



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
612 EAST LAMAR BLVD, SUITE 400  
ARLINGTON, TEXAS 76011-4125

November 9, 2011

Mike Perito  
Vice President Operations  
Entergy Operations, Inc.  
Grand Gulf Nuclear Station  
P.O. Box 756  
Port Gibson, MS 39150

Subject: GRAND GULF - NRC INTEGRATED INSPECTION REPORT NUMBER  
05000416/2011004

Dear Mr. Perito:

On September 27, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Grand Gulf Nuclear Station. The enclosed integrated inspection report documents the inspection findings, which were discussed on October 11, 2011, with you and other members of your staff.

The inspections examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, the NRC has identified three issues that were evaluated under the risk significance determination process as having very low safety significance (Green). The NRC has determined that violations are associated with these issues. Additionally, one licensee-identified violation, which was determined to be of very low safety significance, is listed in this report. However, because of the very low safety significance and because they were entered into your corrective action program, the NRC is treating these findings as a noncited violations, consistent with Section 2.3.2 of the NRC Enforcement Policy.

If you contest the significance of the noncited violation, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001, with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 612 E. Lamar Blvd, Suite 400, Arlington, Texas, 76011-4125; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001; and the NRC Resident Inspector at the facility. In addition, if you disagree with the cross-cutting aspect assigned to any finding in this report, you should provide a response within 30 days of the date of this

Entergy Operations, Inc.

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inspection report, with the basis for your disagreement, to the Regional Administrator, Region IV, and the NRC Resident Inspector at the facility.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy or proprietary information so that it can be made available to the Public without redaction.

Sincerely,

***RC Hagar for VGaddy***

Vincent Gaddy, Chief  
Project Branch C  
Division of Reactor Projects

Docket: 50-416  
License: NPF-29

Enclosure:  
NRC Inspection Report 05000416/2011004  
w/Attachment: Supplemental Information

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**U.S. NUCLEAR REGULATORY COMMISSION**

**REGION IV**

Docket: 05000416  
License: NPF-29  
Report: 05000416/2011004  
Licensee: Entergy Operations, Inc.  
Facility: Grand Gulf Nuclear Station  
Location: 7003 Baldhill Road  
Port Gibson, MS 39150  
Dates: June 28, 2011, through September 27, 2011  
Inspectors: R. Smith, Senior Resident Inspector  
B. Rice, Resident Inspector  
B. Baca, Health Physicist  
L. Carson II, Senior Health Physicist  
N. Greene, Ph.D., Health Physicist  
B. Larson, Senior Operations Engineer  
C. Steely, Operations Engineer  
Approved By: Vincent Gaddy, Chief  
Reactor Project Branch C  
Division of Reactor Projects

## SUMMARY OF FINDINGS

IR 05000416/2011004; 06/28 – 09/27/2011; Grand Gulf Nuclear Station, Integrated Resident Report and Regional Report; Operability Evaluations and Identification and Resolution of Problems.

The report covered a 3-month period of inspection by resident inspectors and two announced baseline inspections by regional inspectors. Three Green, noncited violations of significance were identified. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using Inspection Manual Chapter 0609, "Significance Determination Process." The cross-cutting aspect is determined using Inspection Manual Chapter 0310, "Components Within the Cross Cutting Areas." Findings for which the significance determination process does not apply may be Green or may be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

### A. NRC-Identified Findings and Self-Revealing Findings

Cornerstone: Barrier Integrity

- Green. The inspectors reviewed a self-revealing, noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for inadequate preventative maintenance instructions, which resulted in the loss of control of the fuel handling bridge in the spent fuel pool. On July 15, 2011, while moving spent fuel from the spent fuel pool to the dry cask loading pool, the fuel handling platform did not stop when the paddle switch was released from the reverse position. The paddle switch did not return to the neutral position as designed, and the bridge continued to move in the reverse direction. The fuel handling bridge tripped the zone limit switches and came to a stop. The licensee concluded that the switches had to be cleaned, adjusted, and re-greased periodically to ensure proper operation. Immediate corrective actions included replacing the paddle switch and revising the preventive maintenance instruction to clean and re-grease the paddle switch before every dry cask fuel campaign. The licensee entered this issue into the corrective action program as Condition Report CR-GGN-2011-04896.

The finding is more than minor because it is associated with the procedure quality attribute of the Barrier Integrity Cornerstone and adversely affected cornerstone's objective to ensure that physical design barriers (fuel cladding, reactor coolant system and containment) protect the public from radionuclide releases caused by accidents or events. 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 it did not result from fuel handling errors that caused damage to fuel clad integrity because the fuel handling bridge movement was arrested prior to coming in contact with

the spent fuel pool wall. This finding had a cross-cutting aspect in the area of problem identification and resolution associated with the operational experience component because the licensee failed to evaluate the need to update the preventative maintenance procedure for known issues associated with the fuel handling bridge paddle switch prior to the implementation of the dry fuel storage campaign [P.2(b)] (Section 4OA2).

- Green. The inspectors reviewed a self-revealing, noncited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to install the correct amperage fuses in the hydrogen igniter control circuit. On August 4, 2011, the inspectors were performing an operability review of a condition report dealing with the division 1 hydrogen igniters. The licensee had determined that half the division 1 hydrogen igniters would not energize, and in their investigation, they determined that the loss of power to the hydrogen igniters was due to a blown fuse. The licensee also determined that the blown fuse was 0.3 amps and should have been 0.8 amps per plant drawings. The licensee performed an operability determination for the "as found" condition and determined that the circuit required 0.193 amps to power the circuit, which included the light bulbs. The inspectors reviewed the operability determination and the calculations and determined that the licensee's conclusions were reasonable. The licensee immediate corrective action was to replace the incorrect fuses one division at a time with the correct size 0.8 amp fuses and restore the hydrogen igniters to operable status. This issue was entered into the licensee's corrective action program as Condition Report CR-GGN-2011-005388.

This finding is more than minor because it is associated with the design control attribute of the Barrier Integrity Cornerstone, and it adversely affected the cornerstone's objective to ensure that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. Using Inspection Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," inspectors determined that Appendix H, "Containment Integrity Significance Determination Process," was required. Inspectors determined that this was a type B finding and, using section 6.0, determined that the finding was of very low safety significance (Green) because during their review, the inspectors noted that the hydrogen igniters had maintain functionality over the life of the plant based on satisfactory surveillance tests and no previous failures. Therefore, the exposed time for the de-energized hydrogen igniters was less than 3 days, resulting in very low safety significance. The Appendix H evaluation and the final risk significance determination were reviewed and concurred on by a regional senior reactor analyst. This issue is a latent issue associated with original plant equipment and is not indicative of current performance; therefore, no cross-cutting aspect was identified (Section 1R15).

#### Cornerstone: Mitigating Systems

- Green. The inspectors reviewed a self-revealing, noncited violation of Technical Specification 5.4.1.a for the licensee's failure to follow a procedure that required

them to evaluate components of critical systems in order to establish a preventive maintenance strategy, which resulted in unscheduled unavailability of safety-related systems and associated unscheduled entries into 72-hour shutdown Technical Specification action statements. The inspectors noted the following two examples dealing with failures of safety related equipment, which resulted in entering into shutdown limiting condition of operation. On June 2, 2011, Grand Gulf Nuclear Station experienced a failure of a relay in the standby service water B pump house ventilation system, which rendered the standby service water B system inoperable. The immediate corrective actions were to replace the relays and to restore the ventilation system. On June 22, 2011, the station experienced a failure of a motor contactor coil on breaker 52-154128, which caused the engineered safety feature electrical switchgear room cooler fan coil unit 1T46B003A not to run. The maintenance personnel determined the failure was due to a burnt motor contactor coil. The immediate corrective action was to replace the contactor coil and restore the room cooler. In both cases, the failed equipment was original plant equipment and preventive maintenance measures had not been established. The licensee entered these issues into the corrective action program as Condition Reports CR-GGN-2011-3730 and CR-GGN-2011-4313.

The finding is more than minor because it is associated with the equipment performance 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. 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 it did not result in a loss of system safety function of a single train for more than its technical specification's allowed outage time. This issue is a latent issue associated with original plant equipment and is not indicative of current performance; therefore, no cross-cutting aspect was identified (Section 4OA2).

## **B. Licensee-Identified Violations**

A violation of very low safety significance, which was identified by the licensee, has been reviewed by the inspectors. Corrective actions, taken or planned by the licensee, have been entered into the licensee's corrective action program. The violation and condition report are listed in Section 4OA7.

## REPORT DETAILS

### Summary of Plant Status

Grand Gulf Nuclear Station began the inspection period at 60 percent rated thermal power due to fuel leak location testing, which began the previous quarter. During the inspection period, the plant was limited to 96 percent power due to the isolation of the second-stage steam to both the A and B moisture separator reheaters on January 9, 2011.

- On June 29, 2011, after locating and suppressing the fuel leak, the plant was returned to 96 percent power.
- On July 9, 2011, operators reduced power to 63 percent for a planned control rod sequence exchange, control rod testing, and turbine testing. The plant was returned to 96 percent power on July 10, 2011.
- On August 5, 2011, operators reduced power to 75 percent for control rod testing, control rod friction testing and turbine testing. The plant was returned to 96 percent power on August 7, 2011.
- On August 12, 2011, operators reduced power to 94.5 percent to remove the heater drain pump B from service to repair a steam leak on a pipe plug on the pump casing. The plant was returned to 96 percent power the same day.
- On September 1, 2011, operators reduced power to 85 percent for planned control rod testing and turbine testing. The plant was returned to 96 percent power on September 2, 2011.

### 1. REACTOR SAFETY

#### Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, and Emergency Preparedness

#### 1R04 Equipment Alignments (71111.04)

##### .1 Partial Walkdown

##### a. Inspection Scope

The inspectors performed partial system walkdowns of the following risk-significant systems:

- Standby gas treatment system A during a maintenance outage of standby gas treatment system B
- Standby fresh air system B during a surveillance run of standby fresh air system A



- Division 3 emergency diesel generator following a surveillance run

The inspectors selected these systems based on their risk significance relative to the reactor safety cornerstones at the time they were inspected. The inspectors attempted to identify any discrepancies that could affect the function of the system, and, therefore, potentially increase risk. The inspectors reviewed applicable operating procedures, system diagrams, Updated Final Safety Analysis Report, technical specification requirements, administrative technical specifications, outstanding work orders, condition reports, and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have rendered the systems incapable of performing their intended functions. The inspectors also inspected accessible portions of the systems to verify system components and support equipment were aligned correctly and operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no obvious deficiencies. The inspectors also verified that the licensee had properly identified and resolved equipment alignment problems that could cause initiating events or impact the capability of mitigating systems or barriers and entered them into the corrective action program with the appropriate significance characterization. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of three partial system walkdown samples as defined in Inspection Procedure 71111.04-05.

b. Findings

No findings were identified.

