



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION IV
1600 E. LAMAR BLVD.
ARLINGTON, TX 76011-4511

November 10, 2015

Mr. Eric W. Olson, Site Vice President
Entergy Operations, Inc.
River Bend Station
5485 U.S. Highway 61N
St. Francisville, LA 70775

SUBJECT: RIVER BEND STATION – NRC INTEGRATED INSPECTION
REPORT 05000458/2015003

Dear Mr. Olson:

On September 30, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your River Bend Station, Unit 1. On October 1, 2015, the NRC inspectors discussed the results of this inspection with you and other members of your staff. Inspectors documented the results of this inspection in the enclosed inspection report.

NRC inspectors documented one finding of very low safety significance (Green) in this report. This finding involved a violation of NRC requirements. Further, inspectors documented a licensee-identified violation which was determined to be of very low safety significance. The NRC is treating these violations as non-cited violations consistent with Section 2.3.2.a of the NRC Enforcement Policy.

If you contest the violations or significance of these non-cited violations, 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, DC 20555-0001; with copies to the Regional Administrator, Region IV; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC resident inspector at the River Bend Station.

If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region IV; and the NRC resident inspector at the River Bend Station.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's

E. Olson

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Sincerely,

/RA/

Gregory G. Warnick, Chief
Project Branch C
Division of Reactor Projects

Docket No.: 50-458
License No.: NPF-47

Enclosure:
Inspection Report 05000458/2015003
w/ Attachment: Supplemental Information

E. Olson

- 2 -

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Letter to Eric W. Olson from Gregory G. Warnick, dated November 10, 2015

SUBJECT: RIVER BEND STATION – NRC INTEGRATED INSPECTION
REPORT 05000458/2015003

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U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket: 05000458
License: NPF-47
Report: 05000458/2015003
Licensee: Entergy Operations, Inc.
Facility: River Bend Station, Unit 1
Location: 5485 U.S. Highway 61N
St. Francisville, LA 70775
Dates: July 1 through September 30, 2015
Inspectors: J. Sowa, Senior Resident Inspector
N. Hernandez, Acting Senior Resident Inspector
B. Parks, Acting Resident Inspector
P. Elkmann, Senior Emergency Preparedness Inspector
Approved By: G. Warnick, Chief
Project Branch C
Division of Reactor Projects

SUMMARY

IR 05000458/2015003; 07/01/2015 - 09/30/2015; River Bend Station; Integrated Resident and Regional Report; Follow-up of Events and Notices of Enforcement Discretion

The inspection activities described in this report were performed between July 1 and September 30, 2015, by the resident inspectors at the River Bend Station and an inspector from the NRC's Region IV office. One finding of very low safety significance (Green) is documented in this report. This finding involved a violation of NRC requirements. Additionally, NRC inspectors documented one licensee-identified violation of very low safety significance in this report. The significance of inspection findings is indicated by their color (Green, White, Yellow, or Red), which is determined using Inspection Manual Chapter 0609, "Significance Determination Process." Their cross-cutting aspects are determined using Inspection Manual Chapter 0310, "Aspects within the Cross-Cutting Areas." Violations of NRC requirements are dispositioned in accordance with the NRC Enforcement Policy. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process."

Cornerstone: Initiating Events

- Green. The inspectors reviewed a self-revealing, non-cited violation of Technical Specification 5.4.1.a for the licensee's failure to implement a procedure required by Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Specifically, System Operating Procedure SOP-0009, "Reactor Feedwater System," Revision 63, which is required by Regulatory Guide 1.33, requires the licensee to limit the position of the feedwater regulating valves to less than or equal to 92 percent open to allow for adequate margin to respond to an increase in steam flow while maintaining reactor vessel water level. Contrary to this, on December 12, 2014 while raising reactor power, the licensee failed to maintain the feedwater regulating valves less than or equal to 92 percent open resulting in a steam flow and feedwater flow mismatch and lowering reactor vessel water level, which caused a recirculation flow control valve runback. The crew responded to the runback using approved procedures and restored reactor vessel water level to the correct operating band. This issue was entered in the licensee's corrective action program as Condition Report CR-RBS-2014-6357.

This performance deficiency is more than minor, and therefore a finding, because it is associated with the human performance attribute of the Initiating Events Cornerstone and adversely affected the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the licensee failed to maintain feedwater regulating valves less than or equal to 92 percent open while raising reactor power, which resulted in an unplanned transient when plant systems automatically initiated a recirculation flow control valve runback in response to low reactor vessel water level. Using NRC Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," and Inspection Manual Chapter 0609, Appendix A, Exhibit 1, "Initiating Events Screening Questions," the inspectors determined that the finding is of very low safety significance (Green) because it did not cause a reactor trip and the loss of mitigation equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition, high energy line-breaks, internal flooding, or fire. This finding has an avoid complacency cross-cutting aspect within the human performance area because the licensee failed to perform a thorough

review of the activity every time the work was performed rather than relying on past successes and assumed conditions. Specifically, the control room operators relied on past experiences rather than following a written procedure [H.12]. (Section 4OA3)

Licensee-Identified Violation

A violation of very low safety significance that 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. This violation and associated corrective action tracking numbers are listed in Section 4OA7 of this report.

PLANT STATUS

River Bend Station began the inspection period with operators performing power ascension activities following a forced maintenance outage until 100 percent reactor thermal power was reached on July 4, 2015. It departed from full power as follows:

- On July 13, 2015, power was reduced to 65 percent for control rod suppression testing. Upon completion, power ascension activities were performed to reach 100 percent power on July 19, 2015.
- On September 4, 2015, power was reduced to 65 percent for control rod sequence exchange and scram time testing. Upon completion, power ascension activities were performed to reach 100 percent power on September 8, 2015.

Power remained at essentially 100 percent for the remainder of the inspection period.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

Readiness to Cope with External Flooding

a. Inspection Scope

On August 31, 2015, the inspectors completed an inspection of the station's readiness to cope with external flooding. After reviewing the licensee's flooding analysis, the inspectors chose three plant areas that were susceptible to flooding:

- Residual heat removal train B pump room
- Low pressure core spray pump room
- Division I emergency diesel generator

The inspectors reviewed plant design features and licensee procedures for coping with flooding. The inspectors walked down the selected areas to inspect the design features, including the material condition of seals, drains, and flood barriers. The inspectors evaluated whether credited operator actions could be successfully accomplished.

These activities constitute one sample of readiness to cope with external flooding, as defined in Inspection Procedure 71111.01.

b. Findings

No findings were identified.

1R04 Equipment Alignment (71111.04)

.1 Partial Walkdown

a. Inspection Scope

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

- August 13, 2015, reactor core isolation cooling
- September 3, 2015, low pressure core spray
- September 29, 2015, Division I main steam isolation valve sealing and penetration valve leakage control system

The inspectors reviewed the licensee's procedures and system design information to determine the correct lineup for the systems. They visually verified that critical portions of the systems were correctly aligned for the existing plant configuration.

