UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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ARLINGTON, TEXAS 76011-4125

May 13, 2011

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

SUBJECT: GRAND GULF NUCLEAR STATION – NRC TEMPORARY INSTRUCTION 2515/183 INSPECTION REPORT 05000416/2011008

Dear Mr. Perito:

On April 29, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Grand Gulf Nuclear Station, using Temporary Instruction 2515/183, "Followup to the Fukushima Daiichi Nuclear Station Fuel Damage Event." The enclosed inspection report documents the inspection results which were discussed on April 29, 2011, with Mr. Perito, Vice President Operations, and other members of your staff.

The objective of this inspection was to assess the adequacy of actions taken at the Grand Gulf Nuclear Station in response to the Fukushima Daiichi Nuclear Station fuel damage event. The results from this inspection, along with the results from similar inspections at other operating commercial nuclear plants in the United States, will be used to evaluate the United States nuclear industry's readiness to respond to a similar event. These results will also help the NRC to determine if additional regulatory actions are warranted.

All of the potential issues and observations identified by this inspection are contained in this report. The NRC's Reactor Oversight Process will further evaluate any issues to determine if they are regulatory findings or violations. Any resulting findings or violations will be documented by the NRC in a separate report. You are not required to respond to this letter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's document system (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Vincent G. Gaddy, Chief
Project Branch C
Division of Reactor Projects

Docket: 50-416
License: NPF-29

Enclosure: Inspection Report 05000416/2011008
w/Attachment: Supplemental Information

cc w/Enclosure:

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ADAMS: □ No ☒ Yes	☒ SUNSI Review Complete	Reviewer Initials: VGG
	☒ Publicly Available	☒ Non-Sensitive
	□ Non-publicly Available	□ Sensitive

SRI:DRP/C	DRS/TSB	C:DRP/C		
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05/11/2011	05/11/2011	05/13/2011		

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U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket:	05000416
License:	NPF-29
Report:	05000416/2011008
Licensee:	Entergy Operations, Inc.
Facility:	Grand Gulf Nuclear Station
Location:	7003 Baldhill Road Port Gibson, MS 39150
Dates:	March 23 through April 29, 2011
Inspectors:	R. Smith, Senior Resident Inspector R. Kumana, Acting Resident Inspector A. Fairbanks, Acting Resident Inspector
Approved by:	Vincent G. Gaddy, Chief, Project Branch C Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000416/2011008, 03/23/2011 – 04/29/2011; Grand Gulf Nuclear Station Temporary Instruction 2515/183 - Followup to the Fukushima Daiichi Nuclear Station Fuel Damage Event.

This report covers an announced temporary instruction inspection. The inspection was conducted by resident and Region IV inspectors. 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.

INSPECTION SCOPE

The intent of the temporary instruction is to be a high-level look at the industry's preparedness for events that may exceed the design basis for a plant. The focus of the temporary instruction was on (1) assessing the licensee's capability to mitigate conditions that result from beyond design basis events, typically bounded by security threats; (2) assessing the licensee's capability to mitigate station blackout conditions; (3) assessing the licensee's capability to mitigate internal and external flooding events required by station design; and (4) assessing the thoroughness of the licensee's walkdowns and inspections of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during seismic events possible for the site. If necessary, a more specific followup inspection will be performed at a later date.

INSPECTION RESULTS

The following table documents the NRC inspection at Grand Gulf Nuclear Station performed in accordance with Temporary Instruction 2515/183. The numbering system in the table corresponds to the inspection items in the temporary instruction.

