



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II**

245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

November 3, 2016

Mr. Keith Taber
Vice President
Southern Nuclear Operating Company, Inc.
Vogtle Electric Generating Plant
7821 River Road
Waynesboro, GA 30830

**SUBJECT: VOGTLE ELECTRIC GENERATING PLANT - NRC INTEGRATED INSPECTION
REPORT 05000424/2016003 AND 05000425/2016003**

Dear Mr. Taber:

On September 30, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Vogtle Electric Generating Plant, Units 1 and 2. On October 18, 2016, the NRC inspectors discussed the results of this inspection with Mr. Daniel Komm 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 which was also a violation of regulatory requirements. Further, inspectors documented a licensee-identified violation which was determined to be of very low safety significance in this report. The NRC is treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2.a of the Enforcement Policy. If you contest these violations or significance of these NCVs, 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 II; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC resident inspector at Vogtle.

If you disagree with the 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 II; and the NRC resident inspector at the Vogtle Electric Generating Plant.

K. Taber

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In accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," 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 Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA Curt Rapp Acting for/

Shane R. Sandal, Chief
Reactor Projects Branch 2
Division of Reactor Projects

Docket Nos.: 50-424, 50-425
License Nos.: NPF-68 and NPF-81

Enclosure:
IR 05000424/2016003; 05000425/2016003
w/Attachment: Supplemental Information

cc: Distribution via ListServ

K. Taber

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K. Taber

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Letter to Keith Taber from Shane R. Sandal dated November 3, 2016

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT - NRC INTEGRATED INSPECTION
REPORT 05000424/2016003 AND 05000425/2016003

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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.: 50-424, 50-425

License Nos.: NPF-68, NFP-81

Report No.: 05000424/2016003; and 05000425/2016003

Licensee: Southern Nuclear Operating Company, Inc.

Facility: Vogtle Electric Generating Plant, Units 1 and 2

Location: Waynesboro, GA 30830

Dates: July, 1, 2016 through September, 30, 2016

Inspectors: T. Stephen, Senior Resident Inspector (Acting)
N. Childs, Senior Resident Inspector (Acting)
E. Coffman, Senior Resident Inspector (Acting)
A. Alen, Resident Inspector

Approved by: Shane R. Sandal, Chief
Reactor Projects Branch 2
Division of Reactor Projects

Enclosure

SUMMARY

IR 05000424/2016003; and 05000425/2016003, 07/01/2016 through 09/30/2016; Vogtle Electric Generating Plant, Units 1 and 2, Annual Follow-up of Selected Issues

The report covered a 3-month period of inspection by resident inspectors. There was one NRC identified violation documented in this report. The significance of inspection findings are indicated by their color (i.e., greater than Green, or Green, White, Yellow, Red) and determined using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP) dated April 29, 2015. The cross-cutting aspects are determined using IMC 0310, "Aspects within the Cross-Cutting Areas" dated December 4, 2014. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy dated February 4, 2015. The NRC's program for overseeing the safe operations of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 5. Documents reviewed by the inspectors which are not identified in the Report Details are identified in the List of Documents Reviewed section of the Attachment.

Cornerstone: Mitigating Systems

- (Green) An NRC-identified Green non-cited violation (NCV) of Technical Specifications (TS) 5.4.1.d, "Procedures," was identified for the licensee's failure to correctly verify fire door gaps at the strike plate area and between meeting edges of double swinging metal doors were within acceptable limits. The licensee initiated hourly roving fire watches for these fire doors and took corrective maintenance action to restore affected fire doors within limits. The licensee documented this condition in condition reports 10254221 and 10252774.

The performance deficiency was more than minor because it was associated with the Mitigating Systems cornerstone attribute of Protection Against External Hazards (i.e. fire) and adversely affected the cornerstone objective in that door gaps outside the required limits compromised the door's fire rating qualification. The finding was determined to be of very low safety significance (i.e. Green) because either the combustible loading on both sides of each door was representative of a fire duration of less than 1.5 hours or each door maintained at least a 1-hour fire endurance rating. The finding had a cross-cutting aspect of "Training" in the Human Performance area because the licensee did not ensure there was adequate training to properly inspect station fire doors (H.9). (4OA2)

Violations of very low safety significance that were identified by the licensee have been reviewed by the NRC. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. These violations and corrective action tracking numbers are listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