**1R05 Fire Protection (71111.05)**

.1 Quarterly Fire Inspection Tours

a. Inspection Scope

The inspectors conducted fire protection walkdowns that were focused on availability, accessibility, and the condition of firefighting equipment in the following risk-significant plant areas:

- Division 1 switchgear room (OC202)
- Division 2 switchgear room (OC215)
- Division 1 and 2 remote shutdown rooms and division 3 switch gear room (OC208, OC208A, and OC210)
- Division 1 and 2 reactor protection motor generator set rooms (OC407, OC409, OC707, and OC709)

- Upper and lower cable spreading rooms (OC401, OC410 and OC702)

The inspectors reviewed areas to assess if licensee personnel had implemented a fire protection program that adequately controlled combustibles and ignition sources within the plant; effectively maintained fire detection and suppression capability; maintained passive fire protection features in good material condition; and had implemented adequate compensatory measures for out of service, degraded or inoperable fire protection equipment, systems, or features, in accordance with the licensee's fire plan. The inspectors selected fire areas based on their overall contribution to internal fire risk as documented in the plant's Individual Plant Examination of External Events with later additional insights, their potential to affect equipment that could initiate or mitigate a plant transient, or their impact on the plant's ability to respond to a security event. Using the documents listed in the attachment, the inspectors verified that fire hoses and extinguishers were in their designated locations and available for immediate use; that fire detectors and sprinklers were unobstructed; that transient material loading was within the analyzed limits; and that fire doors, dampers, and penetration seals appeared to be in satisfactory condition. The inspectors also verified that minor issues identified during the inspection were entered into the licensee's corrective action program. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of five quarterly fire-protection inspection samples as defined in Inspection Procedure 71111.05-05.

b. Findings

No findings were identified.

**1R11 Licensed Operator Requalification Program (71111.11)**

.1 Quarterly Review

a. Inspection Scope

On August 3, 2011, the inspectors observed a crew of licensed operators in the plant's simulator to verify that operator performance was adequate, evaluators were identifying and documenting crew performance problems and training was being conducted in accordance with licensee procedures. The inspectors evaluated the following areas:

- Licensed operator performance
- Crew's clarity and formality of communications
- Crew's ability to take timely actions in the conservative direction
- Crew's prioritization, interpretation, and verification of annunciator alarms
- Crew's correct use and implementation of abnormal and emergency procedures

- Control board manipulations
- Oversight and direction from supervisors
- Crew's ability to identify and implement appropriate technical specification actions and emergency plan actions and notifications

The inspectors compared the crew's performance in these areas to pre-established operator action expectations and successful critical task completion requirements. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of one quarterly licensed-operator requalification program sample as defined in Inspection Procedure 71111.11.

b. Findings

No findings were identified.

.2 Biennial Inspection (71111.11B)

The licensed operator requalification program involves two training cycles that are conducted over a 2-year period. In the first cycle, the annual cycle, the operators are administered an operating test consisting of job performance measures and simulator scenarios. In the second part of the training cycle, the biennial cycle, operators are administered an operating test and a comprehensive written examination.

a. Inspection Scope

To assess the performance effectiveness of the licensed operator requalification program, the inspectors conducted personnel interviews, reviewed both the operating tests and written examinations, and observed ongoing operating test activities.

The inspectors interviewed three licensee personnel, consisting of one operator, one instructor, and one senior operator, to determine their understanding of the policies and practices for administering requalification examinations. The inspectors also reviewed operator performance on the written exams and operating tests. These reviews included observations of portions of the operating tests by the inspectors. The operating tests observed included six job performance measures and two scenarios that were used in the current biennial requalification cycle. These observations allowed the inspectors to assess the licensee's effectiveness in conducting the operating test to ensure operator mastery of the training program content. The inspectors also reviewed medical records of six licensed operators for conformance to license conditions, the licensee's system for tracking qualifications, and records of license reactivation for five operators.

The results of these examinations were reviewed to determine the effectiveness of the licensee's appraisal of operator performance and to determine if feedback of performance analysis into the requalification training program was being accomplished. The inspectors interviewed members of the training department and reviewed minutes of

training review group meetings to assess the responsiveness of the licensed operator requalification program to incorporate the lessons learned from both plant and industry events. Examination results were also assessed to determine if they were consistent with the guidance contained in NUREG 1021, "Operator Licensing Examination Standards for Power Reactors", Revision 9, Supplement 1, and NRC Manual Chapter 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process."

In addition to the above, the inspectors reviewed examination security measures, simulator fidelity, and existing logs of simulator deficiencies.

On September 6, 2011, the licensee informed the lead inspector of the biennial examination results. The inspector compared these results to Appendix I, "Licensed Operator Requalification Significance Determination Process."

The inspectors completed one inspection sample of the biennial licensed operator requalification program.

b. Findings

No findings were identified.

**1R12 Maintenance Effectiveness (71111.12)**

a. Inspection Scope

The inspectors evaluated degraded performance issues involving the following risk significant system:

- Neutron monitoring system (C51)

The inspectors reviewed events such as where ineffective equipment maintenance has resulted in valid or invalid automatic actuations of engineered safeguards systems and independently verified the licensee's actions to address system performance or condition problems in terms of the following:

- Implementing appropriate work practices
- Identifying and addressing common cause failures
- Scoping of systems in accordance with 10 CFR Part 50.65(b)
- Characterizing system reliability issues for performance
- Charging unavailability for performance
- Trending key parameters for condition monitoring

- Ensuring proper classification in accordance with 10 CFR Part 50.65(a)(1) or - (a)(2)
- Verifying appropriate performance criteria for structures, systems, and components classified as having an adequate demonstration of performance through preventive maintenance, as described in 10 CFR Part 50.65(a)(2), or as requiring the establishment of appropriate and adequate goals and corrective actions for systems classified as not having adequate performance, as described in 10 CFR Part 50.65(a)(1)

The inspectors assessed performance issues with respect to the reliability, availability, and condition monitoring of the system. In addition, the inspectors verified maintenance effectiveness issues were entered into the corrective action program with the appropriate significance characterization. Specific documents reviewed during this inspection are listed in the attachment.

The inspectors also performed a review of the (a)(3) Periodic Evaluation. This review is credited as an inspection sample.

These activities constitute completion of two quarterly maintenance effectiveness samples as defined in Inspection Procedure 71111.12-05.

b. Findings

No findings were identified.

**1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13)**

a. Inspection Scope

The inspectors reviewed licensee personnel's evaluation and management of plant risk for the maintenance and emergent work activities affecting risk-significant and safety-related equipment listed below to verify that the appropriate risk assessments were performed prior to removing equipment for work:

- The week of July 11, 2011, while the plant placed the mitigating monitor system in service after a design change
- The week of August 1, 2011, while the plant performed a system outage on the standby gas treatment system B
- The week of August 22, 2011, while the plant performed maintenance outage on the diesel driven fire pump A and the division 1 containment and drywell hydrogen analyzers

- The week of September 19, 2011, during emergent issues with a bearing replacement for reactor protection system motor generator set B, resulting in the licensee having to enter yellow risk

The inspectors selected these activities based on potential risk significance relative to the reactor safety cornerstones. As applicable for each activity, the inspectors verified that licensee personnel performed risk assessments as required by 10 CFR Part 50.65(a)(4) and that the assessments were accurate and complete. When licensee personnel performed emergent work, the inspectors verified that the licensee personnel promptly assessed and managed plant risk. The inspectors reviewed the scope of maintenance work, discussed the results of the assessment with the licensee's probabilistic risk analyst or shift technical advisor, and verified plant conditions were consistent with the risk assessment. The inspectors also reviewed the technical specification requirements and inspected portions of redundant safety systems, when applicable, to verify risk analysis assumptions were valid and applicable requirements were met. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of four maintenance risk assessments and emergent work control inspection samples as defined in Inspection Procedure 71111.13-05.

b. Findings

No findings were identified.

**1R15 Operability Evaluations (71111.15)**

a. Inspection Scope

The inspectors reviewed the following issues:

- The interface of the mitigating monitoring system and the plant chilled water system not having a radiation monitor on the plant chilled water system
- Standby service water system B degraded bolts on return flange
- Hydrogen igniter division 1 fuse failure
- Anticipated transient without a scram alternate rod insertion degraded batteries

The inspectors selected these potential operability issues based on the risk significance of the associated components and systems. The inspectors evaluated the technical adequacy of the evaluations to ensure that technical specification operability was properly justified and the subject component or system remained available such that no unrecognized increase in risk occurred. The inspectors compared the operability and

design criteria in the appropriate sections of the technical specifications and Update Final Safety Analysis Report to the licensee personnel's evaluations to determine whether the components or systems were operable. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled. The inspectors determined, where appropriate, compliance with bounding limitations associated with the evaluations. Additionally, the inspectors also reviewed a sampling of corrective action documents to verify that the licensee was identifying and correcting any deficiencies associated with operability evaluations. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of four operability evaluations inspection samples as defined in Inspection Procedure 71111.15-04.

b. Findings

Introduction. The inspectors reviewed a self-revealing, Green noncited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to install the correct amperage fuses in the hydrogen igniter control circuit.

Description. On August 4, 2011, the inspectors were performing an operability review of condition report CR-GGN-2011-05388. Night shift operators were attempting to run the division 1 hydrogen igniters and determined that half the division 1 igniters would not energize. The licensee investigated the loss of power to the igniters and determined that one of the fuses for the division 1 hydrogen igniter control circuit had blown. The licensee also determined that the blown fuse was 0.3 amps and should have been 0.8 amps per plant drawings. The shift manager declared the division 1 hydrogen igniters inoperable and entered the 30 day shutdown limiting condition of operation. The shift manager directed the maintenance department to replace the blown fuse with an available 0.3 amp fuse until engineering could perform an evaluation of the circuit while keeping the division 1 hydrogen igniters in an inoperable status. Through a review of site drawings and calculations, it was determined that the correct fuse size for the circuit was 0.8 amps. The licensee performed an operability determination for the condition and determined that the circuit required 0.193 amps to power the circuit, which included the light bulbs. The inspectors reviewed the operability determination and the calculations and determined that the licensee's conclusions were reasonable. The licensee replaced the incorrect fuses one division at a time with the correct size 0.8 amp fuses and restored the hydrogen igniters to operable status.

The licensee documented this issue in their corrective action program as Condition Report CR-GGN-2011-05388. The short term corrective action included replacing the fuses with the correct size. Additionally, the licensee conducted a review of their documents to determine when the wrong fuses were installed. The licensee concluded that wrong fuses were installed at plant startup.

Analysis. The inspectors determined that the failure to install the correct size fuse in the control circuit of the hydrogen igniters is a performance deficiency. This finding is more

than minor because it is associated with the design control attribute of the Barrier Integrity Cornerstone and adversely affects the cornerstone's objective to ensure that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. Using Inspection Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," inspectors determined that Appendix H, "Containment Integrity Significance Determination Process," was required. Inspectors determined that this was a type B finding and, using section 6.0, determined that the finding was of very low safety significance (Green) because during their review, the inspectors noted that the hydrogen igniters had maintained functionality over the life of the plant based on satisfactory surveillance tests and had no previous failures. Therefore, the exposed time for the de-energized hydrogen igniters was less than 3 days, resulting in very low safety significance. The Appendix H evaluation and the final risk significance determination was reviewed and concurred on by a regional senior reactor analyst. This issue is a latent issue associated with original plant equipment and is not indicative of current performance; therefore no cross-cutting aspect was identified.

Enforcement. Title 10 of Code of Federal Regulations Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established for the selection and review of suitability of application of materials, parts, equipment, and processes that are essential to the safety-related functions of the structures, systems, and components. Contrary to the above, on August 4, 2011, and before, the licensee failed to ensure the correct fuses were installed in the hydrogen igniter control circuits during the startup of the plant. This issue was entered into the licensee's corrective action program as Condition Report CR-GGN-2011-05388. Because this finding was determined to be of very low safety significance and was entered into the licensee's corrective action program, this violation is being treated as a noncited violation, consistent with Section 2.3.2a of the NRC Enforcement Policy: NCV 05000416/2011004-01, "Failure to Ensure Correct Fuses were Installed in the Hydrogen Igniter Control Circuits."

