspectors evaluated the finding using the Occupational Radiation Safety Significance Determination Process and determined it 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# : 2004005*(pdf)*

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

Significance: N/A Mar 25, 2005
Identified By: NRC
Item Type: FIN Finding
Problem Identification and Resolution
The team reviewed approximately 150 condition reports, apparent and root cause analyses, as well as other documents, to assess problem identification and resolution activities. Over the past two years (the assessment period) the team noted a few instances where problems were not properly identified, evaluated, prioritized or corrected but, overall, the licensee's processes were effective.

Based on the interviews conducted, the team concluded that a positive safety-conscience work environment existed at Grand Gulf. The team determined that employees generally felt free to raise safety concerns to their supervision, the employee concerns program and the NRC. The team received a few isolated comments regarding: 1) a reluctance to use the site employee concerns program; 2) production pressure; and 3) the impact of staff reductions on work load and the ability to identify safety issues. Nonetheless, the interviewees all believed that potential safety issues were being addressed. The team determined that licensee management was aware of the perceptions and was taking action to address them.

Inspection Report# : 2005009*(pdf)*

Last modified : June 17, 2005