Units 1 and 2 operated at or near full rated thermal power (RTP) for the entire inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

Impending Adverse Weather Conditions: The inspectors reviewed the licensee's preparations to protect risk-significant systems from high winds and excessive rain expected during September 2, 2016, associated with tropical storm Hermine. The inspectors evaluated the licensee's implementation of adverse weather preparation procedures and compensatory measures, including operator staffing, before the onset of the adverse weather conditions. The inspectors reviewed the licensee's plans to address the ramifications of potentially lasting effects that may result from high winds and excessive rain. The inspectors verified that operator actions specified in the licensee's adverse weather procedure maintain readiness of essential systems. The inspectors verified that required surveillances were current, or were scheduled and completed, if practical, before the onset of anticipated adverse weather conditions. The inspectors also verified that the licensee implemented periodic equipment walkdowns or other measures to ensure that the condition of plant equipment met operability requirements.

b. Findings

No findings were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

Partial Walkdown: The inspectors verified that critical portions of the following systems were correctly aligned by performing partial walkdowns. The inspectors determined the correct system lineup by reviewing associated procedures and drawings.

- Unit 1, 125-volt DC battery charger train A with battery charger train B out of service (OOS) for testing.
- Unit 2, main steam system atmospheric relief valves (ARV) for loops 1, 2, and 3 with loop 4 ARV OOS for maintenance
- Unit 1, nuclear service cooling water (NSCW) transfer pump train B with transfer pump train A OOS for pump well and shaft cleaning and inspection.
- Unit 2, NSCW train B transfer pump and fans with NSCW train A fan #3 OOS.

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05AQ)

a. Inspection Scope

Quarterly Inspection: The inspectors evaluated the adequacy of fire plans by comparing the fire plans to the defined hazards and defense-in-depth features specified in the fire protection program the following five fire areas.

- Unit 2, component cooling water (CCW) heat exchanger rooms, fire zones 54, 55, 148, 172, and 147
- Unit 1, B train emergency diesel generator (EDG) building, fire zones 162 and 164
- Unit 1, north and south main steam valve houses, fire zones 45, 99, and 104
- Unit 2, level A east and west penetration areas, fire zones 87, 88, 89, 90, 93, 102, 158, and 159
- Unit 2, level A 4.16 kV switchgear and remote shutdown rooms, fire zones 91, 92, 97, 98, and 103

The inspectors assessed the following:

- control of transient combustibles and ignition sources
- fire detection systems
- water-based fire suppression systems
- gaseous fire suppression systems
- manual firefighting equipment and capability
- passive fire protection features
- compensatory measures and fire watches
- issues related to fire protection contained in the licensee's corrective action program
- material condition and operational status of fire protection equipment

b. Findings

No findings were identified.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope

Underground Cables: The inspectors reviewed related flood analysis documents and inspected the areas listed below containing cables whose failure could disable risk-significant equipment. The inspector directly observed the condition of cables and cable support structures and, as applicable, verified that dewatering devices and drainage systems were functioning properly. In addition, the inspectors verified the licensee was identifying and properly addressing issues using the corrective action program.

- Unit 1, pull box no. 1NE7ADKEM39
- Unit 1, pull box no. 1NE7ADKEM40
- Unit 1, pull box no. 1NE9GHKEPB01

b. Findings

No findings were identified.

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

a. Inspection Scope

Resident Inspector Quarterly Review of Licensed Operator Regualification: The inspectors observed evaluated simulator scenario, DS #19, administered to a licensed operating crew, on July 18, 2016, in accordance with the licensee's accredited regualification training program.

The inspectors assessed the following:

- licensed operator performance
- the ability of the licensee to administer the scenario and evaluate the operators
- the quality of the post-scenario critique
- simulator performance

Resident Inspector Quarterly Review of Licensed Operator Performance: The inspectors observed licensed operator performance in the Unit 2 main control room on September 25, 2016 during steam pressure loop 2 and loop 3 protection channel III operational testing and again on September 27, 2016 during A train safety injection pump testing.