03.01 Assess the licensee's capability to mitigate conditions that result from beyond design basis events, typically bounded by security threats, committed to as part of NRC Security Order Section B.5.b issued February 25, 2002, and severe accident management guidelines and as required by Title 10 CFR 50.54(hh). Use Inspection Procedure 71111.05T, "Fire Protection (Triennial)," Section 02.03 and 03.03 as a guideline. If Inspection Procedure 71111.05T was recently performed at the facility, the inspector should review the inspection results and findings to identify any other potential areas of inspection. Particular emphasis should be placed on strategies related to the spent fuel pool. The inspection should include, but not be limited to, an assessment of any licensee actions to:	
Licensee Action	Describe what the licensee did to test or inspect equipment.
a. Verify through test or inspection that equipment is available and functional. Active equipment shall be tested and passive equipment shall be walked down and inspected. It is not expected that permanently installed equipment that is tested under an existing regulatory testing program be retested. This review should be done for a reasonable sample of mitigating strategies/equipment.	The licensee performed a comprehensive review of all procedures used to mitigate conditions that result from beyond design basis events. The licensee verified through testing that the fire pumper truck used in various B.5.b strategies can produce the required flows to accomplish these strategies. They also tested the portable generator used to supply temporary power to one division of hydrogen igniters during B.5.b events to verify that it was functional and able to accomplish its required action. Additionally, they tested the digital tachometer used for operating reactor core isolation cooling with no alternating or direct current. Describe inspector actions taken to confirm equipment readiness (e.g., observed a test, reviewed test results, discussed actions, reviewed records, etc.). The inspectors reviewed the results for the following tests of equipment used in B.5.b. strategies: • fire pumper truck performed on March 18, 2011; • portable generator used to supply temporary power to one division of hydrogen igniters performed on March 16, 2011; and • digital tachometer performed on March 22, 2011 The inspectors independently walked down the passive equipment and verified the contents of the licensee's emergency lockers were in accordance with station procedures. The inspectors

		also discussed with plant and licensed operators how the active and passive equipment is tested, maintained, stored, and trained on. Additionally, the inspectors walked down several of the procedures with a plant operator to ensure familiarity with the operation of the equipment, storage locations, and equipment location.
		Discuss general results including corrective actions by licensee.
		The licensee identified numerous procedure enhancements, moved the hazmat trailer to a new location, discovered some equipment that, though in the proper location, was not on the inventory check list, and found that two wrenches on the inventory check list were not in place. The licensee entered these deficiencies in the corrective action program and corrected them by revising procedures or inventories and ensuring all required tools were in place. The licensee noted that the digital tachometer for operation of reactor core isolation cooling had a dead battery. The licensee replaced the battery in the tachometer and verified it could perform its function. The licensee entered this issue into the corrective action program with an action to change procedures to perform periodic inventory of the tachometer, including battery checks. During the inspector walkdowns, the need for additional procedure enhancements, some operator familiarity issues, and the lack of staged procedures in some locations were noted. The licensee entered these issues into the corrective action program and has taken or will take actions to correct the issues identified by the inspectors. None of the issues identified by the inspectors would have prevented accomplishment of the actions in the licensee's strategies.
Licensee Action		Describe the licensee's actions to verify that procedures are in place and can be executed (e.g., walkdowns, demonstrations, tests, etc.)
b. Verify through walkdowns or demonstration that procedures to implement the strategies associated with B.5.b and		The licensee performed walkdowns of all of procedures used to mitigate conditions that result from beyond design basis events. The licensee conducted tabletop exercises for the major event response guidelines, severe accident procedures, and system operating instructions; the licensee also performed a tabletop exercise with the local fire department. Some of the equipment is used for other activities, and the licensee has verified through those other activities that the systems work and that operators are familiar with how to operate the equipment.

10 CFR 50.54(hh) are in place and are executable. Licensees may choose not to connect or operate permanently installed equipment during this verification. This review should be done for a reasonable sample of mitigating strategies/equipment.		Describe inspector actions and the sample strategies reviewed. Assess whether procedures were in place and could be used as intended.
		The inspectors reviewed all the severe accident procedures and guidelines to ensure that the appropriate equipment, training, staging, and timelines could be followed. The inspectors determined that the licensee's procedures were in place as required by the current inventory, that operators had been trained during initial training on these procedures, and that the procedures could be implemented as intended. The inspectors walked down several strategies with plant operators to ensure that the operators knew where the equipment was located, how to operate the equipment, and the ease of use of the equipment.
		Discuss general results including corrective actions by licensee.
		The licensee's review of its procedures revealed that some procedural revisions were required. The licensee entered these issues in the corrective action program and corrected them by revising procedures. During the inspector walkdowns, the need for additional procedure enhancements, some operator familiarity issues, and the lack of staged procedures in some locations were noted. The licensee entered these issues into the corrective action program and have taken or will take actions to correct the issues identified by the inspectors. None of the issues identified by the inspectors would have prevented accomplishment of the actions in the licensee's strategies.
Licensee Action		Describe the licensee's actions and conclusions regarding training and qualifications of operators and support staff.
c. Verify the training and qualifications of operators and the support staff needed to implement the procedures and work		The licensee performed a review of the required personnel qualifications and training programs. Nonlicensed plant operators receive initial training on these severe accident procedures through classroom presentation and walkdowns with instructors, which is required prior to initial watch standing. Continuing training for nonlicensed plant operators is accounted for in the plant operator requalification three year plan, and includes classroom sessions and walkthroughs. Licensed operators receive initial training on these severe accident procedures