## **1R19 Postmaintenance Testing (71111.19)**

### **a. Inspection Scope**

The inspectors reviewed the following postmaintenance activities to verify that procedures and test activities were adequate to ensure system operability and functional capability:

- Standby gas treatment system B after scheduled maintenance
- Diesel driven fire pump A after scheduled maintenance
- Standby service water system B fan C after scheduled maintenance
- Containment inner door seal after scheduled maintenance



- Reactor protection system A and reactor protection system B motor generator set after breaker work on A and bearing replacement on B motor generator set
- Safety related switchgear room ventilation fan bearing replacement

The inspectors selected these activities based upon the structure, system, or component's ability to affect risk. The inspectors evaluated these activities for the following:

- The effect of testing on the plant had been adequately addressed; testing was adequate for the maintenance performed
- Acceptance criteria were clear and demonstrated operational readiness; test instrumentation was appropriate

The inspectors evaluated the activities against the technical specifications, the Update Final Safety Analysis Report, 10 CFR Part 50 requirements, licensee procedures, and various NRC generic communications to ensure that the test results adequately ensured that the equipment met the licensing basis and design requirements. In addition, the inspectors reviewed corrective action documents associated with postmaintenance tests to determine whether the licensee was identifying problems and entering them in the corrective action program and that the problems were being corrected commensurate with their importance to safety. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of six postmaintenance testing inspection samples as defined in Inspection Procedure 71111.19-05.

b. Findings

No findings were identified.

**1R22 Surveillance Testing (71111.22)**

a. Inspection Scope

The inspectors reviewed the Updated Final Safety Analysis Report, procedure requirements, and technical specifications to ensure that the surveillance activities listed below demonstrated that the systems, structures, and/or components tested were capable of performing their intended safety functions. The inspectors either witnessed or reviewed test data to verify that the significant surveillance test attributes were adequate to address the following:

- Preconditioning
- Evaluation of testing impact on the plant

- Acceptance criteria
- Test equipment
- Procedures
- Jumper/lifted lead controls
- Test data
- Testing frequency and method demonstrated technical specification operability
- Test equipment removal
- Restoration of plant systems
- Fulfillment of ASME Code requirements
- Updating of performance indicator data
- Engineering evaluations, root causes, and bases for returning tested systems, structures, and components not meeting the test acceptance criteria were correct
- Reference setting data
- Annunciators and alarms set-points

The inspectors also verified that licensee personnel identified and implemented any needed corrective actions associated with the surveillance testing.

- On July 5, 2011, division 2, 125 Vdc battery charger 1B4
- On August 3, 2011, residual heat removal A quarterly inservice test
- On August 13, 2011, containment isolation valves 1E61-F009 and 1E61-F010
- On September 16, 2011, division 3 high pressure core spray diesel generator
- On September 20, 2011, main steam line high flow functional test channels 1A, 2A, 3A, 4A, 1C, 2C, 3C, and 4C

Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of five surveillance testing inspection samples as defined in Inspection Procedure 71111.22-05.

b. Findings

No findings were identified.

**Cornerstone: Emergency Preparedness**

**1EP6 Drill Evaluation (71114.06)**

.1 Emergency Preparedness Drill Observation

a. Inspection Scope

The inspectors evaluated the conduct of a routine licensee emergency drill on July 19, 2011, to identify any weaknesses and deficiencies in classification, notification, and protective action recommendation development activities. The inspectors observed emergency response operations in the control room simulator and the emergency operations facility to determine whether the event classification, notifications, and protective action recommendations were performed in accordance with procedures. The inspectors also attended the licensee drill critique to compare any inspector-observed weakness with those identified by the licensee staff in order to evaluate the critique and to verify whether the licensee staff was properly identifying weaknesses and entering them into the corrective action program. As part of the inspection, the inspectors reviewed the drill package and other documents listed in the attachment.

These activities constitute completion of one sample as defined in Inspection Procedure 71114.06-05.

b. Findings

No findings were identified.

**2. RADIATION SAFETY**

**Cornerstone: Occupational and Public Radiation Safety**

**2RS06 Radioactive Gaseous and Liquid Effluent Treatment (71124.06)**

a. Inspection Scope

This area was inspected to: (1) ensure the gaseous and liquid effluent processing systems are maintained so radiological discharges are properly mitigated, monitored, and evaluated with respect to public exposure; (2) ensure abnormal radioactive gaseous or liquid discharges and conditions, when effluent radiation monitors are out-of-service, are controlled in accordance with the applicable regulatory requirements and licensee procedures; (3) verify the licensee's quality control program ensures the radioactive effluent sampling and analysis requirements are satisfied so discharges of radioactive materials are adequately quantified and evaluated; and (4) verify the adequacy of public dose projections resulting from radioactive effluent discharges. The inspectors used the

requirements in 10 CFR Part 20; 10 CFR Part 50, Appendices A and I; 40 CFR Part 190; the Offsite Dose Calculation Manual, and licensee procedures required by the Technical Specifications as criteria for determining compliance. The inspectors interviewed licensee personnel and reviewed and/or observed the following items:

- Radiological effluent release reports since the previous inspection and reports related to the effluent program issued since the previous inspection, if any
- Effluent program implementing procedures, including sampling, monitor setpoint determinations and dose calculations
- Equipment configuration and flow paths of selected gaseous and liquid discharge system components, filtered ventilation system material condition, and significant changes to their effluent release points, if any, and associated 10 CFR Part 50.59 reviews
- Selected portions of the routine processing and discharge of radioactive gaseous and liquid effluents (including sample collection and analysis)
- Controls used to ensure representative sampling and appropriate compensatory sampling
- Results of the inter-laboratory comparison program
- Effluent stack flow rates
- Surveillance test results of technical specification-required ventilation effluent discharge systems since the previous inspection
- Significant changes in reported dose values, if any
- A selection of radioactive liquid and gaseous waste discharge permits
- Part 61 analyses and methods used to determine which isotopes are included in the source term
- Offsite dose calculation manual changes, if any
- Meteorological dispersion and deposition factors
- Latest land use census
- Records of abnormal gaseous or liquid tank discharges, if any
- Groundwater monitoring results

- Changes to the licensee's written program for indentifying and controlling contaminated spills/leaks to groundwater, if any
- Identified leakage or spill events and entries made into 10 CFR Part 50.75 (g) records, if any, and associated evaluations of the extent of the contamination and the radiological source term
- Offsite notifications, and reports of events associated with spills, leaks, or groundwater monitoring results, if any
- Audits, self-assessments, reports, and corrective action documents related to radioactive gaseous and liquid effluent treatment since the last inspection

Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of the one required sample, as defined in Inspection Procedure 71124.06-05.

b. Findings

No findings were identified.

**2RS07 Radiological Environmental Monitoring Program (71124.07)**

a. Inspection Scope

This area was inspected to: (1) ensure that the radiological environmental monitoring program verifies the impact of radioactive effluent releases to the environment and sufficiently validates the integrity of the radioactive gaseous and liquid effluent release program; (2) verify that the radiological environmental monitoring program is implemented consistent with the licensee's technical specifications and/or offsite dose calculation manual, and to validate that the radioactive effluent release program meets the design objective contained in Appendix I to 10 CFR Part 50; and (3) ensure that the radiological environmental monitoring program monitors non-effluent exposure pathways, is based on sound principles and assumptions, and validates that doses to members of the public are within the dose limits of 10 CFR Part 20 and 40 CFR Part 190, as applicable. The inspectors reviewed and/or observed the following items:

- Annual environmental monitoring reports and offsite dose calculation manual
- Selected air sampling and thermoluminescence dosimeter monitoring stations
- Collection and preparation of environmental samples
- Operability, calibration, and maintenance of meteorological instruments

- Selected events documented in the annual environmental monitoring report which involved a missed sample, inoperable sampler, lost thermoluminescence dosimeter, or anomalous measurement
- Selected structures, systems, or components that may contain licensed material and have a credible mechanism for licensed material to reach ground water
- Records required by 10 CFR Part 50.75(g)
- Significant changes made by the licensee to the offsite dose calculation manual as the result of changes to the land census or sampler station modifications since the last inspection
- Calibration and maintenance records for selected air samplers, composite water samplers, and environmental sample radiation measurement instrumentation
- Inter-laboratory comparison program results
- Audits, self-assessments, reports, and corrective action documents related to the radiological environmental monitoring program since the last inspection

Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of the one required sample as defined in Inspection Procedure 71124.07-05.

b. Findings

No findings were identified.

**2RS08 Radioactive Solid Waste Processing, and Radioactive Material Handling, Storage, and Transportation (71124.08)**

a. Inspection Scope

This area was inspected to verify the effectiveness of the licensee's programs for processing, handling, storage, and transportation of radioactive material. The inspectors used the requirements of 10 CFR Parts 20, 61, and 71 and Department of Transportation regulations contained in 49 CFR Parts 171-180 for determining compliance. The inspectors interviewed licensee personnel and reviewed the following items:

- The solid radioactive waste system description, process control program, and the scope of the licensee's audit program
- Control of radioactive waste storage areas including container labeling/markings and monitoring containers for deformation or signs of waste decomposition

- Changes to the liquid and solid waste processing system configuration including a review of waste processing equipment that is not operational or abandoned in place
- Radio-chemical sample analysis results for radioactive waste streams and use of scaling factors and calculations to account for difficult-to-measure radionuclides
- Processes for waste classification including use of scaling factors and 10 CFR Part 61 analysis
- Shipment packaging, surveying, labeling, marking, placarding, vehicle checking, driver instructing, and preparation of the disposal manifest
- Audits, self-assessments, reports, and corrective action reports radioactive solid waste processing, and radioactive material handling, storage, and transportation performed since the last inspection

Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of the one required sample as defined in Inspection Procedure 71124.08-05.

b. Findings

No findings were identified.

**4. OTHER ACTIVITIES**

**40A1 Performance Indicator Verification (71151)**

.1 Data Submission Issue

a. Inspection Scope

The inspectors performed a review of the performance indicator data submitted by the licensee for the second quarter 2011 performance indicators for any obvious inconsistencies prior to its public release in accordance with Inspection Manual Chapter 0608, "Performance Indicator Program."

This review was performed as part of the inspectors' normal plant status activities and, as such, did not constitute a separate inspection sample.

b. Findings

No findings were identified.

## 40A2 Identification and Resolution of Problems (71152)

### **Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Public Radiation Safety, Occupational Radiation Safety, and Physical Protection**

#### .1 Routine Review of Identification and Resolution of Problems

##### a. Inspection Scope

As part of the various baseline inspection procedures discussed in previous sections of this report, the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify that they were being entered into the licensee's corrective action program at an appropriate threshold, that adequate attention was being given to timely corrective actions, and that adverse trends were identified and addressed. The inspectors reviewed attributes that included the complete and accurate identification of the problem; the timely correction, commensurate with the safety significance; the evaluation and disposition of performance issues, generic implications, common causes, contributing factors, root causes, extent of condition reviews, and previous occurrences reviews; and the classification, prioritization, focus, and timeliness of corrective actions. Minor issues entered into the licensee's corrective action program because of the inspectors' observations are included in the attached list of documents reviewed.

These routine reviews for the identification and resolution of problems did not constitute any additional inspection samples. Instead, by procedure, they were considered an integral part of the inspections performed during the quarter and documented in Section 1 of this report.

##### b. Findings

No findings were identified.

#### .2 Daily Corrective Action Program Reviews

##### a. Inspection Scope

In order to assist with the identification of repetitive equipment failures and specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's corrective action program. The inspectors accomplished this through review of the station's daily corrective action documents.

