Grand Gulf 1
2Q/2006 Plant Inspection Findings

Initiating Events

Significance: G Apr 11, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform an Adequate Risk Assessment
The inspectors identified two examples of a noncited violation of 10 CFR 50.65, “Maintenance Rule,” for failing to include maintenance that could increase the likelihood of an initiating event in the plant risk assessment. On February 2, 2006 and again on March 28, 2006, the licensee’s risk assessment did not include maintenance activities that increased the likelihood of a reactor scram. The licensee entered this into their corrective action program as Condition Reports CR-GGN-2006-1041 and CR-GGN-2006-1277.
This finding is more than minor since the maintenance that was performed increased the likelihood of an initiating event. Using Inspection Manual Chapter 0609 Appendix K, “Maintenance Risk Assessment and Risk Management Significance Determination Process,” the finding is of very low safety significance since in both cases the change in incremental core damage probability and incremental large early release probability were less than 1E-6 and 1E-7, respectively. This finding has human performance crosscutting aspects because the inadequate risk assessments were due to personnel error.
Inspection Report# : 2006002*(pdf)*

Significance: G Apr 11, 2006
Identified By: NRC
Item Type: FIN Finding
Plant Service Water Leak During Excavation
The inspectors reviewed a self-revealing finding for a failure to follow procedure that resulted in a significant plant service water header leak. The licensee failed to review adequate documents to identify potential hazards as required by Procedure EN-S-112, “Trenching, Excavation and Ground Penetrating Activities,” Revision 2. The licensee entered this into their corrective action program as Condition Report CR-GGN-2006-0219.
This finding is more than minor since it was associated with the human performance 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 this finding has human performance cross-cutting aspects associated with a failure to follow procedures.
Inspection Report# : 2006002*(pdf)*

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 a failure to follow procedure. In addition, the procedure did not meet its stated purpose to verify the operation of a service water pump support system, specifically the well level indication 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. This finding also had crosscutting aspects associated with 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 Green self-revealing finding was reviewed involving 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 for resolution.
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 finding also had crosscutting aspects associated with human performance.
Inspection Report# : 2005004*(pdf)*

Mitigating Systems

Significance: G Apr 11, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Untimely Corrective Actions Associated with Condensate Storage Tank Level Instrumentation
The inspectors identified a Green noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI for the failure to take prompt corrective actions to address a design deficiency involving condensate storage tank level instrumentation. The licensee identified the design deficiency on April 30, 1999, and issued compensatory actions for the operators to manually transfer high pressure core spray and reactor core isolation cooling from the condensate storage tank to the suppression pool in the event of failure of the tank. The licensee corrected the design deficiency on December 8, 2005. The licensee entered this issue in their corrective action program as CR-GGN-2006-1096.
This finding is more than minor because it affected the design control attribute of the mitigating systems cornerstone and affected the cornerstone objective to ensure the availability of systems that respond to initiating events. The finding was of very low safety significance because it was a design deficiency that did not result in a loss of operability. This finding had cross-cutting aspects associated with problem identification and resolution in that station personnel did not implement corrective actions in a timely manner.
Inspection Report# : 2006002*(pdf)*

Significance: G Apr 11, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Alternate Shutdown Cooling Mode Not Properly Implemented in Alternate Shutdown Procedure.
The inspectors identified a Green noncited violation for failure to have an alternative shutdown procedure to restore power following a control room evacuation with loss of offsite power that was independent of the control room. The licensee entered this into their corrective action program as CR-GGN-2005-1854.
This finding is more than minor because it affected the mitigating systems cornerstone objective for the procedure quality and protection from external factors attributes. A Region IV Senior Reactor Analyst made a visit to the site during the week of January 30, 2006. Through discussions with engineers and walkdowns in the plant, the Senior Reactor Analyst determined that there is a credible fire scenario which could simultaneously cause a control room evacuation, a loss of offsite power, and prevent automatic starting and loading of the Division 1 emergency diesel generator. This issue was categorized as a postfire safe shutdown issue associated with response procedure quality. The degradation rating was determined to be Low because operator experience and familiarity with performing the required response actions were adequate to overcome the procedure deficiency. Therefore, this issue screened as having very low safety significance in Phase 1 of Manual Chapter 0609, Appendix F, “Fire Protection Significance Determination Process”.
Inspection Report# : 2006002*(pdf)*

Significance: G Mar 27, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to implement a testing program to demonstrate the ability of standby service water-cooled heat exchangers
The team identified a finding of very low safety significance involving a noncited violation of 10 CFR Part 50, Appendix B, Criterion XI, Test Control, for the failure to implement a testing program to demonstrate the ability of standby service water-cooled heat exchangers to perform their design basis functions under all conditions.

The finding is greater than minor because, if left uncorrected, it would lead to a more significant issue, namely a heat exchanger would become unable to fulfill its safety function due to excessive fouling accumulating during the time between testing. This finding has cross-cutting aspects because it is more than minor, it represents current performance, and the cause is directly associated with the problem identification and resolution attribute of evaluation of test data

Inspection Report# : 2006008*(pdf)*

Significance: G Mar 27, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to translate all design basis information into specifications and procedures

The team identified a finding of very low safety significance for a noncited violation of 10 CFR Part 50, Appendix B, Criterion III, Design Control, for the failure to translate all design basis information into specifications and procedures were not adequate to assure that instrument uncertainties were correctly accounted for in the development of Technical Specification values or in the surveillance test acceptance criteria.