instructions are current for activities related to B.5.b and severe accident management guidelines as required by 10 CFR 50.54 (hh).		along with all emergency operating and off-normal event procedures as part of initial licensed operator qualification. Continuing training for licensed operators is performed in the licensed operator requalification plan and emergency planning continuation training. The emergency response organization training requirements are governed by a procedure in the emergency preparedness training program and personnel on the emergency response roster must complete training/requalification every year. Licensed operators do not currently receive continuing training on B.5.b actions, but the licensee will be reviewing this during its next operations training review group meeting.
		Describe inspector actions and the sample strategies reviewed to assess training and qualifications of operators and support staff.
		The inspectors reviewed training records of all nonlicensed plant operators, licensed plant operators, and all emergency response roster personnel to ensure that they were still within their training window. The inspectors walked down and discussed several strategies with plant and licensed operators to ensure that the operators knew where the equipment was located, knew how to operate the equipment, and could complete the procedures as written.
		Discuss general results including corrective actions by licensee.
		The licensee review of operator qualifications revealed that 12 operators (six senior reactor operators, one reactor operator and five nonlicensed operators) had received the initial B.5.b training, but had not received training for changes in the training curriculum from their initial training. The licensee entered this issue into the corrective action program and conducted the required training for the operators. During the inspectors' walkdowns, it was noted some operators did not locate equipment in a timely manner. The licensee entered this issue into the corrective action program and have taken or will take actions to correct the issue identified by the inspectors. The issue identified by the inspectors would not have prevented accomplishment of the actions in the licensee's strategies.

Licensee Action		Describe the licensee's actions and conclusions regarding applicable agreements and contracts are in place.
d. Verify that any applicable agreements and contracts are in place and are capable of meeting the conditions needed to mitigate the consequences of these events. This review should be done for a reasonable sample of mitigating strategies/equipment.		The licensee reviewed Letters of Agreement with federal, state and local entities. The licensee determined that the agreements were current and that required offsite equipment for response was available. This review was accomplished in March 2011.
		For a sample of mitigating strategies involving contracts or agreements with offsite entities, describe inspector actions to confirm agreements and contracts are in place and current (e.g., confirm that offsite fire assistance agreement is in place and current).
		The inspectors reviewed all Letters of Agreement to ensure that they were current. The inspectors reviewed the licensee procedure which requires an annual review of agreement letters.
		Discuss general results including corrective actions by licensee.
		The licensee determined that one memorandum of understanding with Hydra of Birmingham, Alabama, for fire water services had not been renewed after 2008, and the licensee entered this issue into the corrective action program. In its investigation, the licensee determined that the memorandum of understanding was no longer required because the condition that necessitated additional fire water no longer existed.

Licensee Action		Document the corrective action report number and briefly summarize problems noted by the licensee that have significant potential to prevent the success of any existing mitigating strategy.
e. Review any open corrective action documents to assess problems with mitigating strategy implementation identified by the licensee. Assess the impact of the problem on the mitigating capability and the remaining capability that is not impacted.		The licensee has captured procedural enhancements, additional required locations of procedures in the field, incomplete inventory checklists, missing items in emergency lockers, and other miscellaneous items in the corrective action program. The inspectors reviewed the associated corrective action reports and verified that none of the identified gaps or deficiencies would have significant potential to prevent the success of any existing mitigating strategy.

