Grand Gulf 1
3Q/2005 Plant Inspection Findings

Initiating Events

Significance: G Sep 30, 2005
Identified By: Self-Revealing
Item Type: FIN Finding
Inadvertent Plant Service Water Pump Trip
A Green self-revealing finding was identified for the inadvertent trip of a plant service water pump due to an inadequate procedure. The procedure failed to perform its stated purpose to verify the operation of a service water pump support system. The licensee entered this performance deficiency in their corrective action program for resolution.
This finding is more than minor since it affected the configuration control and human performance attributes of the initiating events cornerstone and directly affected the cornerstone objective of limiting events that challenge plant stability. Based on the results of a Significance Determination Process Phase 1 evaluation, the finding is of very low safety significance (Green) since it did not contribute to the likelihood of a loss of coolant accident, did not contribute to a loss of mitigation equipment, and did not increase the likelihood of a fire or internal/external flood. The cause of the finding is related to the resources aspect of the cross-cutting area of human performance.
Inspection Report# : 2005004*(pdf)*

Significance: G Sep 30, 2005
Identified By: Self-Revealing
Item Type: FIN Finding
Improper Maintenance Results in Partial Loss of Component Cooling Water
A self-revealing Green finding was reviewed for the failure of a newly installed corrosion monitor probe that resulted in a leak in the component cooling water system. Licensee personnel used an inadequate procedure to install the probe and therefore failed to verify the pressure retaining capability of the probe prior to installation. The licensee entered this performance deficiency in their corrective action program.
This finding is more than minor since it affected the design control attribute of the initiating events cornerstone and directly affected the cornerstone objective of limiting events that challenge plant stability. Based on the results of a Significance Determination Process Phase 1 evaluation, the finding is of very low safety significance (Green) since it did not contribute to the likelihood of a loss of coolant accident, did not contribute to a loss of mitigation equipment, and did not increase the likelihood of a fire or internal/external flood. The cause of the finding is related to the resources aspect of the cross-cutting area of human performance.
Inspection Report# : 2005004*(pdf)*

Mitigating Systems

Significance: G Sep 30, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Disabling of Diesel Generator Alarms due to Failure to Follow Procedure
The inspectors reviewed a self-revealing Green noncited violation of Technical Specification 5.4.1 for a failure to follow procedure that resulted in the disabling of required supervisory alarms on the Division II emergency diesel generator. Specifically, operators failed to reset the alarm panel following routine testing. The licensee entered this performance deficiency into their corrective action program.
This finding is more than minor since the disabling of required alarm functions for the emergency diesel generators could become a more significant safety concern if left uncorrected. Based on the results of a Significance Determination Process Phase 1 evaluation, the finding is of very low safety significance (Green) since it did not result in an actual loss of the safety function. The cause of the finding is related to the personnel aspect of the cross-cutting area of human performance.
Inspection Report# : 2005004*(pdf)*

Significance: G May 12, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Alternative Shutdown Procedure Did Not Implement Safe Shutdown Analysis Assumption to Isolate Containment in a Timely Manner
A noncited violation of 10 CFR 50, Appendix R, Section III.L.3 was identified for an inadequate alternative shutdown procedure. The team

identified that Procedure 05-1-02-II-1, "Shutdown from the Remote Shutdown Panel," Revision 30, was not consistent with the safe shutdown analysis with respect to main steam isolation. The procedure did not require shutting the main steam isolation valves in a timely manner to prevent an excessive loss of reactor coolant in the event of a control room evacuation due to fire. Operators might not recognize the loss of coolant due to the limited indications available on the remote shutdown panel. This could result in loss of the reactor coolant makeup and decay heat removal functions. The licensee promptly corrected the procedure and entered this issue in their corrective action program under Condition Report 2005-01865.