These activities constitute three partial system walkdown samples, as defined in Inspection Procedure 71111.04.

b. Findings

No findings were identified.

.2 Complete Walkdown

a. Inspection Scope

On September 24, 2015, the inspectors performed a complete system walkdown inspection of the 125 Vdc Division III system. The inspectors reviewed the licensee's procedures and system design information to determine the correct system lineup for the existing plant configuration. The inspectors also reviewed outstanding work orders, open condition reports, in-process design changes, temporary modifications, and other open items tracked by the licensee's operations and engineering departments. The inspectors then visually verified that the system was correctly aligned for the existing plant configuration.

These activities constitute one complete system walkdown sample, as defined in Inspection Procedure 71111.04.

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05)

.1 Quarterly Inspection

a. Inspection Scope

The inspectors evaluated the licensee's fire protection program for operational status and material condition. The inspectors focused their inspection on four plant areas important to safety:

- August 4, 2015, control building, 125 Vdc switchgear room, fire area C-24
- August 4, 2015, control building, standby switchgear 1A room, fire area C-15
- August 27, 2015, control building, water chiller equipment 1A and 1B rooms, fire areas C-13W and C-13E
- September 3, 2015, auxiliary building, low pressure core spray pump and panel rooms, fire areas AB-6/Z-1 and AB-6/Z-2

For each area, the inspectors evaluated the fire plan against defined hazards and defense-in-depth features in the licensee's fire protection program. The inspectors evaluated control of transient combustibles and ignition sources, fire detection and suppression systems, manual firefighting equipment and capability, passive fire protection features, and compensatory measures for degraded conditions.

These activities constitute four quarterly inspection samples, as defined in Inspection Procedure 71111.05.

b. Findings

No findings were identified.

.2 Annual Inspection

a. Inspection Scope

On August 27, 2015, the inspectors completed their annual evaluation of the licensee's fire brigade performance. This evaluation included observation of an announced fire drill in the control building, 136-foot elevation, due to a bearing failure in a ventilation fan.

During this drill, the inspectors evaluated the capability of the fire brigade members, the leadership ability of the brigade leader, the brigade's use of turnout gear and fire-fighting equipment, and the effectiveness of the fire brigade's team operation. The inspectors also reviewed whether the licensee's fire brigade met NRC requirements for training, dedicated size and membership, and equipment.

These activities constitute one annual inspection sample, as defined in Inspection Procedure 71111.05.

b. Findings

No findings were identified.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope

On September 28, 2015, the inspectors completed an inspection of the station's ability to mitigate flooding due to internal causes. After reviewing the licensee's flooding analysis, the inspectors chose one plant area containing risk-significant structures, systems, and components (SSCs) that were susceptible to flooding:

- Low pressure core spray pump room

The inspectors reviewed plant design features and licensee procedures for coping with internal flooding. The inspectors walked down the selected area to inspect the design features, including the material condition of seals, drains, and flood barriers. The inspectors evaluated whether operator actions credited for flood mitigation could be successfully accomplished.

These activities constitute completion of one flood protection measures sample, as defined in Inspection Procedure 71111.06.

b. Findings

No findings were identified.

1R07 Heat Sink Performance (71111.07)

a. Inspection Scope

On September 21, 2015, the inspectors completed an inspection of the readiness and availability of risk-significant heat exchangers. The inspectors reviewed the data from a performance test for the Division II residual heat removal exchanger and verified the licensee used the industry standard periodic maintenance method outlined in EPRI NP-7552. Additionally, the inspectors walked down the residual heat removal heat exchanger to observe its performance and material condition. The inspectors verified that the residual heat removal heat exchanger was correctly categorized under the Maintenance Rule and was receiving the required maintenance.

These activities constitute completion of one heat sink performance annual review sample, as defined in Inspection Procedure 71111.07.

b. Findings

No findings were identified.

1R11 Licensed Operator Requalification Program and Licensed Operator Performance (71111.11)

.1 Review of Licensed Operator Requalification

a. Inspection Scope

On September 9, 2015, the inspectors observed a portion of an annual requalification test for licensed operators. The inspectors assessed the performance of the operators and the evaluators' critique of their performance. The inspectors also assessed the modeling and performance of the simulator during the requalification activities.

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 Review of Licensed Operator Performance

a. Inspection Scope

On September 4, 2015, the inspectors observed the performance of on-shift licensed operators in the plant's main control room. At the time of the observations, the plant was in a period of heightened risk due to unit power reductions. The inspectors observed the operators' performance of the following activity:

- A planned downpower to 65 percent for rod sequence exchange and scram time testing

In addition, the inspectors assessed the operators' adherence to plant procedures, including the conduct of operations procedure and other operations department policies.

These activities constitute completion of one quarterly licensed operator performance sample, as defined in Inspection Procedure 71111.11.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors reviewed two instances of degraded performance or condition of safety-related SSCs:

- August 13, 2015, reactor core isolation cooling, functional failure review
- September 23, 2015, main steam positive leakage control system and penetration valve leakage control system, functional failure review

The inspectors reviewed the extent of condition of possible common cause SSC failures and evaluated the adequacy of the licensee's corrective actions. The inspectors reviewed the licensee's work practices to evaluate whether these may have played a role in the degradation of the SSCs. The inspectors assessed the licensee's characterization of the degradation in accordance with 10 CFR 50.65 (the Maintenance Rule), and verified that the licensee was appropriately tracking degraded performance and conditions in accordance with the Maintenance Rule.

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

b. Findings

No findings were identified.

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

a. Inspection Scope

On July 7, 2015, the inspectors reviewed a risk assessment performed by the licensee prior to changes in plant configuration and the risk management actions taken by the licensee in response to elevated risk. Planned maintenance on residual heat removal pump A required the licensee transition to yellow risk.

The inspectors verified that this risk assessment was performed timely and in accordance with the requirements of 10 CFR 50.65 (the Maintenance Rule) and plant procedures. The inspectors reviewed the accuracy and completeness of the licensee's risk assessment and verified that the licensee implemented appropriate risk management actions based on the result of the assessment.

Additionally, on August 12, 2015, the inspectors also observed portions of one emergent work activity that had the potential to affect the functional capability of a mitigating system. Specifically, following planned maintenance on the reactor core isolation cooling pump, the post-maintenance test was failed when the pump failed to trip locally. This resulted in two days of unplanned maintenance during troubleshooting and repairs to the pump.

The inspectors verified that the licensee appropriately developed and followed a work plan for these activities. The inspectors verified that the licensee took precautions to minimize the impact of the work activities on unaffected SSCs.