03.02 Assess the licensee's capability to mitigate station blackout conditions, as required by 10 CFR 50.63, "Loss of All Alternating Current Power," and station design, is functional and valid. Refer to Temporary Instruction 2515/120, "Inspection of Implementation of Station Blackout Rule Multi-Plant Action Item A-22" as a guideline. It is not intended that Temporary Instruction 2515/120 be completely reinspected. The inspection should include, but not be limited to, an assessment of any licensee actions to:		
Licensee Action		Describe the licensee's actions to verify the adequacy of equipment needed to mitigate a station blackout event.
a. Verify through walkdowns and inspection that all required materials are adequate and properly staged, tested, and maintained.		The licensee reviewed 10 CFR 50.63, Regulatory Guide 1.155, NUMARC 87-00, the Updated Final Safety Analysis Report, and the NRC's Safety Evaluation Report in response to the Updated Final Safety Analysis Report, to ensure the basis for actions for a station blackout. The licensee uses a coping strategy for the required station blackout coping duration of 4 hours. The licensee verified that required equipment for station blackout recovery actions was adequate and properly staged.

		Describe inspector actions to verify equipment is available and useable.
		The inspectors reviewed the licensee's Updated Final Safety Analysis Report to understand the implementation and required equipment for station blackout and coping strategies. On April 20-21, 2011, the inspectors observed the most recent 24-hour surveillance run of the Division 3 diesel generator that included a fast restart. The inspectors observed a safety related battery surveillance on March 29, 2011. Additionally, the inspectors searched through the corrective action program database for items that could impact the operability of the station batteries and standby diesel generators.
		Discuss general results including corrective actions by licensee.
		The licensee identified that several keys required for station blackout procedures were not controlled by its key control procedure. One required key was not included in the shift manager's key locker. In addition, the licensee did not have inventories in process for nitrogen bottles that are also required. The licensee entered these issues into the corrective action program, immediately replaced the key, and is revising the inventory procedure to ensure the required items are included. During the inspectors' reviews, they noted that there was no updated index for the shift manger's key locker to identify where the new required keys were located in the locker. The licensee corrected the index to identify the location of the newly added keys.
Licensee Action		Describe the licensee's actions to verify the capability to mitigate a station blackout event.
b. Demonstrate through walkdowns that procedures for		The licensee verified that Off-Normal Event Procedure 05-1-02-I-4, "Loss of AC Power," was executable. This verification involved performing the procedure in the simulator, conducting a walkdown of the procedure steps, and performing a "tabletop" discussion with operators.

response to a station blackout are executable.		Describe inspector actions to assess whether procedures were in place and could be used as intended.
		The inspectors walked down the station blackout procedure with plant operators, both in the control room and the plant, to ensure that the operators knew where the equipment was located and how to operate the equipment and to verify the procedure worked as written. The walkdown included locations of supplemental equipment.
		Discuss general results including corrective actions by licensee.
		The licensee identified one step in the procedure that would not be executable as written, in addition to the issue with keys identified in Section 03.03.a. These deficiencies were entered into the corrective action program. In addition, several enhancements to the procedure were noted, and they will be evaluated for inclusion into future revisions. During the inspectors' walkdowns and reviews, they noted that one operator was not familiar with the location of one valve. Inspectors also noted that some sections of the procedure could be enhanced. The licensee entered these issues into their corrective action program. None of these conditions would have prevented implementation of the procedure.

03.03 Assess the licensee's capability to mitigate internal and external flooding events required by station design. Refer to Inspection Procedure 71111.01, "Adverse Weather Protection," Section 02.04, "Evaluate Readiness to Cope with External Flooding," as a guideline. The inspection should include, but not be limited to, an assessment of any licensee actions to verify thorough walkdowns and inspections that all required materials and equipment are adequate and properly staged. These walkdowns and inspections shall include verification that accessible doors, barriers, and penetration seals are functional.

