Grand Gulf 1
2Q/2011 Plant Inspection Findings

Initiating Events

Significance: G Dec 31, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Reactor Shutdown Procedure Causes Power and Level Oscillations
Green. The inspectors identified a green, noncited violation of 10 CFR 50 Appendix B, Criterion V, for an inadequate shutdown procedure resulting in power and level oscillations in the reactor. The revised procedure failed to require the plant to be placed in startup feedwater level control during low power operations. In addition, the operators performed shutdown training on the old procedure. The performance deficiency was self-revealing, however the inspectors added significant value by identifying inadequate condition report classification, causal evaluation, and corrective actions. The licensee entered this issue into the corrective action program as Condition Report CR-GGN-2010-05140.
The finding is more than minor because it was associated with the initiating events cornerstone attribute of procedure quality and affected the associated cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. Using Inspection Manual Chapter 0609, "Significance Determination Process," Phase 1 Screening Worksheet, the inspectors determined that the finding impacted both the initiating events and mitigating systems cornerstones. The inspectors determined that the initiating event cornerstone best reflected the dominant risk of the finding. The finding was determined to be of very low safety significance (Green) because the transient initiator did not contribute to both the likelihood of a reactor trip and to the likelihood that mitigation equipment or functions would not be available. The cause of this finding has a crosscutting aspect in the area of human performance associated with decision-making, because station management failed to use conservative assumptions to demonstrate that the change to the shutdown operating procedure was safe prior to proceeding [H.1(b)]. (Section 4OA2)

Inspection Report# : 2010005 *(pdf)*

Significance: G Sep 27, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Risk Assessment for Switchyard Battery Replacement
Green. The inspectors identified a Green noncited violation of 10 CFR 50.65(a)(4), “Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants,” for failure to properly assess the risk impact of maintenance on the switchyard batteries. Specifically, plant personnel evaluated the work as “light” switchyard work when it should have been evaluated as heavy equipment, which increases the likelihood of a loss of offsite power transient. The licensee entered this issue into the corrective action program as Condition Report CR-GGN-2010-06668.
The finding was more than minor because it was associated with the Protection Against External Factors attribute of the Initiating Event (IE) Cornerstone. Because the finding affects the licensee’s assessment of risk associated with performing maintenance activities, IMC 0609.04, “Phase 1 - Initial Screening and Characterization of Findings,” directs significance determination via the use of IMC 0609, Appendix K, “Maintenance Risk Assessment and Risk Management Significance Determination Process.” In accordance with Flowchart 1 of Appendix K, the significance of this finding was determined to be of very low safety significance (Green), because the calculated Incremental Core Damage Probability Deficit (2E-8) was not greater than 1.0E-6. This finding has a cross-cutting aspect in the area of human performance because the licensee failed to use a systematic decision making process using available risk assessment guidance and did not obtain interdisciplinary input on an important risk management decision [H.1(a)] (Section 1R13).
Inspection Report# : 2010004 *(pdf)*

Mitigating Systems

Significance: G Jun 27, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform an Adequate Inspection of Probable Maximum Precipitation Door Seals Protecting Safety Related Equipment
Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for failure to perform an adequate inspection of probable maximum precipitation door seals protecting safety related equipment. Inspectors found the entrance door to the diesel generator building and the entrance door to the division 2 diesel generator in a degraded condition. The inspectors identified that the door seals did not make complete contact with the door frames all the way around as required by procedure. The licensee initiated compensatory actions for the degraded seals, staging sand bags in the area and requiring monitoring of the affected doors during heavy rainfall. This issue was entered into the licensee’s corrective action program as Condition Report CR-GGN-2011-02575.
The finding is more than minor because it is associated with the protection against external factors attribute of Mitigating System Cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In Inspection Manual Chapter 0609.04, “Phase 1 - Initial Screening and Characterization of Findings,” the inspectors used the seismic, flooding, and severe weather Table 4b and determined it would affect multiple trains of safety equipment. The inspectors consulted the regional senior reactor analyst, who performed a Phase 3 analysis. The result was a delta-core damage frequency of 3.3E-7/yr and a delta-large early release frequency of 6.6E-8/yr. These results confirmed that the finding had very low safety significance (Green). The inspectors determined the apparent cause of this finding was that licensee personnel were not adequately trained to perform these inspections. Therefore this finding has a cross-cutting aspect in the area of human performance associated with resources in that the licensee’s training of personnel was not adequate in performing inspection of the probable maximum precipitation door seals [H.2(b)](Section 1R01).
Inspection Report# : 2011003 *(pdf)*