The inspectors performed these daily reviews as part of their daily plant status monitoring activities and, as such, did not constitute any separate inspection samples.

##### b. Findings

No findings were identified.



.3 Selected Issue Follow-up Inspection: Inadequate Preventive Maintenance for the Refueling Platform

a. Inspection Scope

During a review of items entered in the licensee's corrective action program, the inspectors recognized a corrective action item documenting a loss of control of the fuel handling bridge during the licensee's dry cask storage campaign. The inspectors reviewed the apparent cause evaluation and associated corrective actions.

These activities constitute completion of one in-depth problem identification and resolution sample as defined in Inspection Procedure 71152-05.

b. Findings

Introduction. The inspectors reviewed a self-revealing, Green noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for inadequate preventative maintenance instructions, which resulted in the loss of control of the fuel handling bridge in the spent fuel pool.

Description. On July 15, 2011, while moving spent fuel from the spent fuel pool to the dry cask loading pool, the fuel handling platform did not stop when the paddle switch was released from the reverse position. The fuel handling platform is electrically controlled by a paddle switch that can be moved in the forward and reverse direction and has a spring return to neutral. When the fuel handling operator releases the paddle, it should return to neutral, which stops the movement of the motor. The bridge then coasts to a neutral state until the brake sets and stops the bridge. The fuel handling bridge was entering the horizontal fuel transfer canal when the operator released the paddle switch from the reverse position. The paddle switch did not return to the neutral position as designed, and the bridge continued to move in the reverse direction. Efforts to bring the bridge to a stop by manipulating the paddle switch to the forward direction failed to prevent the bridge from tripping the zone limit switch. When the zone limit switch was actuated, the motor returned to a neutral state, and the bridge stopped as designed. The zone limit switch is the last defense preventing the fuel handling bridge from colliding into the fuel pool wall, and it performed its function as designed.

The licensee determined that the fuel bridge did not stop when the paddle was released because the paddle switch was stuck in the reverse direction. The licensee was aware that the fuel handling bridge paddle switches were prone to sticking for various reasons. In 2001, a condition report was written documenting that the grease used in the paddle switches can evaporate and become sticky over time. Furthermore, dust and moisture can affect the lubrication capability of the grease. The licensee concluded that the switches have to be cleaned, adjusted, and re-greased periodically to ensure proper operation. The preventative maintenance strategy the licensee developed was based on an 18-month period to coincide with refueling outages. During the implementation of the dry fuel storage campaign, which occurs between refueling outages, the licensee did not

perform the preventative maintenance on the paddle switch prior to utilizing the fuel handling bridge.

The licensee documented this issue in Condition Report CR-GGN-2011-04896. Corrective actions included replacing the paddle switch and adjusting the preventive maintenance instructions to include cleaning and re-greasing the paddle switch on the fuel handling platform before every dry fuel cask campaign.

Analysis. The inspectors determined that the failure to implement preventative maintenance prior to using the fuel handling bridge in support of the dry fuel storage campaign is a performance deficiency. The finding is more than minor because it is associated with the procedure quality attribute of the Barrier Integrity Cornerstone and adversely affects the cornerstone's objective to ensure that physical design barriers (fuel cladding, reactor coolant system and containment) protect the public from radionuclide releases caused by accidents or events. 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 it did not result from fuel handling errors that caused damage to fuel clad integrity because the fuel handling bridge movement was arrested prior to coming in contact with the spent fuel pool wall. This finding has a cross-cutting aspect in the area of problem identification and resolution associated with the operational experience component because the licensee failed to evaluate the need to update the preventative maintenance procedure for known issues associated with the fuel handling bridge paddle switch prior to the implementation of the dry fuel storage campaign [P.2(b)].

Enforcement. Title 10 CFR Part 50 Appendix B, Criterion V, states, in part, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures and drawings." Contrary to the above, on and before July 15, 2011, the licensee failed to prescribe preventative maintenance instructions for the fuel handling bridge paddle switch prior to implementing the dry cask loading campaign. The finding was entered into the corrective action program Condition Report CR-GGN-2011-04896. Because the finding was determined to be of very low safety significance and was entered into the licensee's corrective action program, this violation is being treated as a noncited violation consistent with Section 2.3.2a of the NRC Enforcement Policy: NCV 05000416/2011004-02, "Failure to Perform Preventative Maintenance on the Fuel Handling Bridge Paddle Switch."

.4 Selected Issue Follow-up Inspection: Inadequate Preventive Maintenance for the Critical Equipment

a. Inspection Scope

During a review of items entered in the licensee's corrective action program, the inspectors recognized a corrective action item documenting excessive relay cycling associated with NUS thermal switches. The inspectors reviewed apparent cause evaluations and associated corrective actions.

These activities constitute completion of one in-depth problem identification and resolution sample as defined in Inspection Procedure 71152-05.

b. Findings

Introduction. The inspectors reviewed a self-revealing, Green noncited violation of Technical Specification 5.4.1.a for the licensee's failure to follow a procedure that required them to evaluate components of critical systems in order to establish a preventive maintenance strategy, which resulted in unscheduled unavailability of safety-related systems and associated unscheduled entries into 72-hour shutdown Technical Specification action statements.

Description. While reviewing condition reports associated with NUS thermal switches, the inspectors noted the following two examples of failures of safety related equipment that occurred as a result of the licensee's failure to perform appropriate preventive maintenance on components:

- On June 2, 2011, Grand Gulf Nuclear Station experienced a failure of a relay in the standby service water B pump house ventilation system, which rendered the standby service water B system inoperable. The immediate corrective actions were to replace the relays and to restore the ventilation system.
- On June 22, 2011, the station experienced a failure of a motor contactor coil on breaker 52-154128, which caused the engineered safety feature electrical switchgear room cooler fan coil unit 1T46B003A not to run. The immediate corrective action was to replace the contactor coil and to restore the room cooler.

In both cases, the failed components were original plant equipment. The inspectors determined that the failed components were correctly classified as high-critical, but that the licensee had not established the need for any preventive-maintenance measures for these components as required by procedure.. The licensee entered these issues into the corrective action program as Condition Reports CR-GGN-2011-3730 and CR-GGN-2011-4313. Immediate corrective actions implemented by the licensee included establishing preventive maintenance measures for the failed equipment and identifying any additional components that were used in critical systems that had not been previously identified.

Procedure EN-DC-335, Rev. 3, "PM Basis Template," requires the licensee to perform preventive-maintenance evaluations for all high-critical components. Procedure EN-DC-153, "Preventive Maintenance Component Classification," revision 6, says that any component whose failure causes the unit to enter a 72-hour shutdown Technical Specification action statement is a high-critical component.

Analysis. The inspectors determined that the licensee's failure to follow procedure EN-DC-335 and evaluate the damper relays in the standby service water B pump house ventilation system and contactor coils in breaker 52-154128 for preventative maintenance was a performance deficiency. The finding is more than minor because it is associated the equipment performance 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. 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 it did not result in a loss of system safety function of a single train for more than its technical specification's allowed outage time. This issue is a latent issue associated with original plant equipment, so its cause is not indicative of current performance; therefore, no cross-cutting aspect was identified.

Enforcement. Technical Specification 5.4.1.a requires that written procedures be established, implemented, and maintained as recommended by NRC Regulatory Guide 1.33, "Quality Assurance Program Requirements," Revision 2, Appendix A, February 1978. Regulatory Guide 1.33, Appendix A, Section 9a, includes procedures for maintenance that can affect the performance of safety-related equipment. Procedure EN-DC-335, Rev. 3, "PM Basis Template," requires a preventive maintenance basis template be applied to all critical components.

Contrary to the above, before June 2, 2011, the licensee failed to apply a preventive maintenance basis template to two critical components, in that:

- damper relays in the standby service water B pump house ventilation system and contactor coils in breaker 52-154128 were high-critical components, and
- the licensee failed to apply preventive maintenance basis template to damper relays in the standby service water B pump house ventilation system and contactor coils in breaker 52-154128.

The finding was entered into the licensee's corrective action program as Condition Reports CR-GGN-2011-3730 and CR-GGN-2011-4313. Because this finding was determined to be of very low safety significance and was entered into the licensee's corrective action program, this violation is being treated as a noncited violation, consistent with Section 2.3.2a of the NRC Enforcement Policy: NCV 05000416/2011004-03, "Failure to Establish Preventive Maintenance for Components Used in Critical Applications."

## .5 In-depth Review of Operator Workarounds

### a. Inspection Scope

The inspectors evaluated the licensee's implementation of their process used to identify, document, track, and resolve operational challenges. Inspection activities included, but were not limited to, a review of the cumulative effects of the operator workarounds on system availability and the potential for improper operation of the system, for potential impacts on multiple systems, and on the ability of operators to respond to plant transients or accidents.

The inspectors performed a review of the cumulative effects of operator workarounds. The documents listed in the attachment were reviewed to accomplish the objectives of the inspection procedure. The inspectors reviewed current operational challenge records to determine whether the licensee was identifying operator challenges at an appropriate threshold, had entered them into their corrective action program, and had proposed or implemented appropriate and timely corrective actions, which addressed each issue. Reviews were conducted to determine if any operator challenge could increase the possibility of an initiating event, if the challenge was contrary to training, required a change from long-standing operational practices, or if it created the potential for inappropriate compensatory actions. Additionally, all temporary modifications were reviewed to identify any potential effect on the functionality of mitigating systems, impaired access to equipment, or required equipment uses for which the equipment was not designed. Daily plant and equipment status logs, degraded instrument logs, and operator aids or tools being used to compensate for material deficiencies were also assessed to identify any potential sources of unidentified operator workarounds.

These activities constitute completion of one operator workarounds annual inspection sample as defined in Inspection Procedure 71152.

b. Findings

No findings were identified.

**40A3 Event Follow-up (71153)**

.1 Reactor Protection System Power Supply Issues

On September 3, 2011, the output breaker on the division 2 reactor protection system motor generator set tripped, causing a division 2 half scram. The operators responded by entering the "Loss of RPS Bus," off normal event procedure and transferred the reactor protection system to the alternate power supply, reset the half scram, and exited the off normal event procedure. On September 11, 2011, while the reactor protection system B was still aligned with the alternate power supply, the division 1 reactor protector system motor generator set electrical protection assembly breaker C71S003C tripped, causing a division 1 half scram. The operators declared the electrical protection assembly breaker inoperable and entered an unplanned 72 hour limiting condition of operation. The operators reset the electrical protection assembly breaker and re-energized the motor generator set to supply power to the division 1 reactor protection system and reset the half scram. The operators remained in the limiting condition of operation until the cause of the electrical protection assembly breaker trip could be determined.

The Grand Gulf Nuclear Station Updated Final Safety Analysis Report and reactor protection system operating instruction prohibited placing both divisions of the reactor protection system on the alternate power supply concurrently. The licensee proceeded down three parallel paths to exit the limiting condition of operation, one of which was to change the Updated Final Safety Analysis Report and station procedures via the 10 CFR Part 50.59 process to allow the concurrent use of alternate power supply for both

divisions of the reactor protection systems. On September 13, 2011, the licensee completed the process applicability determination that allowed the change to the Updated Final Safety Analysis Report and plant procedures. Prior to the expiration of the limiting condition of operation, the operators aligned the division 1 reactor protection system to its alternate power supply and exited the limiting condition of operation. The inspectors monitored the licensee's activities to exit the unplanned limiting condition of operation, which included attending meetings, evaluating the license basis document change request for changing the Updated Final Safety Analysis Report and plant procedures, and interfacing with licensee management to determine their plan of action.

Specific documents reviewed during this event follow-up are listed in the attachment.