Licensee Action		Describe the licensee's actions to verify the capability to mitigate existing design basis flooding events.
a. Verify thorough walkdowns and inspection that all required materials are adequate and properly staged, tested, and maintained.		The licensee reviewed the equipment and penetrations required to mitigate internal and external flooding events. The licensee inspected the probable maximum precipitation seals and watertight doors.
		Describe inspector actions to verify equipment is available and useable. Assess whether procedures were in place and could be used as intended.
		Inspectors verified that the plant grade is 132.5 feet above mean sea level and that the maximum expected flood height from the Mississippi River is about 103 feet above mean sea level. Therefore, floodwaters from the Mississippi River are not expected to impact the plant. Inspectors toured various levels of the enclosure building, auxiliary building, and control building roofs and verified that the roofs were free of debris that could potentially impact roof drains. Inspectors also verified that the drains had covers. Inspectors performed walkdowns of the high pressure core spray, low pressure core spray pump, and residual heat removal C rooms to verify that the integrity of piping, door seals, and electrical seal penetrations was maintained. Inspectors did not find any issues of concern. Inspectors also reviewed the most recent door seal and penetration inspections and independently inspected the probable maximum precipitation seals.

		Discuss general results including corrective actions by licensee.
		The licensee identified two probable maximum precipitation seals that were degraded. The licensee entered the degraded seals into their corrective action program and ensured that sandbags were located in the vicinity of the doors as a compensatory measure until the seals could be repaired. The licensee has repaired all probable maximum precipitation seals. The licensee noted that one watertight door had not been inspected since 2008. The licensee entered this into the corrective action program and will inspect and test the seal during the week of May 2, 2011. While independently inspecting the probable maximum precipitation seals, inspectors identified doors with degraded seals that the licensee failed to identify during its most recent inspection. The licensee put the degraded seals into the corrective action program and ensured that sandbags were located in the vicinity of the doors as a compensatory measure until the seals could be replaced. Additionally, the inspectors will be evaluating the issue with probable maximum precipitation seals during the second quarter integrated inspection report. The inspectors will review the results of the watertight door inspection and tests and document any deficiencies in the second quarter integrated inspection report. During the inspectors' review of roof drains, they noted two drains without covers. These had already been entered into the licensee's corrective action program.

03.04 Assess the thoroughness of the licensee's walkdowns and inspections of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during seismic events possible for the site. Assess the licensee's development of any new mitigating strategies for identified vulnerabilities (e.g., entered it in to the corrective action program and any immediate actions taken). As a minimum, the licensee should have performed walkdowns and inspections of important equipment (permanent and temporary) such as storage tanks, plant water intake structures, and fire and flood response equipment; and developed mitigating strategies to cope with the loss of that important function. Use Inspection Procedure 71111.21, "Component Design Basis Inspection," Appendix 3, "Component Walkdown Considerations," as a guideline to assess the thoroughness of the licensee's walkdowns and inspections.

Licensee Action		Describe the licensee's actions to assess the potential impact of seismic events on the availability of equipment used in fire and flooding mitigation strategies.
a. Verify through walkdowns that all required materials are adequate and properly staged, tested, and maintained.		Licensee actions included identifying the equipment that would be used for mitigation of fire and flooding events, and determining if the equipment was seismically qualified. Fire protection systems were evaluated for the ability to withstand seismic events. All of the flood mitigating seals and penetrations were walked down to the extent allowable. The licensee inspected roof drainage for ponding concerns. The licensee also reviewed the Letters of Agreement with state and local entities to verify which agreements were still in place.
		Describe inspector actions to verify equipment is available and useable. Assess whether procedures were in place and could be used as intended.
		The inspectors reviewed the Updated Final Safety Analysis Report to determine the maximum flood level for the site and the required equipment to combat floods. The inspectors also reviewed the Updated Final Safety Analysis Report sections covering fire protection systems to determine the license requirements. The inspectors reviewed the licensee's fire protection program and flooding mitigation procedures, including natural and destructive phenomena procedures. The inspectors walked down the licensee's equipment to ensure it was available and usable and to ensure that the procedures could be accomplished as written. This included walking down contingency response equipment, all external watertight doors, the walls of all external buildings for signs of degradation, and the fire protection water system pumps. The licensee also performed an aggregate review of all the vulnerabilities identified to determine if any cumulative effects presented additional vulnerabilities.
		Discuss general results including corrective actions by licensee. Briefly summarize any new mitigating strategies identified by the licensee as a result of their reviews.