Significance: G Jun 27, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Follow Scaffold Control Procedure
Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for the failure to adequately implement scaffolding control procedural requirements related to post-installation inspections and engineering safety evaluations for scaffolding constructed within 2 inches of safety-related or fire protection equipment. During plant walkdowns, inspectors identified multiple examples of the licensee not properly implementing Entergy’s corporate and site procedures for the control of scaffolding. The licensee’s immediate corrective actions included inspecting the scaffolding that had been installed, modifying or removing it where appropriate, and properly posting the scaffolds. This issue was entered into the licensee’s corrective action program as Condition Reports CR-GGN-2011-03480, CR-GGN-2011-03601, CR-GGN-2011-03602, and CR-GGN-2011-03603.
The inspectors determined that this finding is more than minor because it is associated with the external factors and equipment performance attributes of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Inspection Manual Chapter 0609.04, “Phase 1 - Initial Screening and Characterization of Findings,” inspectors determined the finding was of very low safety significance (Green), because it was not a design or qualification deficiency, did not represent a loss of a system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.
The inspectors determined the apparent cause of this finding was lack of supervisor oversight during scaffold construction. Therefore the finding has a cross-cutting aspect in the area of human performance associated with work practices, in that the licensee did not provide effective supervisor oversight of workers constructing scaffolding to ensure these activities were performed per procedural requirements [H.4(c)](Section 1R04).
Inspection Report# : 2011003 *(pdf)*

Significance: G Jun 27, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Identify Conditions Adverse to Fire Protection
Green. The inspectors identified a noncited violation of License Condition 2.C(41) for the failure to identify conditions adverse to the fire protection program. Specifically, during required inspections of the material condition of the sprinkler system, the licensee failed to identify several instances of bent or misaligned sprinkler head deflector plates and a painted sprinkler head. Corrective action included correcting bent or misaligned plates and replacing the painted sprinkler head. This issue was entered into the licensee's corrective action program as Condition Report CR-GGN-2011-03132.
The finding is more than minor because it is associated with the protection against external factors attribute of the Mitigating System Cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the safety concern is that the number of bent or misaligned sprinkler heat canopies and painted sprinkler heads would not provide an adequate area-wide coverage of suppression. The inspectors evaluated the significance of this finding using Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process." The deficiency involved the Fixed Fire Protection Systems category. Using Appendix F,

Attachment 2, "Degradation Rating Guidance Specific to Various Fire Protection Program Elements," the inspectors determined that the deficiency had low degradation since less than 10 percent of the heads in the affected fire area were nonfunctional, a functional head remained within 10 feet of the combustibles of concern, and the system remained nominally code compliant. This finding screened as having very low safety significance (Green) in Phase 1of Manual Chapter 0609, Appendix F. This finding has a cross-cutting aspect in the area of human performance associated with resources because the procedure used to inspect the condition of these sprinklers did not contain specific criteria for identifying unacceptable sprinkler conditions [H.2(c)](Section 1R05).
Inspection Report# : 2011003 *(pdf)*

Significance: G Jun 27, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Ensure that Safety Related Manholes were Properly Sealed to Prevent the Entry of Flammable Liquid
Green. The inspectors identified a noncited violation of Facility Operating License Condition 2.C(41), involving the failure to ensure that manholes MH01, MH20 and MH21 were properly sealed to prevent the entry of flammable liquid. During the performance of the manhole/vault inspection, the inspectors were reviewing engineering change packages associated with solar sump pumps for MH20 and MH21. During their review, they determined that the licensee was not meeting the requirements of their license bases documents for MH20 and MH21, which contain safe shutdown cables for standby service water trains A and B. The licensee's immediate corrective action included placing hazmat barricades around each manhole to prevent flammable fluids from entering the manholes. This issue was entered into the licensee's corrective action program as Condition Report CR-GGN-2011-00562.
This finding was more than minor because it was associated with the protection against external factors attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Inspection Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 3b, Item 1 directs the inspectors to Inspection Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process." However, an NRC senior reactor analyst determined that the unique nature of this performance deficiency did not lend itself to analysis by the methods provided in Appendix F. Therefore, a Phase 3 analysis was performed. Based on a bounding analysis, the analyst determined that the change in core damage frequency was approximately 1.5E-7/yr. The result was low because of the relatively short periods of time that fuel was actually being transferred, the low probability of transfer system failures, and the low likelihood that a loss of normal service water initiator would occur following a fire in the subject manholes. This noncited violation was therefore determined to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem identification and resolution associated with corrective actions because licensee personnel failed to initiate a condition report when the issue was identified during the development of their engineering change package, which resulted in the failure to ensure the safety related manholes were sealed in accordance with their license based documents [P.1(a)](Section 1R06).

