UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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May 13, 2011

Mr. Joseph A. Kowalewski
Vice President, Operations
Entergy Operations, Inc.
Waterford Steam Electric Station, Unit 3
17265 River Road
Killona, LA 70057-0751

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 – NRC TEMPORARY INSTRUCTION 2515/183 INSPECTION REPORT 05000382/2011006

Dear Mr. Kowalewski:

On April 29, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Waterford Steam Electric Station, Unit 3 facility using Temporary Instruction 2515/183, "Follow-up to the Fukushima Daiichi Nuclear Station Fuel Damage Event." The enclosed inspection report documents the inspection results which were discussed on April 15 and April 29, 2011, with you and other members of your staff.

The objective of this inspection was to assess the adequacy of actions taken at Waterford Steam Electric Station, Unit 3 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/By Ray Azua for

Jeffrey Clark
Chief, Project Branch E
Division of Reactor Projects

Docket: 50-382
License: NPF-38

Enclosure
NRC Inspection Report 05000382/2011006
w/Attachment: Supplemental Information

cc w/Enclosure:

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SUNSI Rev Compl.	☒ Yes ☐ No	ADAMS	☒ Yes ☐ No	Reviewer Initials	RVA
Publicly Avail	☒ Yes ☐ No	Sensitive	☐ Yes ☒ No	Sens. Type Initials	RVA

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U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket No:	50-382
License No:	NPF-38
Report No:	05000382/2011006
Licensee:	Entergy Operations, Inc.
Facility:	Waterford Steam Electric Station, Unit 3
Location:	Killona, LA 70057-0751
Dates:	March 23, 2011 through April 29, 2011
Inspectors:	M. Davis, Senior Resident Inspector C. Smith, Project Engineer
Approved by:	Jeffrey Clark, Chief, Project Branch E Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000382/2011006, 03/23/2011 – 04/29/2011; Waterford Steam Electric Station, Unit 3 Temporary Instruction 2515/183 - Follow-up 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 walk downs 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 follow-up inspection will be performed at a later date.

INSPECTION RESULTS

The following table documents the NRC inspection at Waterford Steam Electric Station, Unit 3 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 of the Code of Federal Regulations (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 review of mitigating strategies (B.5.b) and off-normal operating procedures to identify equipment that was not formally staged or inventoried. Additionally, the licensee identified in-plant equipment and components used in those procedures that did not fall under surveillance or testing programs. The licensee tested the active equipment that was not recently tested or serviced and walked down the passive equipment.
	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 licensee's test results and records, and discussed actions with several plant operators. The inspectors verified that all active equipment credited in the B.5.b procedure was located, stored, and maintained per station procedures. Specifically, the inspectors independently reviewed the contents of the B.5.b "Sealand" container, B.5.b emergency operations facility locker, and equipment staged throughout the plant. Additionally, the inspectors reviewed test results for the B.5.b portable pump.
	Discuss general results including corrective actions by licensee.

		No significant discrepancies were identified by the inspectors. Nearly all the active and passive components were already governed by a maintenance or surveillance program. The licensee identified several instances of non-plant equipment that was available in the plant but not officially staged or inventoried in the procedures. Additionally, the licensee identified that the portable pump was never flow tested. However, the vendor manual allows for dry operation of the pump using vacuum check rig on the suction valve to ensure operability. The licensee generated a corrective action to evaluate the need to flow test the pump. However, based on the vendor technical manual, there is sufficient evidence to conclude the pump would function as designed. These issues have been entered into the licensee's corrective action program as CR-WF3-2011-1420, which is the "wrap-up" corrective action for tracking issues related to the Fukushima Daiichi Nuclear Station Fuel Damage Event and NRC Temporary Instruction 183.
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 Security Order Section B.5.b and 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		The licensee performed walkdowns and a tabletop exercise of procedures that implement the strategies associated with Security Order Section B.5.b. Specifically, the licensee walked down the mitigating strategy for venting containment and simulated other mitigating strategies. The licensee verified that operators are familiar with the procedures and know how to operate the 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 time lines could be followed. The inspectors walked down several strategies with plant operators to ensure that the operators knew where the equipment was located and how to operate the equipment.