		The licensee determined that all fire protection systems were designed and installed in accordance with the National Fire Protection Association Codes. Consequently, none of the fire protection systems are seismically qualified, with the exception of portions that are in seismically qualified buildings. The licensee determined that the nonseismically qualified fire protection systems were of a robust design that would likely survive a seismic event. The licensee determined that the emergency core cooling systems' pump room flood switches were not seismically qualified and initiated a corrective action to evaluate their functionality after a safe-shutdown earthquake. It also determined that a section of the fire ring header passing through the Unit 2 turbine building is not seismically qualified. The licensee is evaluating whether this section of piping would be functional following a safe shutdown earthquake. Mitigating actions for this condition need to be developed. The licensee also determined that the storage building where the fire pumper truck is located has ductwork hanging over the parked position of the truck. Mitigating actions, which may involve additional support for the ductwork or potentially relocating the ductwork, need to be developed. Additionally, the licensee determined the fire pumper truck and the portable generator used to supply temporary power to one division of hydrogen igniters are located in a nonseismic building. The licensee is considering mitigating strategies to address the vulnerabilities. These issues have been entered into the licensee's corrective action program. The inspectors determined that, while the licensee has evaluated the fire protection water system to be seismically robust, the licensee does not have policies and procedures in place to protect the system from a seismic event. Specifically, the licensee does not evaluate the fire pump house or fire pumps for seismic concerns with regard to operability and does not take any seismic precautions with regards to temporary equipment such as scaffolding. These issues were entered into the licensee's corrective action program for further evaluation.

EXIT MEETING SUMMARY

The inspectors presented the inspection results to Mr. M. Perito, Site Vice President Operations, and other members of licensee management at the conclusion of the inspection on April 29, 2011. The inspectors acknowledge they examined licensee proprietary materials during the inspection; all such material has been returned to the licensee.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

M. Perito, Site Vice President of Operations
J. Browning, General Plant Manager
D. Coulter, Senior Licensing Specialist
K. Ehrharat, Assistant Operation Manager Shift
H. Farris, Assistant Operation Manager Training
K. Higgenbotham, Planning and Scheduling Manager
J. Houston, Maintenance Manager
R. Jackson, Licensing
C. Lewis, Manager, Emergency Preparedness
J. Miller, Operations Manager
C. Perino, Licensing Manager
M. Richey, Director, Nuclear Safety Assurance
P. Salgado, Assistant Operations Manager Support
R. Sumrall, Superintendant, Operations Training
D. Wiles, Engineering Director
R. Wilson, Manager, Quality Assurance

LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety but rather that selected sections of portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

03.01 Assess the licensee's capability to mitigate conditions that result from beyond design basis events

PROCEDURES

NUMBER	DESCRIPTION OR TITLE	DATE / REVISION
05-S-01-STRATEGY	Alternate Strategy	7
10-S-04-7	Major Event Response, Change 6	0
05-S-01-EP-1	Injection Into RPV With Fire Protection Water System, Attachment 26	23

05-S-01-EP-1	Emergency/Severe Accident Procedure Support Documents	23
05-S-01-SAP-1	Severe Accident Procedure	7
LPN GLP-OPS-B5B00	Emergency Procedure Alternate Strategy (B5B)	0
LPN GLP-EP-EPTS26	SAPs and Emergency Plan Refresher	1
GLP-OPS-B5B00	Emergency Procedure Alternate Strategy	3
GLP-OPS-B5B00	Part 2, Charging Fire Header With Construction Water	3
GLP-OPS-B5B00	Part 3	3
GLP-OPS-B5B00	Part 4	3
GLP-OPS-B5B00	Part 5, Attachment X	3
01-S-10-3	Emergency Preparedness Department Responsibilities	16
	Performed Test to Verify Digital Tachometer Model 1726 used in 05-S-01 Strategy	March 22, 2011
	Fire Apparatus Service Test	August 16, 2010
02-S-01-34	Auxiliary Building Generic Checks	28
06-OP-SP64-M-0047, Attachment I	Unit 1 Fire Hose Station Check, Fire Extinguisher Inspections and B5b Lockers	112
06-OP-SP64-M-0047	B5b Locker Inventory Check	112
	GGNS Fire Truck Tests and Verify Hose Lengths that are Stored on the Fire Truck	March 18, 2011
	Procedure Distribution in Fire House	
05-S-01-EP-1	Pathway #9 Feedwater Pump Discharge	23