These activities constitute completion of one event follow-up as defined in Inspection Procedure 71153-05.

b. Findings

No findings were identified.

**40A6 Meetings**

Exit Meeting Summary

The inspectors debriefed Marty Richey, Director of Nuclear Safety Assurance, and other members of the licensee staff of the results of the licensed operator requalification program inspection on August 18, 2011, and telephonically exited with Michael Bacon, Superintendent, Simulator and Training Support, on September 26, 2011. The licensee representative acknowledged the inspection results. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

On August 19, 2011, the inspectors presented the results of the radiation safety inspections to Marty Richey, Director of Nuclear Safety Assurance, and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

On October 11, 2011, the inspectors presented the inspection results to Mike Perito, Site Vice President Operations, and other members of the licensee staff. The licensee acknowledged the issues presented. The inspector asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

**40A7 Licensee-Identified Violations**

The following violation of very low safety significance (Green) was identified by the licensee and is a violation of NRC requirements which meets the criteria of Section 2.3.2 of the NRC Enforcement Policy for being dispositioned as a noncited violation.

- .1 Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," states, in part, that activities affecting quality shall be accomplished in accordance with prescribed procedures of a type appropriate to the circumstances. Contrary to this requirement, on July 15, 2011, the refueling bridge operator was not able to stop the fuel handling platform when the paddle switch was released from the reverse position. The fuel handling platform stopped due to the zone limit switch actuating, the motor returned to a neutral state, and the bridge stopped as designed. The zone limit switch is the last defense preventing the fuel handling bridge from colliding into the fuel pool wall, and it performed its function as designed. The licensee stopped all fuel movement and determined that the paddle switch had malfunctioned due to the failure to perform the preventive maintenance tasks of cleaning, adjusting, and re-greasing the paddle switches on the fuel handling platform prior to the start of the dry fuel cask campaign. A contributing cause to this event was a lack of procedure guidance provided in 04-1-01-F11-3, "Fuel Handling Platform," Revision 41. The refueling platform procedure did not have any step to direct the operator to immediately depress the stop button if the fuel handling platform is not operating as intended. The switch was replaced, returned to service, and the licensee revised the procedure to include a step to direct the operator to immediately depress the stop button if fuel handling platform was not operating as intended. This issue was entered into the licensee's corrective action program as Condition Report CR-GGN-2011-04896. The finding was determined to be of very low safety significance (Green) because it did not result from fuel handling errors that caused damage to fuel clad integrity because the fuel handling bridge movement was arrested prior to coming in contact with the spent fuel pool wall.

**SUPPLEMENTAL INFORMATION**  
**KEY POINTS OF CONTACT**

Licensee Personnel

J. Browning, General Plant Manager  
M. Bacon, Superintendent, Simulator and Training Support  
R. Bevely, Specialist and Training Coordinator, Chemistry and Radiation Protection  
D. Bowers, Supervisor/Coordinator, Maintenance  
J. Carey, Manager, Training  
D. Coulter, Senior Licensing Specialist  
R. Crowe, OSC Manager, I & C Support  
H. Farris, Assistant Operations Manager  
K. Higgenbotham, Planning and Scheduling Manager  
J. Houston, Maintenance Manager  
D. Jackson, Sr. HP/Chem Specialist, Chemistry  
R. Jackson, Senior Licensing Specialist  
D. Jones, Manager, Design Engineering  
J. Lassetter, Supervisor, Chemistry  
C. Lewis, Manager, Emergency Preparedness  
C. Loyd, Supervisor, Engineering  
J. Miller, Manager, Operations  
L. Patterson, Manager, Program Engineering  
C. Perino, Licensing Manager  
M. Perito, Site Vice President of Operations  
M. Richey, Director, Nuclear Safety Assurance  
R. Scarbrough, Specialist and Lead Offsite Liaison, Licensing  
J. Seiter, Senior Licensing Specialist  
J. Shaw, Manager, System Engineering  
D. Wiles, Engineering Director  
R. Wilson, Manager, Quality Assurance  
T. Trichell, Manager, Radiation Protection

NRC Personnel

R. Smith, Senior Resident Inspector  
B. Rice, Resident Inspector



## LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

### Opened and Closed

05000416/20110004-01	NCV	Failure to Ensure Correct Fuses were Installed in the Hydrogen Igniter Control Circuits (Section 1R15)
05000416/20110004-02	NCV	Failure to Perform Preventative Maintenance on the Fuel Handling Bridge Paddle Switch (Section 4OA2)
05000416/20110004-03	NCV	Failure to Establish Preventative Maintenance for Components Used in Critical Applications (Section 4OA2)

## LIST OF DOCUMENTS REVIEWED

### Section 1RO4: Equipment Alignment

#### PROCEDURE

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
04-S-01-Z51-1	Control Room HVAC System	52
04-1-01-T48-1	Standby Gas Treatment	32
01-S-02-3	Temporary Change Notice 04-1-01-P81-1 High Pressure Core Spray Diesel Generator	117

#### CONDITION REPORT

CR-GGN-2009-05113	CR-GGN-2009-05362	CR-GGN-2009-05395
CR-GGN-2009-05719	CR-GGN-2009-05849	CR-GGN-2009-06010
CR-GGN-2009-06354	CR-GGN-2009-06436	CR-GGN-2009-06510
CR-GGN-2009-06519	CR-GGN-2009-06590	CR-GGN-2009-06645
CR-GGN-2009-06838	CR-GGN-2009-06839	CR-GGN-2009-06895
CR-GGN-2010-00212	CR-GGN-2010-00522	CR-GGN-2010-00755
CR-GGN-2010-00860	CR-GGN-2010-02000	CR-GGN-2010-02055
CR-GGN-2010-02359	CR-GGN-2010-02488	CR-GGN-2010-02525
CR-GGN-2010-03319	CR-GGN-2010-03479	CR-GGN-2010-03631
CR-GGN-2010-04310	CR-GGN-2010-04701	CR-GGN-2010-04839
CR-GGN-2010-05105	CR-GGN-2010-05147	CR-GGN-2010-05299
CR-GGN-2010-05421	CR-GGN-2010-05424	CR-GGN-2010-05597
CR-GGN-2010-06525	CR-GGN-2010-06683	CR-GGN-2010-06713
CR-GGN-2010-06895	CR-GGN-2010-06918	CR-GGN-2010-06990
CR-GGN-2010-07001	CR-GGN-2010-07207	CR-GGN-2010-07208
CR-GGN-2010-07288	CR-GGN-2010-07315	CR-GGN-2010-07484
CR-GGN-2010-07498	CR-GGN-2010-07525	CR-GGN-2010-07532
CR-GGN-2010-07621	CR-GGN-2010-07593	CR-GGN-2010-07957
CR-GGN-2010-08580	CR-GGN-2011-00212	CR-GGN-2011-00291
CR-GGN-2011-00461	CR-GGN-2011-00780	CR-GGN-2011-01052
CR-GGN-2011-01309	CR-GGN-2011-02171	CR-GGN-2011-02299
CR-GGN-2011-02690	CR-GGN-2011-02754	CR-GGN-2011-02808
CR-GGN-2011-02871	CR-GGN-2011-02903	CR-GGN-2011-02985
CR-GGN-2011-03330	CR-GGN-2011-03359	CR-GGN-2011-03561
CR-GGN-2011-03887	CR-GGN-2011-04093	CR-GGN-2011-04125

CR-GGN-2011-04131	CR-GGN-2011-04172	CR-GGN-2011-04241
CR-GGN-2011-04650	CR-GGN-2011-05012	CR-GGN-2011-04160
CR-GGN-2010-00661	CR-GGN-2011-05074	CR-GGN-2011-05488
CR-GGN-2011-06494	CR-GGN-2011-04622	CR-GGN-2011-01868
CR-GGN-2011-06513	CR-GGN-2009-05625	CR-GGN-2009-05233
CR-GGN-2009-04892	CR-GGN-2010-00627	CR-GGN-2009-05678
CR-GGN-2009-06767	CR-GGN-2010-00578	CR-GGN-2010-00629
CR-GGN-2010-00507	CR-GGN-2010-00543	CR-GGN-2010-06673
CR-GGN-2010-06743	CR-GGN-2010-08749	CR-GGN-2011-05667
CR-GGN-2009-06909	CR-GGN-2010-00517	CR-GGN-2010-00634
CR-GGN-2010-00532	CR-GGN-2010-00656	CR-GGN-2010-00638
CR-GGN-2010-00666	CR-GGN-2010-00570	CR-GGN-2010-00662
CR-GGN-2010-00525	CR-GGN-2010-01104	CR-GGN-2010-01093
CR-GGN-2010-00534	CR-GGN-2010-00680	CR-GGN-2010-05159
CR-GGN-2010-05167	CR-GGN-2010-05570	CR-GGN-2010-01909
CR-GGN-2010-06515	CR-GGN-2010-06672	CR-GGN-2010-00641

**Section 1RO5: Fire Protection**

PROCEDURE

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
06-EL-SP65-SA-0001	Control building Fire Detector and Supervisory Panel Functional Test	103

OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
Fire Pre Plan C-03	Division I SWGR Area and Battery Room OC202 and OC207	4
Fire Pre Plan C-04	Division I Remote Shutdown OC208	3
Fire Pre Plan C-05	Division II Remote Shutdown Panel OC208A	2
Fire Pre Plan C-06	Division III SWGR and Battery Room OC210 and OC209	3
Fire Pre Plan C-07	Division II Switchgear Room and Battery Room OC211 and OC215	1
Fire Pre-Plan C-	Lower Inverter Room OC407 and Oc409	2

OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
11-1		
Fire Pre-Plan C-12-1	Lower Cable Spreading Room, H & J Battery Room & Corridor OC401, OC402 and OC410	1
Fire Pre-Plan C-16	Upper Cable Spreading Room (U-1) OC702	1
Fire Pre-Plan C-18	Corridor – OC706, Motor Generator Room – OC707, Unit 1 Support Area – OC708, Electrical Space – OC709	2

DRAWING

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
E-0950	Control Building Elevation 93'0", 111'0", 133'0", and 148'0" Fire and Smoke detection System Units I & II	10

CONDITION REPORTS

CR-GGN-2011-06753

**Section 1R11: Licensed Operator Requalification Program**

PROCEDURE

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
GSMS-LOR-AEX07	Loss of ESF Transformer/ Loss of ESF BUS/ Loss of Offsite Power/ LOCA	9
GSMS-LOR-AEX08	RCIC Isolation/ Reactor Feed Pump A Trip/ Loss of Feedwater/ ATWS	8
GSMS-LOR-WEX07	Crew Evaluation #1	September 14, 2011
GSMS-LOR-WEX08	Crew Evaluation #2	September 14, 2011
EN-TQ-114	Licensed Operator Requalification Training Program	5
EN-OP-115	Conduct of Operations	11

PROCEDURE

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
EN-TQ-202	Simulator Configuration Control	7
EN-TQ-201	Systematic Approach to Training Process	15
EN-NS-112	Medical Program	8
EN-TQ-210	Conduct of Simulator Training	5
EN-TQ-200	Training Oversight Program	14
EN-LI-102	Corrective Action Process	16

OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
	List of modifications that need to be made in TREX load per Control Room walkdown	February 18, 2011
	2011 CYCLE 4 Licensed Operator Requal Simulator Training Plan Simulator	
Written Exams	2011 Exam-Weeks 1-5 Biennial Exams (RO and SRO)	September 2011
JPM's	2011 Exam -Weeks 1-5	September 2011
14-S-02-21	Preparers Guide For Simulator Evaluation Scenarios	6
14-S-02-20	Preparing, Conducting, and Review of Simulator Evaluations	7
LER-2010-002-00	Loss of both trains of Control Room Air Conditioning	2010
LER-2011-001-00	HPCS pump inoperable due to failed test equipment	2011

OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION/DATE</u>
LER-2009-003-00	Special Nuclear Material Inventory Discrepancy	2009
LER-2009-004-00	Condition prohibited by TS due to control room air conditioning Sub System 'B' inoperability not recognized	2009
LER-2010-001-00	Automatic reactor scram on decreasing coolant level due to inadvertent reactor feed pump trip	2010
Scenarios	2011 Exam-Weeks 1-5 Scenarios	September 2011

CONDITION REPORTS

CR-GGN-2010-04505	CR-GGN – 2010-04538	CR-GGN-2010-08659
CR-GGN-2010-04506	CR-GGN-2010-06225	CR-GGN-2011-05652

**Section 1R12: Maintenance Effectiveness**

PROCEDURE

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
EN-DC-207	Maintenance Rule Periodic Assessment	2
EN-DC-206	Maintenance Rule (a)(1) Process	1
04-1-01-F11-3	Fuel Handling Platform	43
EN-DC-205	Maintenance Rule Monitoring	3

OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
	Maintenance Rule Periodic (a)(1) Systems List	September 5, 2011
	GGNS Maintenance Rule Assessment A Requirement of 10 CFR 50.65 (a)(3) Fuel Cycle 17 and Refueling Outage 17 (RF17)	November 1, 2008- June 1, 2010

OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
	Review of Maintenance Rule Program-Neutron Monitoring (C51) System	
	Maintenance Rule Database C51 Neutron Monitoring System	
	C51 Neutron Monitoring System CR 2009-5811, CA1 Disposition Maintenance Rule Status Evaluation	November 23, 2009
GG UFSAR	7.5 Safety-Related Display Instrumentation	2
Attachment 9.2	Typical Lower Tier ACE & Response Template for CR-GGN-2011-4896	

CONDITION REPORT

CR-GGN-2011-03407	CR-GGN-2011-04898	CR-GGN-2011-04984
CR-GGN-2009-04041	CR-GGN-2009-04439	CR-GGN-2009-03942
CR-GGN-2009-05957	CR-GGN-2009-04276	CR-GGN-2009-05611
CR-GGN-2009-04385	CR-GGN-2009-04933	CR-GGN-2009-04217
CR-GGN-2009-04835	CR-GGN-2009-05106	CR-GGN-2009-05119
CR-GGN-2009-05110	CR-GGN-2009-05120	CR-GGN-2009-06623
CR-GGN-2009-05899	CR-GGN-2011-00458	CR-GGN-2009-05673
CR-GGN-2009-04713	CR-GGN-2009-05821	CR-GGN-2009-05897
CR-GGN-2009-06352	CR-GGN-2009-06315	CR-GGN-2009-06382
CR-GGN-2010-05805	CR-GGN-2010-04677	CR-GGN-2010-07547
CR-GGN-2010-03673	CR-GGN-2010-07594	CR-GGN-2011-00134
CR-GGN-2011-01154	CR-GGN-2010-06816	CR-GGN-2010-08011
CR-GGN-2010-07672	CR-GGN-2010-07726	CR-GGN-2010-07972
CR-GGN-2010-07447	CR-GGN-2010-08092	CR-GGN-2010-08433
CR-GGN-2010-08295	CR-GGN-2010-08563	CR-GGN-2010-08811
CR-GGN-2011-03862	CR-GGN-2011-00361	CR-GGN-2010-08299
CR-GGN-2011-00229	CR-GGN-2010-00516	CR-GGN-2009-06733
CR-GGN-2010-07178	CR-GGN-2010-01004	CR-GGN-2010-01452
CR-GGN-2010-01065	CR-GGN-2010-01121	CR-GGN-2010-01213
CR-GGN-2010-01511	CR-GGN-2010-04143	CR-GGN-2010-01258
CR-GGN-2010-03634	CR-GGN-2010-02418	CR-GGN-2010-02986
CR-GGN-2010-03413	CR-GGN-2010-04251	CR-GGN-2010-04077
CR-GGN-2010-02796	CR-GGN-2010-03787	CR-GGN-2010-04511

CR-GGN-2010-04042	CR-GGN-2010-02536	CR-GGN-2010-02636
CR-GGN-2010-05016	CR-GGN-2010-03374	CR-GGN-2010-04521
CR-GGN-2010-03574	CR-GGN-2010-04422	CR-GGN-2010-04833
CR-GGN-2010-04615	CR-GGN-2010-04655	CR-GGN-2010-04481
CR-GGN-2010-04510	CR-GGN-2010-04813	CR-GGN-2010-05405
CR-GGN-2010-05263	CR-GGN-2010-06002	CR-GGN-2010-06072
CR-GGN-2010-05977	CR-GGN-2010-07044	CR-GGN-2010-06224
CR-GGN-2011-00553	CR-GGN-2011-00405	CR-GGN-2010-08826
CR-GGN-2011-00705	CR-GGN-2011-00483	CR-GGN-2011-00899
CR-GGN-2011-01749	CR-GGN-2011-01781	CR-GGN-2011-04859
CR-GGN-2011-02446	CR-GGN-2009-01627	CR-GGN-2009-01967
CR-GGN-2009-04217	CR-GGN-2009-05611	CR-GGN-2009-02892
CR-GGN-2009-05811	CR-GGN-2009-01472	CR-GGN-2008-06618
CR-GGN-2008-06644	CR-GGN-2008-06704	CR-GGN-2008-06705
CR-GGN-2008-06708	CR-GGN-2008-06772	CR-GGN-2008-06988
CR-GGN-2009-00064	CR-GGN-2009-00198	CR-GGN-2009-00426
CR-GGN-2009-00692	CR-GGN-2009-00754	CR-GGN-2009-00860
CR-GGN-2009-01039	CR-GGN-2009-01066	CR-GGN-2009-02959
CR-GGN-2009-03179	CR-GGN-2009-03180	CR-GGN-2009-04279
CR-GGN-2009-04478	CR-GGN-2009-04511	CR-GGN-2009-04572
CR-GGN-2009-05536	CR-GGN-2009-05647	CR-GGN-2009-05811
CR-GGN-2009-05961	CR-GGN-2010-00050	CR-GGN-2010-00202
CR-GGN-2010-00305	CR-GGN-2010-00930	CR-GGN-2010-01656
CR-GGN-2010-01873	CR-GGN-2010-01984	CR-GGN-2010-02031
CR-GGN-2010-02057	CR-GGN-2010-02327	CR-GGN-2010-02427
CR-GGN-2010-04456	CR-GGN-2010-04666	CR-GGN-2010-04759

**Section 1R13: Maintenance Risk Assessment and Emergent Work Controls**

PROCEDURE

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION/ DATE</u>
EN-WM-101	On-line Work Management Process for the Week of July 11, 2011	7
EN-WM-101	On-line Work Management Process for the Week of August 1, 2011	7
EN-WM-101	On-line Work Management Process for the Week of August	7



**Section 1R13: Maintenance Risk Assessment and Emergent Work Controls**

PROCEDURE

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION/ DATE</u>
	21, 2011	
EN-WM-101	On-line Work Management Process for the Week of September 18, 2011	7
EN-WM-101	On-line Work Management Process	January 10, 2011

OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
	Operator's Risk Report, System Status, HPCS DG	August 30, 2011
	GGNS Operations Logs (Nights)	August 27, 2011
LCOTR NO.: 1- TS -11-0219	E12F003A INOP for motor rotor inspection AND rework control circuit.	

CONDITION REPORT

CR-GGN-2011-05379	CR-GGN-2011-05438	CR-GGN-2011-06741
CR-GGN-2011-06690		

WORK ORDER

WO52318010	WO284214	WO52295123
WO52322325	WO52322340	WO52322319
WO52324288	WO52318489	WO255372-5
WO272388	WO283695-01	WO245014
WO283626-05	WO221511-01	WO00283563-01
WO259985	WO00283563-01	WO00283540-01
WO00262139	WO00257886	WO242319
WO242320	WO52263318	WO52263319
WO52261044	WO52258950	WO52263318
WO52263319	WO52261044	WO52268950

WO00276815-01	WO283024	WO272686
WO52335055-01	WO52317708-01	WO261242
WO261243	WO277787-02	WO52332345
WO262640-15	WO262640-02	WO276015
WO52345331	WO262640-18	WO52346620
WO52346621	WO52323012	WO267044-14
WO283276	WO242172-10	WO218801-26
WO218801-22	WO264180-01	WO52323770
WO262640-17	WO52312083-01	WO52300264
WO218801-13	WO218801-04	WO268644
WO156586	WO52248453-01	WO284059

### Section 1R15: Operability Evaluations

#### OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
08-3-03-10	Chemistry Sampling Program	48
ER-GG-2005-0050-000	Nuclear Change Response	0
GLP-OPS-P7100	Operations Training-Plant Chilled Water System	9
EN-OP-104	Operability Determination Process	5

#### OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
	Root Cause Analysis Report: Cross Contamination of Makeup Water Treatment System	November 6, 2003
NEDE-31096-P-A	Anticipated Transients Without Scrams	February 1987
	Grand Gulf Response to IE 80-10	June 4, 1981
	NRC Bulleting IE 80-10	May 6, 1980
FORM 133	Nuclear Plant Engineering Issuance of Specification/ Standard Change Notice SCN No. 96/002 Against Specification/ Standard Change No. GGNS-M-918.0 Revision 1 for Use	December 13, 1996
FORM 131	Issuing Specification GGNS-M-918.0 Revision 1	November 16, 1995

OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
ASME Section VIII Appendix 2	Rules for Bolted Flange Connections With Ring Type Gaskets	July 26, 2011
	Review of GGNS Chemistry Program as Related to IE80-10 Sampling	
	PCW Tritium and Isotopic Data	

DRAWING

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
E-1186-46	E61 Combustible Gas Control System Hydrogen Ignition Controls Unit 1	3

CALCULATION

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
EC-Q1R28-91019	Division I 120V AC Class 1E Power Panel Circuit Coordination Study	3
EC-Q1R28-91020	Division II 120V AC Class 1E Power Panel Circuit Coordination Study	3

CONDITION REPORT

CR-GGN-2011-04313	CR-GGN-2003-02987	CR-GGN-2011-05314
CR-GGN-2011-05315	CR-GGN-2003-02987	CR-GGN-2011-04836
CR-GGN-2011-05009	CR-GGN-2011-04991	CR-GGN-2011-00070
CR-GGN-2011-05911	CR-GGN-2011-05388	CR-GGN-2011-05388

WORK ORDER

WO284805-01

**Section 1R19: Postmaintenance Testing**

PROCEDURE

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
07-S-12-95	Electrical Maintenance of Limitorque Actuators	7
07-S-12-81	Setting of Limitorque Valve Operators	14

## Section 1R19: Postmaintenance Testing

### PROCEDURE

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
06-OP-1T48-Q-0003	Standby Gas Treatment Valve Test B Train	103
06-OP-SP64-M-0001	Diesel Fire Pump C003A Monthly Operability Test	108
06-ME-SP64-R-0001	Fire Protection Water System Diesel Check	103
06-ME-1M23-V-0001	Containment and Drywell Airlock Seal Leak Test	108
04-1-01-M23-1	Drywell/Containment Airlock System	9
01-S-06-5	Reportable Events or Conditions	108
06-ME-1M23-R-0001	Personnel Airlock Door Seal Air System Leak Test	113
07-S-14-56	Western Gear Speed Reducer	27
06-OP-1P41-M-0005	Standby Service Water Loop B Operability Check	112