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

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15)

a. Inspection Scope

The inspectors reviewed five operability determinations that the licensee performed for degraded or nonconforming SSCs:

- July 7, 2015, operability determination associated with Division III emergency diesel generator frequency spikes during surveillance testing (CR-RBS-2015-02467)
- July 22, 2015, operability determination of Division II line fill pump high vibration readings (CR-RBS-2015-05179)
- August 10, 2015, operability determination of Division II emergency diesel generator rear air compressor leak identified while the forward air compressor was tagged out for maintenance (CR-RBS-2015-05736)
- August 19, 2015, operability determination of battery rooms during maintenance on Division II control building chilled water system (CR-RBS-2015-02525)
- August 20, 2015, operability determination of reactor core isolation cooling pump following post-maintenance testing (CR-RBS-2015-05822)

The inspectors reviewed the timeliness and technical adequacy of the licensee's evaluations. Where the licensee determined the degraded SSCs to be operable, the inspectors verified that the licensee's compensatory measures were appropriate to provide reasonable assurance of operability. The inspectors verified that the licensee had considered the effect of other degraded conditions on the operability of the degraded SSCs.

These activities constitute completion of five operability review samples, as defined in Inspection Procedure 71111.15.

b. Findings

No findings were identified.

1R18 Plant Modifications (71111.18)

a. Inspection Scope

On August 26, 2015, the inspectors reviewed temporary modification EC-56521 to gag closed residual heat removal Division II heat exchanger cooling water side thermal relief that affected risk-significant SSCs.

The inspectors verified that the licensee had installed this temporary modification in accordance with technically adequate design documents. The inspectors verified that this modification did not adversely impact the operability or availability of affected SSCs. The inspectors reviewed design documentation and plant procedures affected by the modification to verify the licensee maintained configuration control.

These activities constitute completion of one sample of temporary modifications, as defined in Inspection Procedure 71111.18.

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed five post-maintenance testing activities that affected risk-significant SSCs:

- July 9, 2015, work order (WO) 00393168-12, "HVK-CHL1A Refrigerant Transfer"
- July 15, 2015, WO 00393168-40, "HVK-CHL1A Loss of Power Logic Test"
- July 23, 2015, WO 00419733-05, "Pump and Valve Operability Test Following Replacement of Motor for Service Water Recirculation Pump SWP-3B"
- August 11, 2015, WO 52594672-03, "RCIC Quarterly Pump and Valve Operability Test Following Oil Change and Cleaning"
- September 15, 2015, WO 00424551, "Troubleshoot LSV-C3A"

The inspectors reviewed licensing- and design-basis documents for the SSCs and the maintenance and post-maintenance test procedures. The inspectors observed the performance of the post-maintenance tests to verify that the licensee performed the tests in accordance with approved procedures, satisfied the established acceptance criteria, and restored the operability of the affected SSCs.

These activities constitute completion of five post-maintenance testing inspection samples, as defined in Inspection Procedure 71111.19.

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors observed three risk-significant surveillance tests and reviewed test results to verify that these tests adequately demonstrated that the SSCs were capable of performing their safety functions:

In-service tests:

- July 17, 2015, STP-205-6301, "Low Pressure Core Spray Pump and Valve Operability Test," performed on July 7, 2015

Other surveillance tests:

- July 10, 2015, STP-122-6301, "Division I Instrument Air Quarterly Valve Operability Test," performed on July 8, 2015
- July 23, 2015, STP-203-6604, "High Pressure Core Spray and Reactor Core Isolation Cooling Bypass and Test Return Valves to Condensate Storage Tank 24 Month Leak Rate Test," performed on July 16, 2015

The inspectors verified that these tests met technical specification requirements, that the licensee performed the tests in accordance with their procedures, and that the results of the test satisfied appropriate acceptance criteria. The inspectors verified that the licensee restored the operability of the affected SSCs following testing.

These activities constitute completion of three surveillance testing inspection samples, as defined in Inspection Procedure 71111.22.

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

1EP2 Alert and Notification System Testing (71114.02)

a. Inspection Scope

The inspectors verified the adequacy of the licensee's methods for testing the primary and backup alert and notification system (ANS). The inspectors interviewed licensee personnel responsible for the maintenance of the primary and backup ANS and reviewed a sample of corrective action system reports written for ANS problems. The inspectors compared the licensee's alert and notification system testing program with criteria in NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1; FEMA Report REP-10, "Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants," and the licensee's current FEMA-approved ANS design report, "River Bend Station Alert and Notification System, Siren Warning System Upgrade Project," Addendum 0, dated October 7, 2013.

These activities constitute completion of one alert and notification system testing inspection sample, as defined in Inspection Procedure 71114.02.

b. Findings

No findings were identified.

1EP3 Emergency Response Organization Staffing and Augmentation System (71114.03)

a. Inspection Scope

The inspectors verified the licensee's emergency response organization on-shift, and augmentation staffing levels were in accordance with the licensee's emergency plan

commitments. The inspectors reviewed documentation and discussed with licensee staff the operability of primary and backup systems for augmenting the on-shift emergency response staff to verify the adequacy of the licensee's methods for staffing emergency response facilities, including the licensee's ability to staff pre-planned alternate facilities. The inspectors also reviewed records of emergency response organization augmentation tests and events to determine whether the licensee had maintained a capability to staff emergency response facilities within emergency plan timeliness commitments.

These activities constitute completion of one emergency response organization staffing and augmentation system inspection sample, as defined in Inspection Procedure 71114.03.

1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)

a. Inspection Scope

The inspectors performed an in-office review of emergency plan implementing procedure EIP-2-001, "Classification of Emergencies," Revision 26, implemented July 30, 2015, and an on-site review of procedure EIP-2-007, "Protective Action Recommendation Guidelines," Revision 27, implemented August 13, 2015. These revisions,

- Revised the reactor vessel water level in emergency action levels FC2 and SG 3-1 from -186 inches to -187 inches, based on calculations for new fuel; and,
- Clarifies in emergency action level HU6-1 that activation of seismic switches is not required for operators to conclude that an earthquake has been felt in the plant.

These revisions were compared to their previous revisions, to the criteria of NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1, to Nuclear Energy Institute Report 99-01, "Emergency Action Level Methodology," Revision 5, and to the standards in 10 CFR 50.47(b) to determine if the revisions adequately implemented the requirements of 10 CFR 50.54(q)(3) and 50.54(q)(4). The inspectors verified that the revisions did not decrease the effectiveness of the emergency plan. This review was not documented in a safety evaluation report and did not constitute approval of licensee-generated changes; therefore, these revisions are subject to future inspection.

These activities constitute completion of two emergency action level and emergency plan changes inspection samples, as defined in Inspection Procedure 71114.04.

b. Findings

No findings were identified.

1EP5 Maintenance of Emergency Preparedness (71114.05)

a. Inspection Scope

The inspectors reviewed the following for the period May 2013 to August 2015:

- After-action evaluation reports for licensee drills and exercises;
- independent audits and surveillances of the licensee's emergency preparedness program;
- self-assessments of the emergency preparedness program conducted by the licensee;
- licensee evaluations of changes made to the emergency plan and emergency plan implementing procedures;
- drill and exercise performance issues entered into the licensee's corrective action program;
- emergency preparedness program issues entered into the licensee's corrective action program;
- maintenance records for equipment supporting the emergency preparedness program; and
- emergency response organization and emergency planner training records.