Inspection Report# : 2011003 *(pdf)*

Significance: G Jun 27, 2011
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Provide Adequate Procedures for High Pressure Core Spray Minimum Flow Valve Surveillance Testing
Green. The inspectors reviewed a self-revealing noncited violation of Technical Specification 5.4.1.a for the licensee's failure to provide adequate testing procedures, which resulted in the high pressure core spray minimum flow valve inadvertently stroking approximately 11 times during a surveillance test. The excessive stroking of the valve resulted in the unplanned inoperability of the high pressure core spray system because the valve's feeder breaker overcurrent instantaneous trip setpoint had drifted below the manufacturer's tolerance for the existing setting. As immediate corrective action, the licensee replaced the degraded breaker. This finding was entered into the licensee's corrective action program as Condition Report CR-GGN-2011-01901.
The finding is more than minor because it is associated with the procedure quality attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone's objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Inspection Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," inspectors determined that the finding was of very low safety significance (Green) because it did not result in a loss of system safety function since the high pressure core spray system would still have been functional even with the minimum flow valve potentially failing open. Additionally, it did not represent a loss of a system safety function and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.
This finding had a cross-cutting aspect in the area of problem identification and resolution associated with operating experience in that licensee had not incorporated operating experience from a similar event that had occurred at another Entergy site [P.2(b)](Section 1R12).
Inspection Report# : 2011003 *(pdf)*

Significance: G Jun 27, 2011
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Loose Fuse Clips in Division 3 Emergency Diesel Generator
Green. The inspectors reviewed a self-revealing noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to take adequate corrective actions for a significant condition adverse to quality associated with the division 3 emergency diesel generator. While performing a maintenance effectiveness review of the diesel generators, the inspectors noted on October 17, 2009, at 9:07 p.m., the FU-7 fuse for the division 3 diesel generator was determined to have a faulty fuse clip, resulting in the inoperability of the diesel generator due to loss of power to the direct current powered fuel pumps. Then on March 18, 2011, the division 3 emergency diesel generator was again rendered inoperable due to a faulty fuse clip on the FU-8 fuse holder, which is of the same design and function as the FU-7 fuse holder in the previous occurrence. Short term corrective action included replacing the fuse holder. This finding was entered into the licensee's corrective action program as Condition Report CR-GGN-2011-01868.
The finding is more than minor because it is associated with equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the associated cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Inspection Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," inspectors determined the finding was of very low safety significance (Green) because it was not a design or qualification deficiency, did not represent a loss of a system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.
The finding had a cross-cutting aspect in the area of human performance associated with resources because the training provided to correct the initial event was not adequate to ensure proper fuse installation and verify good connection existed between the fuse and fuse holder [H.2(b)](Section 1R12).
Inspection Report# : 2011003 *(pdf)*

Significance: G Jun 27, 2011

Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Assure Configuration Control of Safety Related Systems
Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” for the failure to review the suitability of leaving test fittings on reactor coolant system flow transmitter equalizing block drain ports instead of the design specified manifold plugs. As corrective action, the licensee replaced the test fittings with the correct drain plugs. This finding was entered into the licensee’s corrective action program as Condition Report CR-GGN-2011-04485.
This finding is more than minor because it is associated with the design control attribute of the Mitigating System Cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Inspection Manual Chapter 0609.04, “Phase 1 - Initial Screening and Characterization of Findings,” inspectors determined that the finding was of very low safety significance (Green) because it was a design or qualification deficiency confirmed not to result in loss of operability of functionality, did not represent a loss of a system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.
The inspectors determined that the finding had a cross-cutting aspect in the area of human performance, associated with work practices, because the licensee failed to ensure that human error prevention techniques, such as holding pre-job briefings, self- and peer-checking, and proper documentation of activities were utilized such that work activities were performed safely and personnel did not proceed in the face of uncertainty or unexpected circumstances Specifically, the licensee failed to review the suitability of installing test and brass fittings on pressure, differential pressure and flow transmitter block valve drain ports instead of the design specified manifold plugs. [H.4(a)](Section 1R12).
Inspection Report# : 2011003 *(pdf)*

Significance: G Jun 27, 2011
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Follow a Procedure Resulting in the Inoperability of the Reactor Core Isolation Cooling System Primary Containment Isolation Valve
Green. The inspectors reviewed a self-revealing noncited violation of Technical Specification 5.4.1.a, for failure to follow a procedure resulting in the inoperability of the reactor core isolation cooling system primary containment isolation valve. This occurred while the licensee was performing surveillance on the reactor core isolation cooling system and incorrectly attached a jumper to the wrong terminal point resulting in blowing a fuse that caused a loss of control power to the reactor core isolation cooling primary containment isolation valve 1E51-F031. As immediate corrective action, the licensee removed the jumper and replaced the control power fuse. The finding was entered into the licensee’s corrective action program as Condition Report CR-GGN-2011-01932.
The finding is more than minor since it is associated with the human performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Inspection Manual Chapter 0609.04, “Phase 1 - Initial Screening and Characterization of Findings,” inspectors determined the finding was of very low safety significance (Green) because it was not a design or qualification deficiency, did not represent a loss of a system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. In addition, this finding had a human performance cross-cutting aspect associated with work practices in that the licensee did not use the proper human performance techniques of self-checking to prevent the loss of control power to a primary containment isolation valve [H.4(a)](Section 1R22).
Inspection Report# : 2011003 *(pdf)*