The inspectors assessed the following:

- use of plant procedures
- control board manipulations
- communications between crew members
- use and interpretation of instruments, indications, and alarms
- use of human error prevention techniques
- documentation of activities
- management and supervision

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors assessed the licensee's treatment of the two issues listed below to verify the licensee appropriately addressed equipment problems within the scope of the

maintenance rule (10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants"). The inspectors reviewed procedures and records to evaluate the licensee's identification, assessment, and characterization of the problems as well as their corrective actions for returning the equipment to a satisfactory condition. The inspectors also interviewed plant personnel to assess the accuracy of performance deficiencies and extent of condition.

- Unit 2, 2HV-0877A, multiple instances of failure to identify maintenance preventable functional failures (MPFFs) on turbine drain system
- Unit 2, common rupture disc to waste gas decay tank 2PSE-1117, failure results in MPFF of waste gas system

b. Findings

No findings were identified.

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

a. Inspection Scope

The inspectors reviewed the four maintenance activities listed below to verify that the licensee assessed and managed plant risk as required by 10 CFR 50.65(a)(4) and licensee procedures. The inspectors assessed the adequacy of the licensee's risk assessments and implementation of risk management actions. The inspectors also verified that the licensee was identifying and resolving problems with assessing and managing maintenance-related risk using the corrective action program. Additionally, for maintenance resulting from unforeseen situations, the inspectors assessed the effectiveness of the licensee's planning and control of emergent work activities.

- Unit 2, 7/18/2016, Yellow EOOS with 'B' train NSCW fan #3 inoperable due to high vibration
- Units 1 & 2, 9/13/2016, Projected Yellow EOOS due to standby auxiliary transformer (SAT) trip and NSCW pump #4 out of service for 1B NSCW tower cleaning
- Unit 2, 9/19/2016, Yellow EOOS due to 'A' train NSCW fan no. 1, NSCW pump no. 1, and 'C' train battery charger 'A' out of service for planned maintenance and testing
- Units 2, 9/28/2016, Yellow EOOS due to 2A NSCW fan #3 out of service for gearbox replacement

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15)

a. Inspection Scope

The inspectors selected the five operability determinations or functionality evaluations listed below for review based on the risk-significance of the associated components and

systems. The inspectors reviewed the technical adequacy of the determinations to ensure that technical specification operability was properly justified and the components or systems remained capable of performing their design functions. To verify whether components or systems were operable, the inspectors compared the operability and design criteria in the appropriate sections of the technical specification and updated final safety analysis report to the licensee's evaluations. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled. Additionally, the inspectors reviewed a sample of corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with operability evaluations.

- Units 1 and 2, immediate determination of operability (IDO) for emergency containment sumps for potential 10CFR Part 21 issue for qualification of GEMS liquid level transmitters (ref. ML16155A354), CR10242523
- Units 1 and 2, IDO for 10CFR Part 21 issue for deficient secondary trip latch of ABB K-line circuit breakers (ref. ML16162A681), CR10242520
- Unit 1, IDO for component cooling water pump (CCW) no. 5 due to unusual lube oil color on outboard bearing, CR10242393
- Unit 1, IDO for cracks on the right bank intercooler of the 'B' train EDG, CR10201347
- Unit 1, Functionality assessment for steam generator blowdown radiation monitor (RE-021) due to sample flow being outside of limits, 10265769

b. Findings

No findings were identified.

1R18 Plant Modifications (71111.18)

a. Inspection Scope

The inspectors reviewed modification LDCR No. 2015036, 1E battery charger configuration change, Version 1.0. The inspectors assessed the following:

- verified that the modification did not affect the safety functions of important safety systems
- confirmed the modification did not degrade the design bases, licensing bases, and performance capability of risk significant structures, systems and components
- verified modification performed during plant configurations involving increased risk did not place the plant in an unsafe condition
- evaluated whether system operability and availability, configuration control, post-installation test activities, and changes to documents, such as drawings, procedures, and operator training materials, complied with licensee standards and NRC requirements
- reviewed a sample of related corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with modifications

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors either observed post-maintenance testing or reviewed the test results for the five maintenance activities listed below to verify the work performed was completed correctly and the test activities were adequate to verify system operability and functional capability.