The inspectors reviewed summaries of 122 corrective action program reports associated with emergency preparedness and selected 16 to review against program requirements, to determine the licensee's ability to identify, evaluate, and correct problems in accordance with planning standard 10 CFR 50.47(b)(14) and 10 CFR Part 50, Appendix E, IV.F. The inspectors verified that the licensee accurately and appropriately identified and corrected emergency preparedness weaknesses during critiques and assessments.

The inspectors reviewed summaries of 33 licensee evaluations of the impact of changes to the emergency plan and implementing procedures, and selected 11 to review against program requirements to determine the licensee's ability to identify reductions in the effectiveness of the emergency plan in accordance with the requirements of 10 CFR 50.54(q)(3) and 50.54(q)(4). The inspectors verified that evaluations of proposed changes to the licensee emergency plan appropriately identified the impact of the changes prior to being implemented.

The inspectors reviewed summaries of licensee records pertaining to the maintenance of equipment and facilities used to implement the emergency plan to determine the licensee's ability to maintain equipment in accordance with the requirements of 10 CFR 50.47(b)(8) and 10 CFR Part 50, Appendix E, IV.E. The inspectors verified that equipment and facilities were maintained in accordance with the commitments of the licensee's emergency plan.

These activities constitute completion of one maintenance of emergency preparedness program inspection sample, as defined in Inspection Procedure 71114.05.

b. Findings

No findings were identified.

1EP6 Drill Evaluation (71114.06)

Training Evolution Observation

a. Inspection Scope

On July 21, 2015, the inspectors observed simulator-based licensed operator requalification training that included implementation of the licensee's emergency plan. The inspectors verified that the licensee's emergency classifications, off-site notifications, and protective action recommendations were appropriate and timely. The inspectors verified that any emergency preparedness weaknesses were appropriately identified by the evaluators and entered into the corrective action program for resolution.

These activities constitute completion of one training evaluation observation sample, as defined in Inspection Procedure 71114.06.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Public Radiation Safety, Occupational Radiation Safety, and Security

40A1 Performance Indicator Verification (71151)

.1 Mitigating Systems Performance Index: Heat Removal Systems (MS08)

a. Inspection Scope

The inspectors reviewed the licensee's mitigating system performance index data for the period of July 2014 through June 2015 to verify the accuracy and completeness of the reported data. The inspectors used definitions and guidance contained in Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, to determine the accuracy of the reported data.

These activities constitute verification of the mitigating system performance index for heat removal systems, as defined in Inspection Procedure 71151.

b. Findings

No findings were identified.

.2 Mitigating Systems Performance Index: Residual Heat Removal Systems (MS09)

a. Inspection Scope

The inspectors reviewed the licensee's mitigating system performance index data for the period of July 2014 through June 2015 to verify the accuracy and completeness of the reported data. The inspectors used definitions and guidance contained in Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, to determine the accuracy of the reported data.

These activities constitute verification of the mitigating system performance index for residual heat removal systems, as defined in Inspection Procedure 71151.

b. Findings

No findings were identified.

.3 Mitigating Systems Performance Index: Cooling Water Support Systems (MS10)

a. Inspection Scope

The inspectors reviewed the licensee's mitigating system performance index data for the period of July 2014 through June 2015 to verify the accuracy and completeness of the reported data. The inspectors used definitions and guidance contained in Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, to determine the accuracy of the reported data.

These activities constitute verification of the mitigating system performance index for cooling water support systems, as defined in Inspection Procedure 71151.

b. Findings

No findings were identified.

.4 Drill/Exercise Performance (EP01)

a. Inspection Scope

The inspectors reviewed the licensee's evaluated exercises and selected drill and training evolutions that occurred between July 2014 and June 2015 to verify the accuracy of the licensee's data for classification, notification, and protective action recommendation opportunities. The inspectors reviewed a sample of the licensee's completed classifications, notifications, and protective action recommendations to verify their timeliness and accuracy. The inspectors used Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, to determine the accuracy of the reported data. The specific documents reviewed are described in the attachment to this report.

These activities constitute verification of the drill/exercise performance indicator, as defined in Inspection Procedure 71151.

b. Findings

No findings were identified.

.5 Emergency Response Organization Drill Participation (EP02)

a. Inspection Scope

The inspectors reviewed the licensee's records for participation in drill and training evolutions between July 2014 and June 2015 to verify the accuracy of the licensee's data for drill participation opportunities. The inspectors verified that all members of the licensee's emergency response organization in the identified key positions had been counted in the reported performance indicator data. The inspectors reviewed the licensee's basis for reporting the percentage of emergency response organization members who participated in a drill. The inspectors reviewed drill attendance records and verified a sample of those reported as participating. The inspectors used Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, to determine the accuracy of the reported data. The specific documents reviewed are described in the attachment to this report.

These activities constitute verification of the emergency response organization drill participation performance indicator, as defined in Inspection Procedure 71151.

b. Findings

No findings were identified.

.6 Alert and Notification System Reliability (EP03)

a. Inspection Scope

The inspectors reviewed the licensee's records of Alert and Notification System tests conducted between July 2014 and June 2015 to verify the accuracy of the licensee's data for siren system testing opportunities. The inspectors reviewed procedural guidance on assessing alert and notification system opportunities and the results of periodic alert and notification system operability tests. The inspectors used Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, to determine the accuracy of the reported data. The specific documents reviewed are described in the attachment to this report.

These activities constitute verification of the alert and notification system reliability performance indicator, as defined in Inspection Procedure 71151.

b. Findings

No findings were identified.

40A2 Problem Identification and Resolution (71152)

.1 Routine Review

a. Inspection Scope

Throughout the inspection period, the inspectors performed daily reviews of items entered into the licensee's corrective action program and periodically attended the licensee's condition report screening meetings. The inspectors verified that licensee personnel were identifying problems at an appropriate threshold and entering these problems into the corrective action program for resolution. The inspectors verified that the licensee developed and implemented corrective actions commensurate with the significance of the problems identified. The inspectors also reviewed the licensee's problem identification and resolution activities during the performance of the other inspection activities documented in this report.

b. Findings

No findings were identified.

.2 Annual Follow-up of Selected Issue

a. Inspection Scope

The inspectors selected one issue for an in-depth follow-up:

- On September 4, 2015, during a retest after maintenance, the station received a trip trouble light on the train A penetration valve leakage control system compressor. On subsequent troubleshooting, the compressor continually tripped on low discharge pressure. The station documented the event in Condition Report CR-RBS-2015-06476 and implemented an engineering change to address the condition. The inspectors assessed the licensee's problem identification threshold, cause analyses, and extent of condition reviews. The inspectors verified that the licensee appropriately prioritized the planned corrective actions and that these actions were adequate to address the condition.

These activities constitute completion of one annual follow-up sample, as defined in Inspection Procedure 71152.

b. Findings

No findings were identified.