Significance: SL-IV Mar 27, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Update Available Low Pressure Coolant Injection Loops in the Updated Final Safety Analysis Report
SLIV. Inspectors identified a noncited violation of 10 CFR 50.71(e)(4), which requires the final safety analysis report be updated, at intervals not exceeding 24 months, to reflect changes made in the facility or procedures described in the final safety analysis report. Licensee personnel failed to update the original revision of the final safety analysis report to reflect the actual number of low pressure coolant injection loops available for automatic initiation during shutdown

cooling operations in Mode 3. The licensee plans to update the final safety analysis report at the next scheduled revision. This finding was entered into the licensee's corrective action program as condition report CR-GGN-2011-01631.
The failure of licensing personnel to update the final safety analysis report to reflect the available low pressure coolant injection loops for automatic initiation during shutdown cooling operations in Mode 3 was a performance deficiency. This finding was evaluated using traditional enforcement because it had the potential for impacting the NRC's ability to perform its regulatory function. The inspectors used the NRC Enforcement Policy, dated September 30, 2010, to evaluate the significance of this violation. Consistent with the NRC Enforcement Policy, this finding was determined to be a Severity Level IV noncited violation.
Inspection Report# : 2011002 *(pdf)*

Significance: G Mar 27, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Demonstrate Maintenance Effectiveness of Train B Control Room Air Conditioner
Green. The inspectors identified a noncited violation of 10 CFR Part 50.65(a)(2) for the licensee's failure to demonstrate that the performance of the train B control room air conditioner was being effectively controlled through the performance of appropriate preventive maintenance. Engineering did not properly evaluate maintenance rule functional failures resulting in the system remaining in an a(2) status instead of an a(1) status. As corrective action, the train B control room air conditioner was moved into an a(1) status. The licensee entered this issue into their corrective action program as Condition Report
CR-GGN-2011-01623.
The finding was more than minor because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Inspectors performed a Phase 1 screening, in accordance with Inspection Manual Chapter 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings," and determined that the finding was of very low safety significance (Green) because the maintenance rule aspect of the finding did not cause an actual loss of safety function of the system nor did it cause a component to be inoperable. As corrective action, the train B control room air conditioner was moved into an (a)(1) status. This finding had a crosscutting aspect in the area of human performance associated with the decision making component because licensee personnel failed to make appropriate safety-significant or risk-significant decisions to address the multiple failures of the train B control room air conditioner compressor. [H.1(a)] (Section 1R12.b.2)
Inspection Report# : 2011002 *(pdf)*

Significance: G Mar 27, 2011
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Prevent Recurrence of Control Room Air Conditioner Compressor Tripping Due to Low Oil Pressure
Green. The inspectors reviewed a self-revealing noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, after the licensee failed to determine the cause and prevent recurrence of a significant condition adverse to quality associated with the train B control room air conditioner compressor tripping due to low oil pressure. Specifically, on December 13, 2010, the train B control room air conditioner compressor tripped on low oil pressure after the licensee had performed a root cause analysis to identify the cause and prevent recurrence of a similar compressor trip on October 14, 2010. As immediate corrective action, the licensee installed an inline suction filter. No additional failures have occurred since its installation. The finding was entered into the licensee's corrective action program as Condition Report CR-GGN-2010-07315. This finding was more than minor because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Inspection Manual Chapter 0609, "Significance Determination Process," Phase 1 worksheets, the inspectors determined that a Phase 2 analysis was required because the finding represented a loss of system safety function. The plant-specific risk informed notebook does not include the evaluation of risk caused by the loss of cooling to the main control room. Therefore, the senior reactor analyst conducted a Phase 3 analysis. Based on the bounding analysis, the analyst determined that the change in core damage frequency result was 5.9 x 10-7. This

noncited violation was therefore determined to be of very low safety significance (Green). This finding had a crosscutting aspect in the area of problem identification and resolution associated with the corrective action program component because licensee personnel failed to thoroughly evaluate the multiple failures of the train B control room air conditioner compressor. [P.1(c)] (Section 4OA3.1.b)
Inspection Report# : 2011002 *(pdf)*

Significance: G Dec 31, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Untimely Corrective Actions to Address the deficiencies in the RCIC Flow Control System
Green. The inspectors reviewed a self-revealing noncited violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Actions," was identified associated with the licensee's failure to take timely corrective actions to correct a condition adverse to quality associated with degradation of the Reactor Core Isolation Cooling (RCIC) flow control system. The licensee entered this issue into the corrective action program as Condition Report CR-GGN-2010-06850. This performance deficiency is more than minor because it is associated with the mitigating systems cornerstone attribute of equipment performance as it adversely affected the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Using Inspection Manual 0609, "Significance Determination Process," Phase 1 Screening Worksheet, the inspectors determined that the finding affects the mitigating systems cornerstone because the deficiency degraded the short term heat removal capability of the RCIC system. The finding does not represent a loss of system safety function for RCIC, therefore it is determined to be of very low safety significance, or green. The cause of this finding has a crosscutting aspect in the area of human performance associated with resources because the licensee failed to properly prioritize the work order associated with correcting the degraded condition with the RCIC flow control system [H.2(a)]. (Section 1R22)