### DRAWING

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
E-117	C71 RPS MG Set Control System (Marked Up Drawing)	11
M-1124C	Upper Containment Personnel Airlock Elevation 208' 10"	4
Figure 7.2-11	Block Diagram-RPS Protective Circuit Electrical Protection Assembly	

### OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
2011-005	UFSAR Section 8.3.1.1.5.4 and figure 8.3-14 to allow limited simultaneous connection of RPS A and RPS B to their alternate supplies to support emergent plant situations	September 12, 2011

### CONDITION REPORT

CR-GGN-2011-06079                      CR-GGN-2011-06079                      CR-GGN-2011-06571

CR-GGN-2011-06362	CR-GGN-2011-06226	CR-GGN-2011-06360
CR-GGN-2011-06480	CR-GGN-2011-06527	CR-GGN-2011-06360
CR-GGN-2011-06361	CR-GGN-2011-06571	CR-GGN-2011-06226
CR-GGN-2011-06267		

WORK ORDER

WO00203362	WO52275922-01	WO52275918
WO00264258	WO52257735-01	WO52277216-01
WO00284220-01	WO52316814	WO52323564
WO52277119	WO00233238	WO52336622-01
WO289268-06	WO289268-08	WO235193
WO264246	WO52282296	WO52359277
WO269618	WO257650	WO208284
WO215561		

**Section 1R22: Surveillance Testing**

PROCEDURE

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
06-EL-1L51-R-0001	125V Battery Charger Capability Test	101
06-OP-1E12-Q-0023	LPCI/RHR Subsystem A Quarterly Functional Test	121
06-OP-1P81-M-0002	HPCS Diesel Generator 13 Functional Test	124

CALCULATION

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
PRA-GG-1-001S01	GGNS PSA at Power Level 1 Accident Sequence Analysis	0

CONDITION REPORT

CR-GGN-2008-03640	CR-GGN-2007-03793	CR-GGN-2007-05085
CR-GGN-2008-01667	CR-GGN-2008-05220	CR-GGN-2008-06475
CR-GGN-2008-06656	CR-GGN-2010-01426	CR-GGN-2010-06463
CR-GGN-2010-07591	CR-GGN-2010-07635	CR-GGN-2010-08380

CR-GGN-2011-00916	CR-GGN-2011-01922	CR-GGN-2011-03391
CR-GGN-2011-05213	CR-GGN-2011-04582	CR-GGN-2011-05446
CR-GGN-2011-04219	CR-GGN-2010-01031	CR-GGN-2009-05930
CR-GGN-2009-05215	CR-GGN-2009-05932	CR-GGN-2009-05472
CR-GGN-2009-06066	CR-GGN-2010-04733	CR-GGN-2010-00036
CR-GGN-2010-01329	CR-GGN-2011-00789	CR-GGN-2011-01710
CR-GGN-2010-07351	CR-GGN-2010-04009	CR-GGN-2010-05892
CR-GGN-2011-00791	CR-GGN-2011-00820	CR-GGN-2011-00985
CR-GGN-2010-00684	CR-GGN-2010-05290	CR-GGN-2010-01585
CR-GGN-2010-00800	CR-GGN-2010-01474	CR-GGN-2010-01337
CR-GGN-2009-05508	CR-GGN-2010-01320	CR-GGN-2010-01345
CR-GGN-2009-05731	CR-GGN-2009-06174	CR-GGN-2010-02797
CR-GGN-2010-02200	CR-GGN-2010-03655	CR-GGN-2010-04629
CR-GGN-2010-02990	CR-GGN-2010-03241	CR-GGN-2010-02805
CR-GGN-2010-04015	CR-GGN-2010-03333	CR-GGN-2010-04625
CR-GGN-2010-04255	CR-GGN-2009-05527	CR-GGN-2010-02974
CR-GGN-2010-06137	CR-GGN-2010-05208	CR-GGN-2010-05330
CR-GGN-2010-04686	CR-GGN-2010-04963	CR-GGN-2010-05572
CR-GGN-2010-03650	CR-GGN-2010-06878	CR-GGN-2010-06148
CR-GGN-2010-06150	CR-GGN-2010-05328	CR-GGN-2011-00403
CR-GGN-2011-00749	CR-GGN-2011-00819	CR-GGN-2011-00850
CR-GGN-2011-01306	CR-GGN-2010-06142	CR-GGN-2011-01942
CR-GGN-2011-02393	CR-GGN-2009-05627	CR-GGN-2010-00395
CR-GGN-2010-00501	CR-GGN-2011-00155	CR-GGN-2011-02738
CR-GGN-2011-03176		

WORK ORDER

WO52288840-01	WO176327	WO276508-01
WO52350134	WO52343544	WO52353955
WO52353958	WO52356025	WO52353956
WO52353957	WO52356024	WO52356026

**Section 1EP6: Drill Evaluation**

PROCEDURE

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
1-S-02-3	Activation of the Emergency Plan	118

**Section 1EP6: Drill Evaluation**PROCEDURE

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
10-S-01-6	Notification of Off Site Agencies and Plan On Call Emergency Personnel	49
01-S-10-4	Emergency Preparedness Drills and Exercises	12
10-S-01-1	Activation of the Emergency Plan	120

OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
NEI 99-02	Emergency Preparedness Cornerstone	5

CONDITION REPORT

CR-GGN-2010-07742	CR-GGN-2011-01117	CR-GGN-2011-01140
CR-GGN-2011-01146	CR-GGN-2011-01416	CR-GGN-2011-01422
CR-GGN-2011-01560	CR-GGN-2011-02568	CR-GGN-2011-02571
CR-GGN-2011-02601	CR-GGN-2011-02602	CR-GGN-2011-02603
CR-GGN-2011-02632	CR-GGN-2011-02860	CR-GGN-2011-03681
CR-GGN-2011-03993	CR-GGN-2011-04147	CR-GGN-2011-05004
CR-GGN-2011-05007	CR-GGN-2011-02860	CR-GGN-2011-03681
CR-GGN-2011-03993	CR-GGN-2011-04147	CR-GGN-2010-07742
CR-GGN-2011-01117	CR-GGN-2011-01140	CR-GGN-2011-01146
CR-GGN-2011-01422	CR-GGN-2011-01560	CR-GGN-2011-02568
CR-GGN-2011-02571	CR-GGN-2011-02601	CR-GGN-2011-02602
CR-GGN-2011-02603	CR-GGN-2011-02632	

**Section 2RS06: Radioactive Gaseous and Liquid Effluent Treatment**PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
06-CH-1D17-M-0005	Building Ventilation Exhaust Gaseous Isotopic	109
06-CH-1DI7-V-0062	Turbine Building Occasional Release Point Monitoring	100
06-CH-SGI7-V-0032	Inop Gaseous Monitor Analysis	111

06-CH-SGI7-V-0034	Radwaste Release Inop Radwaste Monitor Pre-release Analysis	107
06-CH-SG17-0-0045	Radwaste Release Post-release Calculations	103
06-CH-SG17-P-0041	Radwaste Release Pre-release Analysis	107
06-ME-1Z51-R-0006	In-Place Testing of Control Room Emergency Filtration System	108
08-S-03-20	Interlaboratory Monitoring Program	12
08-S-03-23	Chemistry Quality Control Program	7
17-S-06-Z51-1	Control Room SBFAU Leakage Test	2
17-S-06-T48-1	SBGTS Filter Train Bypass Leakage Test	1
EN-CY-102	Laboratory Analytical Quality Control	3
EN-LI-102	Corrective Action Process	16
EN-WM-100	Work Request (WR) Generation, Screening and Classification	6

AUDITS, SELF-ASSESSMENTS, AND SURVEILLANCES

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
	2009 AREVA NP Environmental Laboratory – Analytical Service Final Quality Assurance Status Report (January – December 2009)	June 9, 2010
	2010 AREVA NP Environmental Laboratory – Analytical Service Final Quality Assurance Status Report (January – September 2010)	October 18, 2010
GLO 2011-00041 CA1	RETS / REMP / Groundwater Protection Initiative (Pre-Nuclear Regulatory Commission) Self-Assessment	April – May 2011
NUPIC 20160, 20118, 20134, 20153	AREVA NP, Inc.	January 8, 2009
NUPIC 20317	NCS Corporation (Nuclear Cont. Sys)	June 16, 2009
NUPIC 20371	Eberline Services	September 23, 2009



QA-02/06-2009- GGNS-1	2009 Chemistry, Effluents and Environmental Monitoring Audit	August 24 – Sept. 14, 2009
QA-2/6-2009- GGNS-1	QA Follow-up Surveillance of the 2009 Chemistry, Effluents and Environmental Monitoring Audit	March 17, 2010
QA-216-2009- GGNS-1	QA Second Follow-up Surveillance of the 2009 Chemistry, Effluents, and Environmental Monitoring Audit	October 20 - 21, 2010

CONDITION REPORTS:

CR-GGN-2009-04121	CR-GGN-2009-04303	CR-GGN-2009-05874	CR-GGN-2009-06914
CR-GGN-2010-00281	CR-GGN-2010-00293	CR-GGN-2010-00471	CR-GGN-2010-00690
CR-GGN-2010-00731	CR-GGN-2010-04799	CR-GGN-2010-04933	CR-GGN-2010-06972
CR-GGN-2010-08830	CR-GGN-2011-00275		

10 CFR 50.75(g) ACTION REQUESTS:

CR-GGN-2011-02936

RELEASE PERMITS:

WO 00206289	WO 00207339	WO 00207344	WO 00239068
WO 00239095	WO 00247781	WO 00247786	WO 00256477
WO 00256482			

IN-PLACE FILTER TESTING:

<u>Work Order</u>	<u>TRAIN</u>	<u>TEST</u>	<u>DATE</u>
51797845	Train A	Standby Gas Treatment Charcoal Canister	July 15, 2009
51668162	Train A	DOP Test	September 15, 2009
51797846	Train B	DOP Test	September 15, 2009
00170587	Train B	Standby Gas Treatment Charcoal Canister	September 30, 2009
51687534	Train B	DOP Test	August 20, 2010
52256224	Train A	DOP Test	November 4, 2010

52256223	Train A	Standby Gas Treatment Charcoal Canister	November 22, 2010
52275918	Train B	Standby Gas Treatment Charcoal Canister	August 18, 2011

MISCELLANEOUS DOCUMENTS

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE / REVISION</u>
	Offsite Dose Calculation Manual	Revision 37
	2009 Grand Gulf Nuclear Station Annual Radiological Environmental Operating Report	April 28, 2010
	2010 Grand Gulf Nuclear Station Annual Radiological Environmental Operating Report	April 28, 2011
WO 51689553	Inspect Sealed Areas on Blower Housing	May 12, 2009
WO 51688484	1D17P015 Calibrate Loop Instruments	May 20, 2009
WO 51803142	OG & RWT Vent Stack Flow Rate Transmitter Calibration	January 20, 2010
WO 52190154	OG & RWT Vent Stack Flow Rate Transmitter Calibration	April 27, 2010
WO 52241564	1D17P014 Calibrate Loop Instruments	August 30, 2010
WO 52216352	Inspect Sealed Areas on Blower Housing	October 27, 2010
WO 52255208	1D17P015 Calibrate Loop Instruments	February 23, 2011
WO 52287715	Inspect Sealed Areas on Blower Housing	May 17, 2011
WO 52035683	Inspect Sealed Areas on Blower Housing	August 4, 2011