40A3 Follow-up of Events and Notices of Enforcement Discretion (71153)

Recirculation Flow Control Valve Runback Due to Lowering Reactor Water Level

a. Inspection Scope

On December 12, 2014, a Unit 1 automatic recirculation flow control valve runback from 90 percent reactor thermal power to 74 percent reactor thermal power occurred in response to lowering reactor water level. The inspectors reviewed operator response,

control room logs, operating procedures, plant computer data, and the root cause investigation results.

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

b. Findings

Introduction. A self-revealing, Green, non-cited violation of Technical Specification 5.4.1.a was identified when licensee personnel failed to follow a procedure for operation of the feedwater system causing an automatic recirculation flow control valve runback.

Description. On December 12, 2014, licensed operators attempted to raise reactor power from 85 percent to 100 percent and failed to follow a procedural requirement for maintaining the feedwater regulating valves less than or equal to 92 percent open. The licensee had lowered reactor power from 100 percent power to 85 percent power for control rod sequence exchange and feedwater pump B (FWS-P1B) end bell repairs. After repairs were completed, feedwater pump B failed to start three times. The licensee made the decision to raise reactor power from 85 percent to 95 percent with feedwater pump B out of service. System Operating Procedure SOP-0009, "Reactor Feedwater System," Revision 63, Section 2.22 stated, "Feedwater regulating valve position should be limited to less than or equal to 92 percent open to allow an adequate margin for valve modulation while maintaining reactor water level." Above 92 percent open there is not an increase in feedwater flow; 92 percent open is effectively the maximum amount of feedwater flow that the feedwater regulating valves can pass. Therefore, to have the ability to increase feedwater flow during a transient, the margin referred to in Procedure SOP-0009, Section 2.22 is the difference between 92 percent and a lower initial starting point. Normally, at 100 percent reactor power, three feedwater pumps are operating and the feedwater regulating valves are approximately 80 percent open. Adherence to this step would have required the operators to stop the power ascension when feedwater regulating valves reached 92 percent open because feedwater flow would not be able to match an increase in steam flow at greater valve positions. During the reactivity brief, the limiting factor was identified as feedwater pump motor amps based on previous plant experience, rather than to establish a limit for feedwater regulating valve position. Operators monitored feedwater pump amperage while raising reactor power via recirculation pump flow control, but failed to monitor feedwater regulating valve position during the power ascension. Consequently, operators continued to increase power while the feedwater regulating valves were opened in excess of the procedural limit of 92 percent. As a result, the power increase exceeded the capacity of the feedwater system configuration, which caused a steam flow and feedwater flow mismatch, resulting in reactor vessel water level lowering. When reactor vessel water level reached 30.8 inches, a recirculation flow control valve runback to approximately 74 percent reactor power was automatically initiated. The crew responded to the runback using approved procedures and restored reactor vessel water level to the correct operating band.

Analysis. The failure to operate the feedwater system in accordance with system operating procedures to maintain feedwater regulating valves less than or equal to 92 percent open when raising reactor power was a performance deficiency. The performance deficiency is more than minor, and therefore a finding, because it is

associated with the human performance attribute of the Initiating Events Cornerstone and adversely affected the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the licensee failed to maintain feedwater regulating valves less than or equal to 92 percent open while raising reactor power, which resulted in an unplanned transient when plant systems automatically initiated a recirculation flow control valve runback in response to low reactor vessel water level. Using NRC Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," and Inspection Manual Chapter 0609, Appendix A, Exhibit 1, "Initiating Events Screening Questions," the inspectors determined that the finding is of very low safety significance (Green) because it did not cause a reactor trip and the loss of mitigation equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition, high energy line-breaks, internal flooding, or fire. This finding has an avoid complacency cross-cutting aspect within the human performance area because the licensee failed to perform a thorough review of the activity every time the work was performed rather than relying on past successes and assumed conditions. Specifically, the control room operators relied on past experiences rather than following a written procedure [H.12].

Enforcement. Technical Specification 5.4, "Procedures," Section 5.4.1.a, requires, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2. Section 4.o of Appendix A to Regulatory Guide 1.33, Revision 2, requires procedures for startup, operation, and shutdown of the feedwater system. The licensee established System Operating Procedure SOP-0009, "Reactor Feedwater System," Revision 63, to meet the Regulatory Guide 1.33 requirement. Step 2.22 of procedure SOP-0009 requires that feedwater regulating valve position should be limited to less than or equal to 92 percent open to allow an adequate margin for valve modulation while maintaining reactor water level. Contrary to the above, on December 12, 2014, the licensee did not limit the feedwater regulating valve position to less than or equal to 92 percent. Specifically, the licensee did not monitor feedwater regulating valve position during reactor power ascension. As a result, reactor vessel water level lowered and a recirculation flow control valve runback occurred. The licensee entered this into their corrective action program as Condition Report CR-RBS-2014-6357. The licensee restored compliance when the crew responded to the runback using approved procedures and restored reactor vessel water level to the correct set point. This violation is being treated as a non-cited violation (NCV), consistent with Section 2.3.2 of the Enforcement Policy. NCV 05000458/2015003-01, "Failure to Operate the Unit 1 Feedwater System In Accordance With Procedures."

40A6 Meetings, Including Exit

Exit Meeting Summary

On August 20, 2015, the inspectors presented the results of the onsite inspection of the emergency preparedness program to Mr. C. Rich, General Manager, Plant Operations, and other members of the licensee staff. The licensee acknowledged the issues presented. The licensee confirmed that any proprietary information reviewed by the inspectors had been returned or destroyed.

On September 9, 2015, the inspectors conducted a telephonic exit meeting to characterize an issue discussed at the August 20, 2015, onsite exit meeting. The inspectors presented the characterization of a finding to Mr. D. Burnett, Corporate Director, Emergency Preparedness, and other members of the licensee staff. The licensee acknowledged the issue presented.

On October 1, 2015, the inspectors presented the integrated inspection results to Mr. E. Olson, Site Vice President, and other members of the licensee staff. The licensee acknowledged the issues presented. The licensee confirmed that any proprietary information reviewed by the inspectors had been returned or destroyed.