strategies/equipment.		Discuss general results including corrective actions by licensee.
		No significant discrepancies were identified by the inspectors. The procedures were logically organized, clearly written, and could be accomplished by the most junior plant operator. Several key pieces of equipment are pre-staged, and some are designed to be functional without continuous operator coverage, including the portable pump. The licensee did identify some potential enhancements to time critical procedures, such as removing control room ceiling tiles. The licensee further identified that the containment venting procedure could be accomplished as written, but an alternative method proposed in the severe accident management guidelines procedures requires specific equipment and materials that were not readily available. The licensee's procedures were adequate in ensuring that the desired action could be accomplished. These issues have been entered into the corrective action program as CR-WF3-2011-1420, which is the "wrap-up" corrective action for tracking issues related to the Fukushima Daiichi Nuclear Station Fuel Damage Event and NRC Temporary Instruction 183.
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 instructions are current for activities related to Security Order Section B.5.b and severe accident management guidelines as required by 10 CFR 50.54 (hh).		The licensee performed a review to verify licensed and non-licensed operators have current training and could implement the procedures. Additionally, the licensee evaluated the need for support and emergency planning personnel to receive training. Plant operators received initial training on these severe accident procedures through lesson plan WLP-EP-SAM00 and WLP-OPS-SAM00. Continuing training for plant operators is accounted for in the plant operator requalification 3-year plan, which includes classroom and walkthroughs. Licensed operators received initial training on these severe accident procedures along with all emergency operating and off-normal operating procedures as part of initial licensed operator qualification.
		Describe inspector actions and the sample strategies reviewed to assess training and qualifications of operators and support staff.

		The inspectors reviewed the training records of all plant and licensed operators and of 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, how to operate the equipment, the ease of use of the equipment, and could complete the procedures as written.
		Discuss general results including corrective actions by licensee.
		No significant discrepancies were identified by the inspectors. The licensee's B.5.b and severe accident management guidelines and procedures were effective in ensuring that the desired action could be accomplished. The procedures were logically organized, clearly written, and could be accomplished by the most junior plant operator. The licensee also generated severe accident management guidelines overview training for all technical support center managers and security coordinators. The licensee developed "familiarization" lesson plans on severe accident management guidelines and station blackout procedures for all plant personnel that were not required to have the formal training and qualifications.
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		The licensee reviewed the Letters of Agreement from the Emergency Plan, as well as agreements with offsite organizations credited in the supplemental severe accident management guidelines in March 2011. The licensee verified the Letters of Agreement are reviewed annually in accordance with station procedures.
		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