**Section 2RS07: Radiological Environmental Monitoring Program**

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
01-S-06-12	GGNS Surveillance Program	110
06-EN-S000-O-0002	Surveillance Procedure: Land Use Census – Safety Related	101

06-EN-S000-A-0003	Surveillance Procedure: Interlaboratory Comparison Program – Safety Related	101
06-EN-S000-V-0001	Surveillance Procedure: Radiological Environmental Sampling – Safety Related	108
06-IC-SC84-SA-1003	Primary Tower Wind Speed/Directional Air Temperature (T/dT)/Relative Humidity Calibration	102

AUDITS, SELF-ASSESSMENTS, AND SURVEILLANCES

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
	2010 Annual Quality Assurance Report for the REMP: GEL Lab, Inc.	February 15, 2011
LO-GLO-2011-00041-CA1	RETS/REMP/Groundwater Protection Initiative (Pre-NRC) Self-Assessment	May 2011
QA-02/06-2009-GGNS-1	Chemistry, Effluents, and Environmental Monitoring Programs	September 24, 2009
QS-2010-GGNS-001	QA Follow-up Surveillance of the 2009 Chemistry, Effluents and Environmental Monitoring Audit	March 17, 2010
QS-2010-GGNS-016	QA Second Follow-up Surveillance of the 2009 Chemistry, Effluents and Environmental Monitoring Audit	October 21, 2010

CONDITION REPORTS

CR-GGN-2009-04485	CR-GGN-2009-05533	CR-GGN-2009-06803	CR-GGN-2010-05748
CR-GGN-2010-05829	CR-GGN-2011-00697	CR-GGN-2011-00715	CR-GGN-2011-00846
CR-GGN-2011-01495	CR-GGN-2011-02242	CR-GGN-2011-02310	CR-GGN-2011-02731
CR-GGN-2011-02936	CR-GGN-2011-03745	CR-GGN-2011-04887	

CALIBRATION AND MAINTENANCE RECORDS

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
WO 52226984	Calibration for Met Tower Wind Speed, Wind Direction, Temperature, DT, and Relative Humidity	September 14, 2010
WO 52276937	Calibration for Met Tower Wind Speed, Wind Direction, Temperature, DT, and Relative Humidity	February 16, 2011

WO 52318009	Calibration for Met Tower Wind Speed, Wind Direction, Temperature, DT, and Relative Humidity	May 25, 2011
CHEM-003	Air Sampler #1 Calibration Data Sheet	July 11, 2011
CHEM-004	Air Sampler #3 Calibration Data Sheet	July 11, 2011
CHEM-007	Air Sampler #7 Calibration Data Sheet	July 11, 2011
CHEM-005	Air Sampler #3 Calibration Data Sheet	January 19, 2011
CHEM-006	Air Sampler #7 Calibration Data Sheet	January 19, 2011
CHEM-008	Air Sampler #1 Calibration Data Sheet	January 19, 2011

**MISCELLANEOUS DOCUMENTS**

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
	Grand Gulf Nuclear Station Annual Radiological Environmental Operating Report	April 20, 2010
	Grand Gulf Nuclear Station Annual Radiological Environmental Operating Report	April 28, 2011
Chapter 2.3.3	GGNS Updated Final Safety Analysis Report	37
	Offsite Dose Calculation Manual	37
	Ground Water Monitoring Plan for Grand Gulf Nuclear Station	April 2011
	2006-2010 5-Year Wind Rose Data (10 meters)	

**Section 2RS08: Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation**

**PROCEDURES**

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
EN-NF-200	Special Nuclear Material Control	7
EN-RW-102	Radioactive Shipping Procedure	8

## PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
EN-RW-104	Scaling Factors	3
EN-RW-105	Process Control Program	1
04-S-01-G17-3	Radwaste Filters and Demineralizers	44
06-CH-SG17-V-0047	Surveillance Procedure: Temporary Storage Tanks Activity Determination – Safety Related	102
08-S-02-25	Radiation Protection Procedure: Radwaste Resin Transfer – Safety Related	7
08-S-06-71	Radwaste Instructions: Sampling Procedures for Waste Classification – Safety Related	7

## AUDITS, SELF-ASSESSMENTS, AND SURVEILLANCES

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
22765	NUPIC Limited Scope Audit/Survey	January 12, 2011
LO-GLO-2011-0039	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	April 22, 2011
QA-14/15-2009-GGNS-1	Quality Assurance Audit Report: Radiation Protection/Radwaste	October 22, 2009

## CONDITION REPORTS

CR-HQN-2011-00921 CR-GGN-2011-03898 CR-GGN-2011-03959 CR-GGN-2011-05783  
CR-GGN-2011-05858 CR-GGN-2011-05859 CR-GGN-2011-05860 CR-GGN-2011-05861  
CR-GGN-2011-05862

## RADIOACTIVE MATERIAL SHIPMENTS

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
GGN-2010-0303	1 Radiography Camera (Type B)	March 8, 2010
GGN-2010-0616	4 CRDM Metal Boxes (Type A)	June 17, 2010

## RADIOACTIVE MATERIAL SHIPMENTS

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
GGN-2010-0901	2 CRDM Spud shields (LSA-II)	September 1, 2010
GGN-2010-1104	1 RWCU-A HIC (Type B)	November 16, 2010
GGN-2010-1203	3 Bead Resin General (LSA-II)	December 13, 2010
GGN-2011-0102	1 CPS Liner General (LSA-II)	January 10, 2011
GGN-2011-0605	2 DAW/Metal/GIC General (LSA-II)	June 16, 2011
GGN-2011-0703	1 CPS-A General (LSA-II)	July 18, 2011

## MISCELLANEOUS DOCUMENTS

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
Chapter 11	GGNS Updated Final Safety Analysis Report	9
Chapter 12	GGNS Updated Final Safety Analysis Report	8
	Basic Radioactive Waste Packaging, Transportation, and Disposal Training	February 17, 2011

### **Section 40A2: Identification and Resolution of Problems**

#### PROCEDURE

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
02-S-01-25	Deficient Equipment Identification	14
02-S-01-37	Component Position Control	7
04-1-01-F11-1	Refueling Platform	42
EN-DC-136	Temporary Modifications	5
EN-DC-153	Preventive Maintenance Component Classification	6
EN-DC-335	[Preventive Maintenance] Basis Template	3
EN-FAP-OP-006	Operator Aggregate Impact Index Performance Indicator	0
EN-LI-100	Process Applicability Determination	10
EN-OP-102	Protective and Caution Tagging	13
ER-GG-2003-0261-000	Remove Automatic Isolation from Selected Valves	0

OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
	ESF Switchgear Room Cooler Ventilation (T46) System Data Collection for Work Order No. 276275	
10-0020	Standing Order	June 10, 2010
11-0004	Standing Order, Condition Report GGN-2010-5081 for Moisture Separator Reheater A Second Stage Reheater Tube Leaks	February 7, 2011
11-0010	Standing Order, Condition Report GGN-2010-6941 identified a condition of excessive cycling of 1E51F005, RCIC TURB EXH OTBD DRN VLV.	April 5, 2011
11-0019	Standing Order	May 27, 2011
11-0020	Standing Order	June 22, 2011
11-0021	Standing Order, Condition Report GGN-2011-4391 documents that on 6/24/11 during a temp lift for uncoupled run of Heater Drain Pump B, TBCW to the pump seal cooler was incorrectly restored with the seal removed.	June 26, 2011
11-0024	Standing Order, Two recent examples of inappropriate equipment restoration have revealed inconsistent adherence to standards associated with the equipment clearance program.	August 2, 2011
11-0025	Standing Order, Condition Report CR-GGN-2011-5162 identified a condition of leakage from the inboard seal of Condensate Booster Pump A. This standing order implements the actions required from the Revision 0 ODMI generated from CR-GGN-2011-5162.	July 31, 2011
10-0022	Standing Order, The purpose of this Standing Order is to provide guidance to address concerns regarding increased dose rates due to operation with a SS Generator tube leak, with the potential for further degradation of the Seal Steam Generator	June 18, 2010

OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
	Seal Steam Generator Tube Leak ODMI Action Plan	June 17, 2010
	Reactor Feed Pump Turbine A Lube Oil Pump Degradation	June 8, 2010
	Condensate Booster A Pump Seal Leak ODMI Action Plan	July 31, 2011
	Main Turbine Generator Exciter Bearing #11 Vibration ODMI Action Plan	May 19, 2011
	Post MSR Second Stage Isolation Monitoring ODMI Action Plan	February 4, 2011

CONDITION REPORT

CR-GGN-2011-04673	CR-GGN-2011-04896	CR-GGN-2001-00791
CR-GGN-2010-06941	CR-GGN-2010-05925	CR-GGN-2010-06048
CR-GGN-2010-06437	CR-GGN-2010-06652	CR-GGN-2010-06660
CR-GGN-2010-06876	CR-GGN-2010-06895	CR-GGN-2010-06910
CR-GGN-2010-07052	CR-GGN-2010-07113	CR-GGN-2010-07409
CR-GGN-2010-07413	CR-GGN-2010-07500	CR-GGN-2010-07651
CR-GGN-2010-07827	CR-GGN-2010-07986	CR-GGN-2010-08195
CR-GGN-2010-08580	CR-GGN-2010-08750	CR-GGN-2010-08796
CR-GGN-2011-00023	CR-GGN-2011-00528	CR-GGN-2011-01305
CR-GGN-2011-01488	CR-GGN-2011-01638	CR-GGN-2011-02147
CR-GGN-2011-02223	CR-GGN-2011-02435	CR-GGN-2011-02442
CR-GGN-2011-02638	CR-GGN-2011-02681	CR-GGN-2011-02849
CR-GGN-2011-02882	CR-GGN-2011-02965	CR-GGN-2011-03165
CR-GGN-2011-03168	CR-GGN-2011-03403	CR-GGN-2011-03502
CR-GGN-2011-03528	CR-GGN-2011-03594	CR-GGN-2011-03653
CR-GGN-2011-03730	CR-GGN-2011-03939	CR-GGN-2011-04045
CR-GGN-2011-04052	CR-GGN-2011-04115	CR-GGN-2011-04140
CR-GGN-2011-04163	CR-GGN-2011-04216	CR-GGN-2011-04250
CR-GGN-2011-04402	CR-GGN-2011-04542	CR-GGN-2011-04543
CR-GGN-2011-04574	CR-GGN-2011-04637	CR-GGN-2011-04665
CR-GGN-2011-04958	CR-GGN-2011-05021	CR-GGN-2011-05079



CR-GGN-2011-05086  
CR-GGN-2011-03730  
CR-GGN-2011-04303  
CR-GGN-2011-04673

CR-GGN-2011-05288  
CR-GGN-2011-03774  
CR-GGN-2011-04306

CR-GGN-2011-03202  
CR-GGN-2011-04297  
CR-GGN-2011-04313

ENGINEERING CHANGE

EC0000018161  
EC22768

EC 22635

EC 23937

**40A3: Event Follow-up**

OTHER

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
2011-055	LBDCR RPS Alternate Power Supply	September 12, 2011
	RPS Marked-up Drawing E-1174	11

CONDITION REPORT

CR-GGN-2010-06867  
CR-GGN-2011-06360  
CR-GGN-2011-06480

CR-GGN-2011-06226  
CR-GGN-2011-06361  
CR-GGN-2011-06527

CR-GGN-2011-06267  
CR-GGN-2011-06362  
CR-GGN-2011-06571

**40A7: Licensee-Identified Violations**

CONDITION REPORT

CR-GGN-2011-04977      CR-GGN-2011-04896