CONDITION REPORTS

CR-GGN-2011-02432	CR-GGN-2011-02558	CR-GGN-2011-02800
CR-GGN-2011-02801	CR-GGN-2011-01776	CR-GGN-2011-01857
CR-GGN-2011-01877	CR-GGN02011-01882	CR-GGN-2011-01895
CR-GGN-2011-01896	CR-GGN-2011-01924	CR-GGN-2011-01925
CR-GGN-2011-01951	CR-GGN-2011-01958	CR-GGN-2011-01959
CR-GGN-2011-01961	CR-GGN-2011-01877	CR-GGN-2011-01891
CR-GGN-2011-01895	CR-GGN-2011-01959	CR-GGN-2011-02372

CR-GGN-2011-02645	CR-GGN-2011-02757	CR-GGN-2011-02831

WORK ORDERS

WO 52327369 01

03.02 Assess the licensee's capability to mitigate station blackout conditions

PROCEDURES

NUMBER	DESCRIPTION OR TITLE	DATE / REVISION
04-1-01-P75-1	Standby Diesel Generator System	89
GNRO-93/00003	Change of Commitments on Containment Isolation Valves During Station Blackout	January 12, 1993
9.1-14b	GG USFAR	
05-S-01-EP-1, Attachment 4	Defeating HPCS High Sp Water Level Suction Transfer Interlock	23
05-S-01-EP-1, Attachment I	Defeating RCIC High SP Water level Suction Transfer Interlock	23
05-1-02-I-4	Off-Normal Event Procedure Loss of AC Power	38

CONDITION REPORT

CR-GGN-2011-02016	CR-GGN-2011-02019	CR-GGN-2011-02053
CR-GGN-2011-02063	CR-GGN-2011-02016	CR-GGN-2011-02010
CR-GGN-2011-02016	CR-GGN-2011-02019	CR-GGN-2011-02053
CR-GGN-2011-02063	CR-GGN-2011-02177	CR-GGN-2011-02906
CR-GGN-2011-02910	CR-GGN-2011-02913	CR-GGN-2011-02960

03.03 Assess the licensee's capability to mitigate internal and external flooding events required by station design

NUMBER	DESCRIPTION OR TITLE	DATE / REVISION
06-OP-SP64-R-0049	Fire Related Sealed Penetration Visual Inspection	108
	TIMD083 - Predefined History	April 11, 2011
07-1-24-T10-1	Periodic Leak Check of Airtight Door Seal Surface	5

06-TE-1000-V-0001	Culvert No 1 Embankment Stability/Inspection Survey	100
3.4-2a	GG UFSAR	3
06-OP-SP64-R-0049	Surveillance Procedure Fire Rated Sealed Penetrations Visual Inspection	108

CONDITION REPORTS

CR-GGN-2011-02410	CR-GGN-2011-02412	CR-GGN-2011-02428
CR-GGN-2011-02525	CR-GGN-2011-02575	CR-GGN-2011-02619
CR-GGN-2011-02356	CR-GGN-2011-02364	CR-GGN-2011-02064
CR-GGN-2011-02619		

WORK ORDERS

WO 00171973 01	WO 52203106 01	WO 52221454 01
WO 52241872 01	WO 52270712 01	WO 52256742 01

03.04 Assess the thoroughness of the licensee's walkdowns and inspections of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during seismic events

CONDITION REPORTS

CR-GGN-2011-02349	CR-GGN-2011-02350	CR-GGN-2011-02351