Failure to assure that an important safe shutdown analysis assumption was translated into the alternative shutdown procedure was a performance deficiency. This issue was more than minor because it affected the Mitigating Systems cornerstone attributes of protection from external factors (fire) and procedure quality. Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process," Appendix F states that it excludes findings associated with control room evacuation. Therefore, in accordance with Manual Chapter 0609, the safety significance of this issue was determined by regional management review. This review concluded this finding was of very low safety significance because a licensee evaluation determined that the inventory lost from the reactor and containment through open main steam isolation valves following a control room fire would not affect low pressure injection for more than 24 hours. Also, during the initial stages, the inventory loss would be beneficial compared to promptly shutting the main steam isolation valves, since the steam would be removing significant heat that would otherwise have been retained in containment and would have to be removed through the remaining engineered safety features train. Therefore, additional assistance would be available from the technical support center and repair teams to help identify the problem and direct closure of the main steam isolation valves.
Inspection Report# : 2005008*(pdf)*

Significance: G May 12, 2005
Identified By: NRC
Item Type: FIN Finding
Inadequate Fire Drill Critique
A finding was identified for fire brigade performance deficiencies that were not identified by the licensee during the drill critique. The deficiencies identified by the inspection team but not noted by the licensee's critique included not using lense inserts, using a fire hose that did not reach the fire properly, not maintaining a two-person rescue team, and not considering requesting offsite assistance. The licensee identified a number of additional performance deficiencies, and determined that performance during the May 10, 2005, unannounced fire drill was unsatisfactory. In accordance with the licensee's program, the individuals involved required remediation and the drill must be re-performed within 30 days.

The licensee's incomplete assessment of fire brigade during the unannounced May 10, 2005, fire drill was a performance deficiency because the corrective action process would not have addressed the missed performance problems. This finding was more than minor because the Mitigating Systems cornerstone objective attribute to provide protection against external factors (fires) was affected. Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process," states that it excludes findings associated with the onsite manual fire brigade. Therefore, in accordance with Manual Chapter 0609, the safety significance was determined by regional management review. This review concluded that this finding was of very low safety significance because it reflected a training drill, rather than fire brigade fire performance during an actual fire. The fire brigade performance aspect of this finding affects the cross-cutting area of human performance. The incomplete drill evaluation aspect of this finding affects the crosscutting area of problem identification and resolution. This issue was entered into the licensee's corrective action program under Condition Report 2005-01872.
Inspection Report# : 2005008*(pdf)*

Significance: G May 12, 2005
Identified By: NRC
Item Type: FIN Finding
No Procedures for Implementing Two Repairs Needed to Achieve Cold Shutdown Following A CR Fire
A finding was identified for not properly identifying repairs needed to achieve and maintain cold shutdown following a control room fire and documenting them in analyses and procedures. The team identified two repairs which were necessary in order to be able to achieve cold shutdown according to the licensee's alternate shutdown methodology. An alternate air supply was needed to maintain safety relief valves open during prolonged implementation of alternate shutdown cooling, and temporary instrumentation was needed to monitor reactor temperature and cooldown rate in the same mode. This issue was entered into the licensee's corrective action program under Condition Report 2005-02369.

Failure to properly identify repairs needed to achieve and maintain cold shutdown following a control room fire and document them in analyses and procedures was a performance deficiency. This issue was more than minor because it affected the Mitigating Systems cornerstone attributes of protection from external factors (fire) and procedure quality. This finding was determined to have very low safety significance using Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process," because it involved an issue that only affected cold shutdown.
Inspection Report# : 2005008*(pdf)*

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)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance: G Sep 30, 2005
Identified By: Self-Revealing

Item Type: NCV NonCited Violation
Failure to Control a High Radiation Area with Dose Rates Greater than One Rem per Hour
The inspector reviewed a self-revealing non-cited violation of Technical Specification 5.7.3 because the licensee failed to control a high radiation area with dose rates greater than 1,000 millirem per hour. Specifically, on September 22, 2005, a radiation worker was performing a visual inspection of a low pressure coolant injection pipe penetration in the drywell. The worker climbed three feet above the floor elevation, at which time the worker's electronic dosimeter alarmed with peak dose rate of 582 millirem per hour. Radiation protection personnel performed a survey of the area and determined that dose rates were as high as 1,200 millirem per hour at one foot from the low pressure coolant injection pipe. This finding was entered into the licensee's corrective action program.
This finding is greater than minor because it is associated with the Occupational Radiation Safety Cornerstone attribute of program and process and affected the cornerstone objective to ensure the adequate protection of a worker's health and safety from exposure to radiation. The finding involves the potential for a worker's unplanned or unintended dose resulting from actions contrary to technical specifications. When processed through the Occupational Radiation Safety Significance Determination Process, the finding is of very low safety significance because it did not involve ALARA planning or work controls, there was no overexposure or substantial potential for an overexposure, and the ability to assess dose was not compromised.
Inspection Report# : 2005004*(pdf)*

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-Revealing
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)*

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 : November 30, 2005