a reasonable sample of mitigating strategies/equipment.		current (e.g., confirm that offsite fire assistance agreement is in place and current).
		The inspectors confirmed agreements with offsite responders are current and the equipment and capabilities of the offsite responders remain valid. Contact information and capability of offsite response was verified via telephone. Specifically, the inspectors spoke with the offsite supplier for temporary emergency diesel generator(s) and transformer(s). Additionally, the inspectors contacted the credited outside firm with the expertise and advanced equipment to combat large industrial fires and hazards. These samples were selected due to Waterford Unit 3's site-specific hazards.
		Discuss general results including corrective actions by licensee.
		The inspectors did not identify any significant issues with the offsite response agreements, contact information, or capabilities. However, the licensee identified several discrepancies in the contact information listed in the procedures. The supplemental severe accident management guidelines offsite agreements were not tracked on annual basis and some of the contact information was erroneous. The contact information was corrected and an annual requirement was established to ensure the contact information, agreements, and capabilities listed in the procedures are correct. These issues have been entered into the corrective action program as CR-WF3-2011-1420, which is the "wrap-up" corrective action for tracking issues related to the Fukushima Daiichi Nuclear Station Fuel Damage Event and NRC Temporary Instruction 183.
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 portable pump, and other associated Security Order Section B.5.b equipment, is located outside the Nuclear Plant Island Structure in a cargo container at approximately plant grade elevation (plus 20-foot mean sea level). In a flooding event the portable pump could potentially become inaccessible and inoperable. A truck is required to tow the pump to a hydrant or other designated water source, but trucks are not protected from design floods. Further, the severe accident management guidelines rely on the same pump for multiple strategies. No priority is given to determine how the pump should be utilized. Operators felt that the container size was too small for the amount of equipment stored inside (hoses were stacked on top of pump), and made equipment retrieval difficult. Lastly, the B.5.b Sealand cargo container is not seismically qualified, so the equipment stored inside may be affected by an earthquake. These issues are all being tracked and evaluated in the corrective action program. Despite the issues identified, there is confidence that the licensee is adequately meeting the requirements for external event mitigation. Nothing was identified that would substantially question the ability to respond to external events. These issues have been entered into the corrective action program as CR-WF3-2011-1420, which is the "wrap-up" corrective action for tracking issues related to the Fukushima Daiichi Nuclear Station Fuel Damage Event and NRC Temporary Instruction 183.

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 re-inspected. 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 verified its capability to respond to a station blackout event through plant walkdowns and by performance of a station blackout scenario in the simulator. In addition the licensee verified that all the required staged equipment was accounted for or available. The licensee further identified any equipment referenced in procedures that was not staged, maintained, or tested and placed those deficiencies into the corrective action program.
		Describe inspector actions to verify equipment is available and useable.
		The inspectors reviewed the storage locations, corrective actions, and surveillance data for the active and passive equipment required in “Station Blackout Recovery” Procedure OP-902-005. Specifically, the inspectors walked down the diesel generators, battery rooms, emergency feedwater pumps, and stored equipment.
		Discuss general results including corrective actions by licensee.
		The inspectors identified that the steam supply valves (MS 401A and MS 401B) to the emergency feedwater system may be difficult to manually operate under high differential pressure conditions. The licensee calculated that the valves would require 136 pounds of force to operate, however, EPRI guidance document (NP-6516) states that for this type of motor operated valve the manual actuation force should be limited to 125 pounds. Additionally, the valves are located at a height that would require scaffolding or a ladder to avoid climbing on heated pipes in a dark room, and one of the valves lacked scaffolding. To address this, the licensee generated Corrective Action CR-WF3-2011-2776 to stage a mechanical assist device for manual operation of the valves and a ladder to provide access to the valves. Additionally, the licensee identified that a screwdriver required for completion of Step 14 of OP-902-005 “Station Blackout Recovery” Procedure was not staged, though was available. These issues have been entered into the corrective action program as CR-WF3-2011-1420, which is the “wrap-up” corrective action for tracking

		issues related to the Fukushima Daiichi Nuclear Station Fuel Damage Event and NRC Temporary Instruction 183.
Licensee Action		Describe the licensee's actions to verify the capability to mitigate a station blackout event.
b. Demonstrate through walkdowns that procedures for response to a station blackout are executable.		The licensee reviewed "Station Blackout Recovery" Procedure, OP-902-005, as well as supporting procedures, in detail. Operator manual actions were demonstrated with walkdowns; control room actions were verified by a simulator scenario performed on March 2, 2011. The licensee verified that operators were up to date on required loss of alternating current training.
		Describe inspector actions to assess whether procedures were in place and could be used as intended.
		The inspectors reviewed the licensing basis for Waterford Unit 3 to ensure the station is a 4-hour coping plant. The inspectors reviewed the results of licensee walkdowns, corrective actions, training records, and simulator scenarios. The inspectors reviewed "Loss of Offsite Power" Procedure OP-902-003 and "Station Blackout Recovery" Procedure OP-902-005. Additionally, the station blackout coping time can be extended if load shedding of the battery occurs. The inspectors verified that "Station Blackout Recovery" Procedure OP-902-005 contained instructions to reduce battery loads, extending coping time. Operators are trained and capable of executing the procedure as written.
		Discuss general results including corrective actions by licensee.
		No significant issues were identified by the inspectors. The licensee identified several enhancements that could be made to aid in completion of the station blackout procedure.