The team determined this finding to be greater than minor because, similar to an example in MC 0612, Power Reactor Inspection Reports, Appendix E, Examples of Minor Issues, the failure of licensee personnel to demonstrate where, and how, instrument uncertainties were translated into either Technical Specification values or the surveillance test acceptance criteria could result in systems and/or components not being capable of performing its design basis functions. This finding has cross-cutting aspects because it is more than minor, the failure to correct a previously identified adverse condition is an ongoing performance deficiency, and the cause (i.e., not understanding how to address instrument uncertainties) is directly associated with the problem identification and resolution attribute of corrective actions.
Inspection Report# : 2006008*(pdf)*

Significance: G Oct 13, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Foreign Material in the Drywell
The inspectors identified a Green noncited violation (NCV) of TS 5.4.1(a) for the failure of licensee personnel to perform an adequate drywell closeout inspection for foreign material. On October 13, 2005, licensee personnel failed to follow Integrated Operating Instruction 3-1-01-1, "Cold Shutdown to Minimum Generator Load," Attachment II, steps 2, 16, 21, and 34 of the drywell closeout sheet. The inspectors conducted a general inspection of the drywell and discovered approximately 50 foreign material items totaling a volume of approximately one and a half cubic feet in the drywell floor area. This foreign material included plastic wrappings and tie-wraps, articles of protective clothing, loose paper, metal objects and other miscellaneous material. This issue was entered into the licensee's corrective action program as CR-GGN-2006-00236.

The finding is more than minor because it is associated with the mitigating systems cornerstone attribute of equipment performance 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 Manual Chapter 0609, "Significance Determination Process," Phase 1 Worksheet, the finding is determined to have very low safety significance because there was no loss of safety function of the emergency core cooling system suction strainers. The cause of the finding is related to the crosscutting element of human performance in that licensee personnel did not follow the drywell closeout procedure.

Inspection Report# : 2005005*(pdf)*

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 involving 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. This finding also had crosscutting aspects associated with human performance.
Inspection Report# : 2005004*(pdf)*

Barrier Integrity

Significance: G Jun 30, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Improper Reactor Recirculation Pump Speed Change
The inspectors identified a Green noncited violation of Technical Specification 5.4.1(a) for the failure to follow the procedure for reactor recirculation pump speed changes. Operators attempted to shift Recirculation Pump A to fast speed without verifying that interlocks were satisfied (annunciators not lit) as required by procedure. As a result, Recirculation Pump A failed to shift to fast speed, creating a flow mismatch between the recirculation loops. The licensee entered this into their corrective action program as Condition Report CR-GGN-2006-2329.
This finding is more than minor since the failure to follow procedures regarding reactor manipulation, if left uncorrected, could lead to a more significant safety concern. The inspectors determined this finding affected the Barrier Integrity cornerstone since matched recirculation loop flows is an assumption used in the accident analysis for a loss-of-coolant accident resulting from a loop break. A flow mismatch could result in core response more severe than assumed in the accident analysis. Using Manual Chapter 0609, “Significance Determination Process,” Phase 1 Worksheets, the finding is of very low safety significance since it only affects the fuel barrier. This finding has crosscutting aspects associated with human performance since operators failed to follow procedures and verify that all annunciators associated with the recirculation loop pump temperatures were extinguished prior to shifting Recirculation Pump A to fast speed. Operators made incorrect assumptions regarding the meaning

of the lit annunciator and the impact that it would have on their ability to shift the pump to fast speed.
Inspection Report# : 2006003*(pdf)*

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 involving the licensee's failure 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)*

Public Radiation Safety

Significance: G Sep 15, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to comply with certificate of compliance instructions
The team reviewed the details associated with a self-revealing, non-cited violation of 10 CFR 71.17(c)(2) that resulted from the licensee's failure to properly assemble a transportation package. The licensee was alerted to the error when a worker cleaning the assembly area discovered an unused reinforcing spacer block. However, the shipment had already been released from the site. The shipment was returned to the licensee's facility approximately seven hours after it left. The licensee reported the occurrence in accordance with 10 CFR 71.95(c) and documented it in the corrective action program as CR-GGN-2005-01007.

The finding is more than minor because it was associated with one of the Public Radiation Safety Cornerstone attributes (Transportation Program) and it affected the associated cornerstone objective in that the use of a shipping package not assembled in accordance with the certificate of compliance diminished the licensee's ability to ensure adequate protection of public health and safety from exposure to radioactive materials released into the public domain. The finding involved an occurrence in the licensee's radioactive material transportation program that is contrary to NRC regulations; therefore, it was processed through the Public Radiation Safety Significance Determination Process. When the finding was processed through the significance determination process, it was found to have very low safety significance because: (1) it involved radioactive material control, (2) it was associated with transportation, (3) no radiation limit was exceeded, (4) there was no breach of the package during transit, (5) it was a certificate of compliance finding, (6) there was no design documentation deficiency, (7) it was not a maintenance/use performance deficiency, (8) it involved minor content deficiencies (minor structural component left out), but (9) it did not involve a major content deficiency. This finding also had cross-cutting aspects associated with human performance. This finding also had cross-cutting aspects associated with human performance, in that the failure of licensee personnel to comply with the certificate of compliance instructions directly resulted in the finding.
Inspection Report# : 2005011*(pdf)*

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Last modified : August 25, 2006