Inspection Report# : 2010005 *(pdf)*

Significance: G Dec 31, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Operability Evaluation Following a Spurious Actuation of the Standby Service Water Pump House Ventilation Fan
Green. The inspectors identified a Green noncited violation of 10 CFR 50 Appendix B, Criterion V, involving a failure to follow procedures, which resulted in an inadequate operability evaluation. On December 5, 2010, a spurious actuation of the standby service water pump house ventilation system occurred, resulting in the pump house temperatures dropping below the design limit. The operability evaluation failed to consider the impact of the actual freezing conditions occurring at the site at that time, and operations did not secure the fan after the spurious actuation until questioned by the inspectors. The licensee entered this issue into their corrective action program as Condition Report CR GGN 2011 00151.

This performance deficiency is more than minor because it is associated with the mitigating systems cornerstone attribute of equipment performance as it adversely affected the 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, this finding was of very low safety significance since it did not result in a loss of operability, nor did it screen as potentially risk significant due to a seismic, flooding, or severe weather-initiating event. The cause of this finding had a crosscutting aspect in the area of problem identification and resolution associated with corrective actions because licensee personnel failed to thoroughly evaluate the impact of the spurious actuation of the standby service water pump house ventilation fan [P.1 (c)]. (Section 1R15)

Inspection Report# : 2010005 *(pdf)*

Significance: G Dec 31, 2010
Identified By: NRC

Item Type: NCV NonCited Violation
Failure to Perform Required Quality Control Inspections
Green. Inspectors identified a noncited violation of 10 CFR 50, Appendix B, Criterion X, “Inspection,” for the failure to ensure that Quality Control verification inspections were consistently included and correctly specified in quality-affecting procedures and work instructions for construction-like work activities as required by the Quality Assurance Program. The licensee performed extensive reviews, and inspectors performed independent reviews of the licensee’s conclusions as well as independent sampling, to confirm that improper or missed inspections did not actually affect the operability of plant equipment. Entergy initiated prompt fleet-wide corrective actions to ensure proper work order evaluation and proper inclusion of Quality Control verification inspections. This issue was entered into the corrective action program under Condition Reports CR-HQN 2009-01184 and CR-HQN-2010-0013.

The failure to ensure that adequate Quality Control verification inspections were included in quality-affecting procedures and work instructions as required by the Quality Assurance Program was a performance deficiency. This programmatic deficiency was more than minor because, if left uncorrected, it could lead to a more significant safety concern in that the failure to check quality attributes could involve an actual impact to plant equipment. This issue affected the Design Control attribute of the Mitigating Systems cornerstone because missed or improper quality control inspections during plant modifications could impact the availability, reliability, and capability of systems needed to respond to initiating events. This performance deficiency was determined to have very low safety significance in Phase 1 of the SDP, since it was confirmed to involve a qualification deficiency that did not result in a loss of operability or functionality. The inspectors determined that this performance deficiency involved a cross-cutting aspect related to the human performance in decision-making (H.1a), because the licensee did not have an effective systematic process for obtaining interdisciplinary reviews of proposed work instructions to determine whether Quality Control verification inspections were appropriate. [H.1(a)] (Section 4OA2)

Inspection Report# : 2010005 *(pdf)*

Significance:  Dec 31, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Implement the Experience and Qualification Requirements of the Quality Assurance Program
Green. Inspectors identified a noncited violation of 10 CFR 50, Appendix B, Criterion II, “Quality Assurance Program,” for the failure to implement the experience and qualification requirements of the Quality Assurance Program. As a result, the licensee failed to ensure that an individual assigned to the position of Quality Assurance Manager met the qualification and experience requirements of ANSI/ANS 3.1-1978 as required by the Quality Assurance Program. Specifically, the individual assigned to be the responsible person for the licensee’s overall implementation of the Quality Assurance Program did not have at least 1 year of nuclear plant experience in the overall implementation of the Quality Assurance Program within the quality assurance organization prior to assuming those responsibilities. This issue was entered into the corrective action program as Condition Report CR-HQN-2010-00386.
Failure to ensure that an individual assigned to the position Quality Assurance Manager met the qualification and experience requirements of ANSI/ANS 3.1-1978 as required by the Quality Assurance Program was a performance deficiency. This performance deficiency was determined to be more than minor because, if left uncorrected, it could create a more significant safety concern. Failure to have a fully qualified individual providing overall oversight to the Quality Assurance Program had the potential to affect all cornerstones, but this finding will be tracked under the Mitigating Systems cornerstone as the area most likely to be impacted. The issue was not suitable for quantitative assessment using existing Significance Determination Process guidance, so it was determined to be of very low safety significance using IMC 0609, Appendix M, “Significance Determination Process Using Qualitative Criteria.” The inspectors determined that there was no cross-cutting aspect associated with this finding because this issue was not indicative of current performance because the violation occurred more than 3 years ago. (Section 4OA2)