40A7 Licensee-Identified Violation

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 the NRC Enforcement Policy for being dispositioned as a non-cited violation:

- Title 10 of the Code of Federal Regulations, Part 50.54(q)(2) requires, in part, that power reactor licensees follow and maintain the effectiveness of an emergency plan which meets the requirements of Appendix E to 10 CFR Part 50, and the standards of 10 CFR 50.47(b). Planning standard 50.47(b)(2) requires, in part, that licensees maintain adequate staffing to provide an initial emergency response in key functional areas at all times. Planning standard 50.47(b)(15) requires that licensees provide emergency response training to those who may be called upon in an emergency. Contrary to the above, between December 13, 2013, and June 24, 2014, River Bend Station failed to maintain adequate staffing to provide an initial emergency response in key functional areas at all times. Specifically, an individual stood 17 on-shift emergency response organization watches in a key functional area while not qualified in their on-shift emergency response organization position. The failure to maintain adequate staffing to provide an initial emergency response in key functional areas at all times is a performance deficiency within the licensee's ability to foresee and correct. The issue is more than minor because it was associated with the emergency response organization readiness cornerstone attribute and adversely affected the Emergency Preparedness Cornerstone objective. The finding was evaluated using Inspection Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," dated September 23, 2014, and determined to be of very low safety significance (Green) because it was not a loss of planning standard function, and was not a degraded risk significant planning standard function. The issue was entered into the licensee's corrective action program as Condition Report CR-RBS-2014-03050.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

D. Burnett, Director, Emergency Planning, Entergy South
G. Bush, Manager, Material, Procurement, and Contracts
J. Clark, Manager, Regulatory Assurance
B. Cole, Manager, Radiation Protection
R. Conner, Manager, Nuclear Oversight
F. Corley, Manager, Design & Program Engineering
K. Crissman, Senior Manager, Maintenance
B. Ford, Senior Manager, Fleet Regulatory Assurance
T. Gates, Manager, Operations Support
K. Hallaran, Manager, Chemistry
J. Henderson, Assistant Manager, Operations
K. Huffstatler, Senior Licensing Specialist
R. Leasure, Superintendent, Radiation Protection
P. Lucky, Manager, Performance Improvement
J. Maher, Manager, Systems & Components Engineering
C. Miller, Manager, Site Projects and Maintenance Services
P. O'Conner, Manager, Training
E. Olson, Site Vice President
S. Peterkin, Manager, Radiation Protection
W. Renz, Director, Emergency Planning, Entergy South
J. Reynolds, Manager, Operations
C. Rich, General Manager, Plant Operations
R. Cook, Manager, Security
T. Schenk, Manager, Emergency Preparedness
S. Vazquez, Director, Engineering
J. Vukovics, Supervisor, Reactor Engineering
J. Wieging, Senior Manager, Production
D. Yoes, Manager, Quality Assurance

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000458/2015-003-01	NCV	Failure to Operate the Unit 1 Feedwater System In Accordance With Procedures (Section 4OA3)
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LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Calculations/Specifications

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
8.3.1.32	Design Basis Flood – River Bend Station (West Creek and Grants Bayou)	1
8.3.1.34	PMP in Site Area (Assuming no Berm Around Excavation)	1
8.3.1.37	Determination of Water Surface Elevations in Grants Bayou and West Creek Near Plant Site for PMF and 25-Year Flood + SSE	1
RBS-210.460	Specification for Missile Protected Doors	2
RBS-210.461	Specification for Pressuretight Doors, Watertight Doors, and Special Doors	2
RBS-210.462	Specification for Pressuretight and Watertight Doors	1
CF8503290006	Peelle Design Calculation for Pressuretight and Watertight Doors	March 15, 1985
CI8412200004	Calculations Design & Stress Analysis for Watertight & Pressuretight Doors	December 17, 1984

Condition Reports (CRs)

CR-RBS-2014-02647 CR-RBS-2014-06083 CR-RBS-2014-06315 CR-RBS-2015-06200

Section 1R04: Equipment Alignment

Condition Report (CRs)

CR-RBS-2015-04868 CR-RBS-2015-06242 CR-RBS-2015-06377 CR-RBS-2015-06804
 CR-RBS-2015-06913 CR-RBS-2015-06476

Drawing

<u>Number</u>	<u>Title</u>	<u>Revision</u>
PID-27-15A	System 257 Standby Gas Treatment	16

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
SOP-0032	Low Pressure Core Spray	023

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
SOP-0034	MSIV Sealing System and Penetration Valve Leakage Control System	014
SOP-0035	Reactor Core Isolation Cooling System (SYS #209)	049
SOP-0049	125 VDC System (SYS #305)	033

Section 1R05: Fire Protection

Calculation

<u>Number</u>	<u>Title</u>	<u>Revision</u>
G13.18.12.2-022	River Bend Station Combustible Loading	005

Condition Reports (CRs)

CR-RBS-2011-05120 CR-RBS-2015-00239 CR-RBS-2015-04866

Other Document

Operations Standards and Expectations – Fire Brigade Drill Criteria Grading

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
AB-070-501	LPCS Pump Room Fire Area AB-6/Z-1	4
AB-095-511	LPCS Panel Room Fire Area AB-6/Z-2	3
CB-098-118	Standby Switchgear 1A Room Fire Area C-15	2
CB-098-122	Water Chiller Equipment 1A Room Fire Area C-13W	3
CB-098-123	Water Chiller Equipment 1B Room Fire Area C-13E	3
CB-116-129	125 VDC Switchgear Room Fire Area C-24	4
EN-TQ-125	Fire Brigade Drills (Drill No. DRL-FP-0112)	2
STP-000-3401	Fire Door Release and Closing Mechanism Inspection	301

Work Order (WO)

WO 52613417

Section 1R06: Flood Protection Measures

Condition Reports (CRs)

CR-RBS-2014-05036	CR-RBS-2014-05141	CR-RBS-2014-05253	CR-RBS-2014-06083
CR-RBS-2014-06315	CR-RBS-2014-06316	CR-RBS-2015-05407	CR-RBS-2015-06200

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
ARP-870-51	*P870-51 Alarm Response	025
EOP-0003	Emergency Operating Procedure – Secondary Containment and Radioactive Release Control	017

Section 1R07: Heat Sink Performance

Other Documents

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
	Division II RHR Heat Exchangers GL 89-13 Visual Inspection Datasheet for E12-EB001B and E12-EB001D	February 28, 2015 - March 10, 2015
RBS-EP-15-00016	RHR Heat Exchangers E12-EB001B and E12-EB001D Heat Transfer Capacity Verification January 23, 2015	0

Section 1R11: Licensed Operator Requalification Program and Licensed Operator Performance

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EN-TQ-202	Simulator Configuration Control	9
EN-TQ-210	Conduct of Simulator Training	8
EN-TQ-114	Licensed Operator Requalification Program	9

Section 1R12: Maintenance Effectiveness

Condition Reports (CRs)

CR-RBS-2014-05318	CR-RBS-2014-05322	CR-RBS-2014-05323	CR-RBS-2015-01005
CR-RBS-2015-01033	CR-RBS-2015-01116	CR-RBS-2015-01277	CR-RBS-2015-01358
CR-RBS-2015-01359	CR-RBS-2015-01360	CR-RBS-2015-01680	CR-RBS-2015-02165
CR-RBS-2015-03006	CR-RBS-2015-03033	CR-RBS-2015-03287	CR-RBS-2015-03581
CR-RBS-2015-03749	CR-RBS-2015-04961	CR-RBS-2015-06417	CR-RBS-2015-06476

Other Document

<u>Number</u>	<u>Title</u>	<u>Date</u>
VTD-G200-0102	Installation, Operation and Maintenance Instructions for Models 3196ST, 3196MT, 3196XLT (Publication Number A348-EL)	January 28, 2010