		Specifically, ceiling panels in the control room are required to be opened, but they are secured on four sides with latches and associated hardware. Further, the licensee noted that some station blackout procedures are not frequently practiced and generated a condition report to address the configuration (design) of the time-critical actions for removal of control room panels and the need for initial training to all plant personnel (non-operators). These issues have been entered into the corrective action program as CR-WF3-2011-1420, which is the "wrap-up" corrective action for tracking issues related to the Fukushima Daiichi Nuclear Station Fuel Damage Event and NRC Temporary Instruction 183.

03.03 Assess the licensee's capability to mitigate internal and external flooding events required by station design. Refer to Inspection Report 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 through 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 through walkdowns and inspection that all required materials are adequate and properly staged, tested, and maintained.		The licensee verified the capability to mitigate a design basis flood (both internal and external) via walkdowns and inspections of all the required materials, equipment, and procedures. Waterford Unit 3 does not credit any portable or temporary equipment for design flood mitigation; all internal and external flooding mitigation equipment is permanently installed and tested. Accessible doors, barriers, and penetration seals were inspected and found satisfactory.
		Describe inspector actions to verify equipment is available and useable. Assess whether procedures were in place and could be used as intended.

		The inspectors walked down exterior flood doors and accessible penetrations on elevations below plus 30 foot mean sea level. The licensee does not credit any portable or temporary equipment to mitigate floods. The inspectors determined that flood doors are required to be closed per the "Severe Weather and Flooding" Procedure OP-901-521.
		Discuss general results including corrective actions by licensee.
		Waterford Unit 3 is protected against flooding by the Nuclear Plant Island Structure up to plus 29.25 feet mean sea level; the worst-case design basis flood is plus 27.6 feet mean sea level. The Nuclear Plant Island Structure is designed to be watertight and has relatively few doors and penetrations. The licensee identified some degraded penetrations and door seals. Additionally, the licensee identified corrosion products and debris that could affect the operation of the level switches that provide control signals for the Dry Cooling Tower sump pumps. These issues have been entered into the corrective action program as CR-WF3-2011-1420, which is the "wrap-up" corrective action for tracking issues related to the Fukushima Daiichi Nuclear Station Fuel Damage Event and NRC Temporary Instruction 183. The inspectors determined there were no significant issues that would degrade the ability of the licensee to successfully mitigate the effects of internal or external design floods.