Inspection Report# : 2010005 *(pdf)*

Significance:  Sep 27, 2010
Identified By: NRC
Item Type: NCV NonCited Violation

Degraded Fire Door Barrier Protecting the Safeguards Switchgear Rooms
Green. The inspectors identified a Green noncited violation of Facility Operating License Condition 2.C(41) involving the failure to ensure that fire barriers protecting safety-related areas were functional during monthly fire barrier inspections. The inspectors identified that fire door OC211, crossover door between division 1 and 2 switchgear rooms, was missing 5 screws in the divider overlap and there was a three inch crack in the door on the bottom left side. The Fire Hazards Analysis Report, Section 9A.2.4 defines fire doors as a fire barrier, and Section 9A.5.7 and 9A.5.8, “Fire Area 7” and “Fire Area 8”, respectively, describe the electrical switchgear rooms as having 3-hour fire rated barriers. Operations initiated an hourly fire watch for the non-functional door per the technical requirements manual. The licensee entered this issue into their corrective action program as Condition Report CR-GGN-2010-05541.
The finding was more than minor since it was associated with the protection against external factors attribute of the reactor safety Mitigating Systems (MS) Cornerstone, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Manual Chapter 0609, Appendix F, “Fire Protection Significance Determination Process,” the inspectors determined that the finding impacted the fire confinement category. The inspectors assigned a low degradation rating because the cracks did not create an actual hole through the door. The inspectors concluded that the finding was of very low safety significance (Green) because the degraded barrier was expected to maintain nearly the same level of effectiveness and reliability had the degradation not been present, and there were no fire ignition sources or combustible materials in the area that would subject the barrier to direct flame impingement. The cause of this finding has a crosscutting aspect in the area of human performance associated with resources, because plant personnel failed to adequately evaluate and provide proper maintenance for degrading fire doors [H.2(d)] (Section 1R05)
Inspection Report# : 2010004 *(pdf)*

Significance: G Sep 27, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Remove Foreign Material from the Control Room Air Conditioning Systems
Green. The inspectors identified a Green noncited violation of 10 CFR 50 Appendix B, Criterion XVI, for the failure to remove foreign material from the control room air conditioning oil and Freon subsystems. The pencil strainer on the compressor was found to be 90 percent clogged by foreign material. Plant personnel cleaned the pencil strainer, but placed the CRAC B system back in service without cleaning the oil and Freon subsystems which resulted in the CRAC B system becoming inoperable two weeks later. The licensee entered this issue into the corrective action program as Condition Report CR-GGN-2010-04839.
The finding was more than minor because it was associated with the equipment performance attribute of the reactor safety Mitigating Systems (MS) Cornerstone, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Manual Chapter 0609, “Significance Determination Process,” Phase 1 Worksheet, the finding was determined to be of very low safety significance since it did not result in a loss of system safety function. The cause of this finding has a crosscutting aspect in the area of problem identification and resolution associated with the corrective action program because the licensee failed to appropriately address the foreign material in the control room air conditioning subsystems [P.1(d)] (Section 1R15).

Inspection Report# : 2010004 *(pdf)*

Significance: G Sep 27, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Properly Implement an Adequate Structural Monitoring Program
Green. The inspectors identified a Green noncited violation of 10 CFR 50 Appendix B Criterion V for failure to perform required inspection of safety-related plant structures. Specifically, the inspectors found inspections that had been only partially performed and some areas that had not been documented as inspected. Subsequent walkdowns identified several deficiencies including concrete cracks and spalling, deficient coatings, rusted tanks and exposed rebar. The licensee entered this issue into the corrective action program as Condition Report CR-GGN-2010-06871.
The finding is greater than minor because it is associated with the Mitigating Systems (MS) Cornerstone attribute of protection against external events and affects the cornerstone objective to ensure the availability, reliability, and

capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Using Inspection Manual Chapter 0609, “Significance Determination Process,” Phase 1 Worksheet, the finding is determined to have very low safety significance since it did not represent a loss of system safety function, an actual loss of safety function of a single train for greater than its TS allowed outage time, or screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. This finding has a crosscutting aspect in the area of human performance, associated with the resources component, in that the licensee failed to accurately document and manage the structural inspections [H.2(c)] (Section 40A2).