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
AOP-0003	Automatic Isolations	34
SOP-0034	MSIV Sealing System and Penetration Valve Leakage Control System	14

Work Orders (WOs)

WO 00378572-01 WO 52485361-01 WO 52594672-01 WO 52609844-01

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

Condition Report (CR)

CR-RBS-2015-05822

Procedure

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
ADM-0096	Risk Management Program Implementation and On-Line Maintenance Risk Assessment	315

Section 1R15: Operability Determinations and Functionality Assessments

Condition Reports (CRs)

CR-RBS-2015-02467 CR-RBS-2015-02525 CR-RBS-2015-05153 CR-RBS-2015-05155
CR-RBS-2015-05179 CR-RBS-2015-05736 CR-RBS-2015-05822

Drawings

<u>Number</u>	<u>Title</u>	<u>Revision</u>
PID-08-09B	System 309 Diesel Generator	22
PID-27-07A	System 204 Residual Heat Removal – LPCI	38
PID-27-07B	System 204 Residual Heat Removal – LPCI	42

Other Documents

<u>Number</u>	<u>Title</u>	<u>Revision</u>
RBS USAR	8.3.1.1.3.6.1 Standby Diesel Generators (Page 8.3-11)	12
RBS USAR	8.3.1.1.3.6.1 Standby Diesel Generators (Page 8.3-12)	16
SDC-209	Reactor Core Isolation Cooling Design Criteria System #209	5

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
AOP-0060	Loss of Control Building Ventilation	10
EN-OP-104	Operability Determination Process	9
SOP-0035	Reactor Core Isolation Cooling System	49
STP-204-6302	DIV II LPCI (RHR) Pump and Valve Operability Test	029
STP-209-6310	RCIC Quarterly Pump and Valve Operability Test	38

Work Order (WO)

WO 00421239

Section 1R18: Plant Modifications

Drawing

<u>Number</u>	<u>Title</u>	<u>Revision</u>
PID-09-10F	System 118 Service Water Normal	30

Engineering Documents

<u>Number</u>	<u>Title</u>	<u>Revision</u>
TMOD EC-56521	Gag Closed RHR Div II Heat Exchanger Cooling Water Side Thermal Relief Valve	---
EC-04589 10 CFR 50.59 Evaluation	Install Gag on RHR Heat Exchanger Cooling Water Relief Valve, E12-RVF100B	0

Section 1R19: Post-Maintenance Testing

Condition Reports (CRs)

CR-RBS-2012-00855 CR-RBS-2015-03622 CR-RBS-2015-04977 CR-RBS-2015-04979
CR-RBS-2015-05085 CR-RBS-2015-05995 CR-RBS-2015-06746

Engineering Document

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EC-58575	Provide Information to Operations from EC-58444 (Control Building Heatup and Survivability Documents)	000

Other Document

<u>Number</u>	<u>Title</u>	<u>Date</u>
PAR SOP-0066R322 CN-A	One-Time Change Notice to SOP-0066, Revision 322	June 17, 2015

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
AOP-0003	Automatic Isolations	34
CMP-1026	MCC Circuit Breakers, Starters and Thermal Overloads	20
CMP-1065	480V and Less Squirrel Cage Induction Motors	8
EN-MA-118	Foreign Material Exclusion	10
EN-MA-125	Troubleshooting Control of Maintenance Activities	17
SOP-0034	MSIV Sealing System and Penetration Valve Leakage Control System	14
SOP-0066	Control Building HVAC Chilled Water System (SYS #410)	322
STP-000-0201	Surveillance Test Procedure	301
STP-209-6310	RCIC Quarterly Pump and Valve Operability Test	038
STP-256-6322	DIV II Service Water Recirculation Pump and Valve Operability Test	029

Work Orders (WOs)

WO 00345573	WO 00388359	WO 00393168	WO 00393168-11
WO 00393168-12	WO 00393168-40	WO 00393168-41	WO 00393168-42
WO 00418683	WO 00419733	WO 00424551	WO 52484596
WO 52530809	WO 52534660		

Section 1R22: Surveillance Testing

Condition Report (CR)

CR-RBS-2015-05102

Drawing

<u>Number</u>	<u>Title</u>	<u>Revision</u>
PID-27-06A	System 209 Reactor Core Isolation Cooling	44

Engineering Document

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EC-58852	Reply EC for Acceptance Criteria STP-203-6604 RCIC Valve Criteria with RCIC Discharge Pressure Between 60-70 PSIG	000

Other Document

<u>Number</u>	<u>Title</u>	<u>Date</u>
PAR STP-203-6604 R306CN-A	Change Notice to STP-203-6604, Revision 306	June 17, 2015

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
STP-122-6301	DIV I Instrument Air Quarterly Valve Operability Test	305
STP-203-6604	HPCS & RCIC Bypass and Test Return Valves to CST 24 Month Leak Rate Test	306
STP-205-6301	LPCS Pump and Valve Operability Test	024

Work Orders (WOs)

WO 52520385 WO 52621617

Section 1EP2: Alert and Notification System Testing

Procedures and Documents

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EPP-2-401	Inadvertent Siren Sounding	8
EPP-2-701	Prompt Notification System Maintenance and Testing, June 5, 2014	27, 28

Procedures and Documents

<u>Number</u>	<u>Title</u>	<u>Revision</u>
52540146-01	Work Order: Annual Siren PM, Non-Placekeeping Portion	
52540146-02	Work Order: Annual Siren PM, Placekeeping Portion	

Condition Reports (CRs)

CR-RBS-2015-03371 CR-RBS-2015-03507 CR-RBS-2015-04035

Section 1EP3: Emergency Response Organization Staffing and Augmentation System

Procedures and Documents

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EN-LI-310	Emergency Response Organization Notification System	3
EIP-2-006	Notifications, Attachment 7, Activation of the ERO	42

Condition Reports (CRs)

CR-RBS-2015-04406

Section 1EP4: Emergency Action Level and Emergency Plan Changes

No additional documents were reviewed.