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.		The licensee performed walkdowns and inspections to identify plant equipment required by procedures for fire and flood mitigation. The identified equipment was then inspected to determine its seismic qualification, if applicable.
		Describe inspector actions to verify equipment is available and useable. Assess whether procedures were in place and could be used as intended.
		The inspectors conducted multiple walkdowns, both independently and in conjunction with licensee personnel, of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during a seismic event. This equipment included, but was not limited to: • all major B.5.b contingency response equipment staged throughout the site; • all installed fire protection and suppression equipment; • the installed diesel and electric fire pumps and their controls; and • watertight doors, seals, and penetrations in the Nuclear Plant Island Structure.
		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's reviews of flood and fire mitigating equipment that may be damaged by a seismic event determined that non-safety related structures, systems, and components, in general, were not considered to be seismically qualified due to a wide variety of issues. The majority of room flood mitigation sump pumps were not designed as seismically qualified. Specifically, the sump pumps (both permanently installed and portable diesel sump pump) in the dry cooling towers areas are not seismically qualified. The dry cooling towers system is the ultimate heat sink at Waterford Unit 3. However, the portable diesel sump pump is staged in an area that is classified Seismic II is free from seismic falling hazards, so it would remain functional after a seismic event. Similarly, the vast majority of the fire protection system, including both installed fire pumps, was not designed as seismically qualified. Firefighting equipment staged to respond to Security Order Section B.5.b events was not stowed in seismically qualified buildings or locations, as a seismic event and B.5.b event were not assumed to occur coincidentally. The licensee identified that hydrostatic barrier penetrations in the Nuclear Plant Island Structure were not explicitly designed with seismic considerations. However, the Nuclear Plant Island Structure flood seal penetrations were designed and constructed to withstand a differential pressure from a 20-foot head of water. Design engineering personnel evaluated the penetrations in calculation EC-28921 and determined they are acceptable for seismic events. Additionally, the licensee formally documented several level switches as seismically qualified after a review of procurement and qualification documentation. Finally, the licensee generated corrective actions to address the effect of flood borne debris on the NPIS penetrations and the fuel oil storage tank fill line. These issues have been entered into the corrective action program as CR-WF3-2011-1420, which is the "wrap-up" corrective action for tracking issues related to the Fukushima Daiichi Nuclear Station Fuel Damage Event and NRC Temporary Instruction 183. The licensee's reviews identified instances where response capability could be enhanced. These included improving procedural guidance, reviewing the locations of portable equipment, and reviewing the need for supplemental portable equipment to compensate for the possible loss of the firewater storage tank, the fire pumps, fire suppression system piping, and the portable Security Order Section B.5.b pump.

Exit Meeting Summary

The inspectors presented the inspection results to Mr. Kowalewski and other members of the licensee management at the conclusion of the inspection on April 29, 2011. The inspectors handled proprietary information but it was handled and disposed of properly.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

C. Arnone, General Manager Plant Operations
W. Crowley, Operations
J. Kowalewski, Vice President, Operations
J. Pollock, Licensing
B. Proctor, Assistant Operations Manager

Nuclear Regulatory Commission

J. Clark, Branch Chief

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

MISCELLANEOUS

NUMBER	DESCRIPTION OR TITLE	REVISION
EPLAN	Emergency Plan	40
OP-TEM-008	Emergency Diesel Generator A(B) Backup Temporary Diesel Generator(s)	4
SAMG1	Severe Accident Management Guidelines	
S-SAMG-001	Loss of Large Areas of the Plant Due to Fire/Explosion	10

CORRECTIVE ACTIONS

WF3-2011-1420

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

MISCELLANEOUS

NUMBER	DESCRIPTION OR TITLE	REVISION
EPLAN	Emergency Plan	40
OP-902-009	Standard Appendices	
OP-TEM-008	Emergency Diesel Generator A(B) Backup Temporary Diesel Generator(s)	4
SAMG1	Severe Accident Management Guidelines	
S-SAMG-001	Loss of Large Areas of the Plant Due to Fire/Explosion	10
TG-OP-902-005	Technical Guidance for Station Blackout Recovery	302
TG-OP-902-009	Technical Guidance for Standard Appendices	301

CORRECTIVE ACTIONS

WF3-2011-1420

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

DOCUMENTS

Number	Description or Title	Revision
EPLAN	Emergency Plan	40
OP-901-521	Severe Weather and Flooding	303
OP-TEM-008	Emergency Diesel Generator A(B) Backup Temporary Diesel Generator(s)	4

CORRECTIVE ACTIONS

WF3-2011-1420

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

DOCUMENTS

NUMBER	DESCRIPTION OR TITLE	REVISION
EC-28921	Design Engineering Calculation	
G1359	Drawing: Fire Protection Plan Reactor Auxiliary Building	
EPLAN	Emergency Plan	40
OP-TEM-008	Emergency Diesel Generator A(B) Backup Temporary Diesel Generator(s)	4

CORRECTIVE ACTIONS

WF3-2011-1776 WF3-2011-1878 WF3-2011-1420