Inspection Report# : 2010004 *(pdf)*

Barrier Integrity

Significance: G Mar 27, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Transient Combustible Stored in the Fire Exclusion Zone Near the Independent Spent Fuel Storage Installation
Green
. The inspectors identified a noncited violation of Facility Operating License Condition 2.C(41), involving the failure to ensure that transient combustible were not stored in the fire exclusion zone near the independent spent fuel storage installation. The inspectors performed a quarterly fire protection inspection of independent spent fuel storage installation and identified a large air conditioner with combustible material covering it located in the fire exclusion zone that was within 60 feet of the dry fuel storage pad. The inspectors determined through interviews that the material had been placed there the previous day by the maintenance department. As immediate corrective action the licensee removed the combustible material from the area. The finding was entered into the licensee’s corrective action program as Condition Report CR-GGN-2011-00455.
This finding was more than minor because it was associated human performance attribute of the Barrier Integrity Cornerstone to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Using Manual Chapter 0609, Appendix F, “Fire Protection Significance Determination Process,” the inspectors determined that the finding impacted the fire prevention and administrative controls category. The inspectors assigned a low degradation rating due to the fact that the amount of combustible material in the area was minimal. The inspectors concluded that the finding was of very low safety significance (Green) due to the fact there were no fire ignition sources in the area. The cause of this finding has a crosscutting aspect in the area of human performance associated with the work practices component because the licensee failed to effectively communicate expectations regarding storage of combustible material near the dry fuel storage pad. [H.4(b)] (Section 1R05.1.b)

Inspection Report# : 2011002 *(pdf)*

Significance: G Mar 27, 2011
Identified By: NRC
Item Type: FIN Finding
Inadequate Design Control for the Mitigation Monitoring System Modification
Green. The inspectors reviewed a self-revealing, Green finding of EN-DC-115, “Engineering Change Process,” involving the failure to maintain adequate design control measures associated with the installation of the mitigation monitoring system. On November 8, 2010, a reactor coolant pressure boundary failure occurred at the skid mounted Online Noble Chemical - Mitigation Monitoring System pump inside primary containment. The positive displacement sample pump ejected the pump piston from the housing, resulting in an approximate
7 gpm leak of reactor coolant. The steam leak resulted in a reactor recirculation system flow control valve lockup (due to hydraulic power unit motor failure) and approximately 15,000 square feet of contaminated area in the primary containment structure. The licensee failed to ensure proper validation testing for the pump prior to installation. Specifically, the licensee did not ensure that the pump could withstand the operating pressures and temperatures of the system in which it was installed. The licensee removed the mitigation monitoring system from service and isolated the skid from the reactor water cleanup system. This finding was entered into the licensee’s corrective action program as

Condition Report CR-GGN-2010-07852.
The finding is more than minor because it affects the design control attribute of the Barrier Integrity Cornerstone to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Therefore, using inspection Manual Chapter 0609, "Significance Determination Process," Phase 1 Worksheet for LOCA initiators, the inspectors concluded that the finding was of very low safety significance (Green) because the failure of the mitigation monitoring system would not have exceeded technical specifications limits for identified leakage in the reactor coolant system. This finding has a crosscutting aspect in the work practices component of the human performance area; because the licensee failed to adequately oversee the design of the mitigation monitoring system such that nuclear safety is supported. [H.4(c)] (Section 4OA3.2.b)
Inspection Report# : 2011002 *(pdf)*

Emergency Preparedness

Significance: G Dec 31, 2010
Identified By: NRC
Item Type: VIO Violation
Failure to Have Guidelines for the Choice of Protective Actions During an Emergency Consistent with Federal Guidance
Green. A cited violation of 10 CFR 50.47(b)(10) was identified for failure to develop and have in place guidelines for the choice of protective actions during an emergency that were consistent with federal guidance. Federal guidance for the choice of protective actions during an emergency is described in EPA-400-R-92-001 and states, in part, that evacuation is seldom justified when doses are less than protective action guides. The licensee's automatic process that extended existing protective action recommendations with changes in wind direction without considering radiation dose was identified as a performance deficiency.

This finding is more than minor because it affects the Emergency Preparedness Cornerstone objective of implementing adequate measures to protect the health and safety of the public during a radiological emergency, and is associated with the cornerstone attributes of emergency response organization performance and procedure quality. This finding was determined to be of very low safety significance because it was a failure to comply with NRC requirements, was associated with risk significant planning standard 10 CFR 50.47(b)(10), and was not a risk significant planning standard functional failure or a planning standard degraded function. The finding was not a functional failure or degraded planning standard function because appropriate protective action recommendations for the public would have been made for all areas where protective action guides were exceeded. This finding is a cited violation of 10 CFR 50.47(b)(10) because the licensee failed to restore compliance with NRC requirements in a timely manner. The finding is related to the corrective action element of the problem identification and resolution crosscutting aspect because the licensee failed to take corrective actions to address the safety issue in a timely manner [P1.d] (Section 1EP5)