Section 1EP5: Maintenance of Emergency Preparedness

Procedures and Documents

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
	Emergency Plan	41
EN-FAP-LI-003	Corrective Action Review Board Process	
EN-LI-102	Corrective Action Program; September 5, 2014	24
EN-LI-104	Self-Assessment and Benchmark Process	
EN-LI-118	Cause Evaluation Process	
EN-LI-305	Emergency Planning 10 CFR 50.54(Q) Review Program	3
EN-LI-306	Drills and Exercises	7
EN-PL-140	Emergency Response Organization Respiratory Protection Guidelines	4

Procedures and Documents

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
EPP-2-100	Procedure Review, Revision, and Approval	15
EPP-2-201	River Bend Station Emergency Preparedness Organization and Responsibilities	21
EPP-2-501	Emergency Facilities and Equipment Readiness	16
EPP-2-503	River Bend Station Equipment Important to Emergency Preparedness	1
EN-EP-305	Emergency Planning 10CFR50.50(q) Review Program	3
EN-QV-105	Nuclear Oversight Performance Monitoring, October 31, 2014	12
EN-QV-109	Audit Process, January 1, 2015	28
CEO2014-48	Nuclear Oversight Fleet Trimester Report, November 2013 through February 2014	April 22, 2014
CEO2014-76	Nuclear Oversight Fleet Trimester Report, March through June 2014	July 16, 2014
CEO2014-78	Second Trimester Functional Area Report	July 2014
	First Trimester Functional Area Report	April 2015
QA-07-2014-RBS-1	Quality Assurance Audit Report, Emergency Plan	June 20, 2014
QA-07-2015-RBS-01	Quality Assurance Audit Report, Emergency Plan	April 6, 2015
LO-RLO-2013-86	River Bend Pre-NRC Exercise Assessment	February 18, 2014
RLO-2014-0038	Review of Drill and Exercise Performance	September 24, 2014
EP-M-13-016	Exercise Evaluation Report for the July 23 Site Drill	August 19, 2013
EP-M-13-022	Exercise Evaluation Report for the September 17 Site Drill	October 17, 2013
EP-M-14-007	Evaluation Report for the October 30 Medical Drill	January 15, 2014
EP-M-13-028	Exercise Evaluation Report for the November 19 Site Drill	December 19, 2013
EP-M-13-029	Exercise Evaluation Report for the December 18 Off Hours Accountability Drill	December 19, 2013
EP-M-14-003	Exercise Evaluation Report for the January 21 Site Drill	February 6, 2014
EP-M-14-004	Exercise Evaluation Report for the March 6 Site Drill	April 1, 2014

Procedures and Documents

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
EP-M-14-011	Exercise Evaluation Report for the May 20 Site Drill	July 28, 2014
EP-M-14-009	Exercise Evaluation Report for the June 18 Site Drill	July 7, 2014
EP-M-14-012	Evaluation Report for the August 12 Augmentation Drill	August 27, 2014
EP-M-14-016	Exercise Evaluation Report for the October 7 Site Drill	November 11, 2014
EP-M-15-004	Evaluation Report for the December 17 Medical Drill	January 14, 2015
EP-M-15-010	Drill Evaluation Report for the April 14 TSC-OSC Focused Mini Drill	May 13, 2015
EP-M-15-011	Exercise Evaluation Report for the May 27 Team A Site Drill	June 25, 2015
	10 CFR 50.54(Q) Screening for EIP-2-18, Revision 35	September 5, 2013
	10 CFR 50.54(Q) Screening for EIP-2-26, Revision 20	September 5, 2013
	10 CFR 50.54(Q) Screening for EPP-2-503, Revision 1	September 19, 2013
	10 CFR 50.54(Q) Screening for EN-EP-310, Revision 3	April 15, 2014
	10 CFR 50.54(Q) Screening for EIP-2-22, Revision 29	May 13, 2014
	10 CFR 50.54(Q) Screening for EIP-2-20, Revision 37	June 11, 2014
	10 CFR 50.54(Q) Screening for River Bend Station Emergency Plan, Revision 41	December 1, 2014
	10 CFR 50.54(Q) Screening for EN-TQ-110, Revision 12	January 27, 2015
	10CFR50.54(Q) Screening for EN-EP-801, Revision 11	February 10, 2015
	10CFR50.54(Q) Screening for EPP-2-501, Revision 16	March 17, 2015
	10CFR50.54(Q) Screening for EN-EP-313, Revision 0	
	10CFR50.54(Q) Screening for EIP-2-007, Revision 27	August 12, 2015

Procedures and Documents

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
WR00324514	Evacuation Announcements were not heard in all areas of SB	November 20, 2013
WR00343569	Install OPS Mobile Radio on Desk in EOF	June 24, 2014
KLD-TR-665	River Bend Station Annual Population Update 2013	September 23, 2014
KLD-TR-562	River Bend Station Annual Population Update 2014	September 24, 2013
WTRBS-2015-00239	Work Tracker from the Emergency Drill on May 27, 2015	June 8, 2015
WTRBS-2015-00280	Work Tracker from the July 21 st Emergency Drill	July 16, 2015
FCBT-GET-PATSS	Entergy Fleet Plant Access Training	20, 21

Condition Reports (CRs)

CR-RBS-2013-03084	CR-RBS-2013-03232	CR-RBS-2013-07207	CR-RBS-2013-07599
CR-RBS-2014-01702	CR-RBS-2014-01837	CR-RBS-2014-01974	CR-RBS-2014-03028
CR-RBS-2014-03050	CR-RBS-2014-03072	CR-RBS-2015-00512	CR-RBS-2015-02860
CR-RBS-2015-03371	CR-RBS-2015-03507	CR-RBS-2015-04035	CR-RBS-2015-04209

Section 1EP6: Drill Evaluation

Procedure

<u>Number</u>	<u>Title</u>	<u>Revision</u>
RDRL-EP-1502	Site Drill Scenario	00

Section 4OA1: Performance Indicator Verification

Procedure

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EN-LI-114	Performance Indicator Process	6

Other Documents

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
Engineering Report RBS-SA-06-0001	RBS Mitigating System Performance Index (MSPI) Basis Document	2
NEI 99-02	Regulatory Assessment Performance Indicator Guideline	7

Other Documents

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
RBG-47593	Electronic Submittal of Second Quarter 2015 NRC Performance Indicator Information	July 21, 2015

Section 40A2: Problem Identification and Resolution

Condition Reports (CRs)

CR-RBS-2011-06135	CR-RBS-2011-06232	CR-RBS-2012-00855	CR-RBS-2012-00887
CR-RBS-2012-01101	CR-RBS-2012-01178	CR-RBS-2015-02165	CR-RBS-2015-03006
CR-RBS-2015-03287	CR-RBS-2015-03622	CR-RBS-2015-03972	CR-RBS-2015-04363
CR-RBS-2015-06256	CR-RBS-2015-06476		

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EN-DC-115	Engineering Change Process	17
EN-LI-102	Corrective Action Program	24

Work Orders (WOs)

WO 00265500	WO 00304836	WO 00306064	WO 00409215
WO 00424551	WO 51022097		

Section 40A3: Follow-up of Events and Notices of Enforcement Discretion

Condition Reports (CRs)

CR-RBS-2014-06350	CR-RBS-2014-06357	CR-RBS-2014-06364
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Other Documents

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
	FCV Runback	December 12, 2015
	River Bend Daily Plant Status Report	December 15, 2015
	River Bend Main Control Room Log	December 12, 2015
Root Cause Evaluation of CR-RBS-2014-06357	Level 4 Recirc Runback due to Exceeding Feedwater System Pump Capacity (Event Date 12/12/2015)	0

Procedure

<u>Number</u>	<u>Title</u>	<u>Revision</u>
SOP-0009	Reactor Feedwater System (SYS #107)	063