Inspection Report# : 2010005 *(pdf)*

Significance: G Sep 27, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Primary Meteorological Tower Inoperable Without Compensatory Actions in Place
Green. A self-revealing non-cited violation of 10 CFR 50.47(b)(8), was identified when the Grand Gulf Nuclear Station Primary Meteorological Tower was rendered inoperable without compensatory actions from July 6 through July 27, 2010. The primary meteorological tower was declared inoperable by operations for maintenance to perform surveillance and preventative maintenance activities. The technicians did not finish the surveillance due to problems with data points exceeding allowable tolerance limits, and left the tower with the 10 and 50 meter instruments lowered to the ground. Inaccurate meteorological data continued to be displayed in the plant computer system. During the subsequent night shift, the control room supervisor inadvertently closed out the limiting condition of operations for the primary meteorological tower being out of service prior to the tower being returned to an operable condition. The

licensee entered this issue into their corrective action program as Condition Report CR GGN 2010-05748.

The finding was more than minor because it was associated with the Facilities and Equipment attribute of the Emergency Preparedness (EP) Cornerstone and adversely affected the cornerstone objective of ensuring the capability to implement adequate measures to protect public health and safety in the event of a radiological emergency. Specifically, from July 6 through July 27, 2010, key emergency response members could not have accurately performed their assigned emergency notification and dose assessment functions, with an absence of compensatory measures. In accordance with NRC Inspection Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," Sheet 1 and the examples contained in section 4.8 of the same document, the inspectors determined the finding to be of very low safety significance (Green) because the performance deficiency was a failure to comply with NRC regulations, the deficiency was associated with a non-risk significant planning standard as defined in MC0609 Appendix B, and it did not represent a functional failure of the planning standard. The cause of this finding has a crosscutting aspect in the area of human performance associated with work control, because the maintenance and operations department failed to appropriately communicate and coordinate work activities on the primary meteorological tower. [H.3(b)] (Section 1R19).

Inspection Report# : 2010004 *(pdf)*

Occupational Radiation Safety

Significance: G Mar 27, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to use a qualified radiation protection technician to provide direct continuous coverage of work in a locked high radiation area
Green. The inspectors identified a noncited violation of Technical Specification 5.7.2, resulting from the licensee's failure to use a qualified radiation protection technician to provide direct continuous coverage of work in a locked high radiation area. The finding was placed into the corrective action program as Condition Report CR-GGN-2011-01045, and corrective action was being evaluated.
The failure to use a qualified radiation protection technician to provide direct continuous coverage of work in a locked high radiation area is a performance deficiency. The finding was more than minor because it was associated with the Occupational Radiation Safety Cornerstone attribute (exposure control) of program and process and affected the cornerstone objective, in that, the failure to use qualified radiation protection technicians to provide job coverage in a high radiation area with dose rates in excess of 1000 mrem/hr had the potential to increase personnel dose. Using the Occupational Radiation Safety Significance Determination Process, the inspectors determined the finding to have very low safety significance because: (1) it was not associated with ALARA planning or work controls, (2) there was no overexposure, (3) there was no substantial potential for an overexposure, and (4) the ability to assess dose was not compromised. (Section 2RS01.b)

Inspection Report# : 2011002 *(pdf)*

Significance: G Sep 27, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Follow the Radiological Protection Job Coverage Procedure
Green. The inspectors reviewed a self-revealing Green noncited violation of Technical Specification 5.4.1.a for a procedure violation. Radiation Work Permit 20101704 covered work on Valve 1G33F253 in the reactor water cleanup room. Work on this valve was conducted over a 6-day period, May 6 through 11, 2010, and in that time, three personnel contaminations occurred. Appropriate protective clothing was not assigned by the job coverage technician and contributed to the three personnel contaminations and radioactive intake by one of the workers of 62 mrem.
The failure to assign appropriate protective clothing during radiological work is a performance deficiency. The finding is greater than minor because it was associated with the Public Radiation Safety Cornerstone attribute of program and process (exposure control), and affected the cornerstone objective, in that it resulted in an individual receiving

unplanned dose. Using the Occupational Radiation Safety Significance Determination Process, the inspectors determined the finding to have very low safety significance because: (1) it was not associated with ALARA planning or work controls, (2) there was no overexposure, (3) there was no substantial potential for an overexposure, and (4) the ability to assess dose was not compromised. The finding has a human performance crosscutting aspect associated with work practices, because the radiation protection technician covering the job did not use risk insights or take the job site condition into consideration when assigning protective clothing for radiological work [H.3(a)] (2RSO4). Inspection Report# : 2010004 *(pdf)*

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the cover letters to security inspection reports may be viewed.

Miscellaneous

Last modified : October 14, 2011