- SNC 799545, Unit 2 Train A ESF Chiller Purge Unit in Alarm, June 29, 2016
- SNC 802887, High Vibrations on Unit 2 NSCW Train B Fan #3, July 18, 2016
- SNC 518898, Unit 2 reactor cavity supply motor-operated valve (2HV2134) limitorque maintenance, August 2, 2016
- SNC 765405, Unit 2 Train B NSCW Pump #4 10 Year Major Motor Refurbishment, August 12, 2016
- SNC 814468, Unit 2 train B component cooling water (CCW) pump No. 4 outboard bearing lube oil repair, September 8, 2016

The inspectors evaluated these activities for the following:

- Acceptance criteria were clear and demonstrated operational readiness.
- Effects of testing on the plant were adequately addressed.
- Test instrumentation was appropriate.
- Tests were performed in accordance with approved procedures.
- Equipment was returned to its operational status following testing.
- Test documentation was properly evaluated.

Additionally, the inspectors reviewed a sample of corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with post-maintenance testing.

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors reviewed the four surveillance tests listed below. The surveillance test was either observed directly or test results were reviewed to verify testing activities and results provide objective evidence that the affected equipment remain capable of performing their intended safety functions and maintain their operational readiness

consistent with the facility's current licensing basis. The inspectors evaluated the test activities to assess for:

- preconditioning of equipment,
- appropriate acceptance criteria,
- calibration and appropriateness of measuring and test equipment,
- procedure adherence, and
- equipment alignment following completion of the surveillance.

Additionally, the inspectors reviewed a sample of significant surveillance testing problems documented in the licensee's corrective action program to verify the licensee was identifying and correcting any testing problems associated with surveillance testing.

Routine Surveillance Tests

- 14630-1, SSPS Slave Relay K624 Train A Test Containment Isolation, Ver. 10
- 14668A-1, Train A Diesel Generator Operability Test (24 hour run), Ver. 8.1

In-Service Tests (IST)

- 14802B-2, Train B NSCW Pump / Check Valve IST and Response Time, Ver. 7
- 14802A-1, Train A NSCW Pump / Check Valve IST and Response Time, Ver. 6.1

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors observed the emergency preparedness drill conducted on August 24, 2016. The inspectors observed licensee activities in the simulator and technical support center to evaluate implementation of the emergency plan, including event classification, notification, dose assessment, and protective action recommendations. The inspectors evaluated the licensee's performance against criteria established in the licensee's procedures. Additionally, the inspectors attended the facility post-exercise critique to assess the licensee's effectiveness in identifying emergency preparedness weaknesses and verified the identified weaknesses were entered in the corrective action program.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

The inspectors reviewed a sample of the performance indicator (PI) data, submitted by the licensee, for the Unit 1 and Unit 2 PIs listed below. The inspectors reviewed plant records compiled between July 2015 and June 2016 to verify the accuracy and completeness of the data reported for the station. The inspectors verified that the PI data complied with guidance contained in Nuclear Energy Institute 99-02, "Regulatory Assessment Performance Indicator Guideline," and licensee procedures.

Cornerstone: Mitigating Systems

- residual heat removal system (2)
- high pressure injection system (2)
- heat removal system (2)

The inspectors verified the accuracy of reported data that were used to calculate the value of each PI. In addition, the inspectors reviewed a sample of related corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with PI data.

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution (71152)

.1 Routine Review

The inspectors screened items entered into the licensee's corrective action program in order to identify repetitive equipment failures or specific human performance issues for follow-up. The inspectors reviewed condition reports, attended screening meetings, or accessed the licensee's computerized corrective action database.

.2 Annual Follow-up of Selected Issues

a. Inspection Scope

The inspectors conducted a detailed review of the following two condition reports (CRs):

- CR 10251396, Failure to translate emergency action level (EAL) HA1#5 from emergency plan to implementing procedures
- CR 10254221, Failure to properly inspect fire door gap measurements

The inspectors evaluated the following attributes of the licensee's actions:

- complete and accurate identification of the problem in a timely manner
- evaluation and disposition of operability and reportability issues
- consideration of extent of condition, generic implications, common cause, and previous occurrences
- classification and prioritization of the problem
- identification of root and contributing causes of the problem
- identification of any additional condition reports
- completion of corrective actions in a timely manner

b. Findings

Introduction: An NRC-identified Green non-cited violation (NCV) of TS 5.4.1.d, "Procedures," was identified for the licensee's failure to correctly verify fire door gaps were within acceptable limits of procedure, 29124-C, Fire Doors Inspection.

Description: The resident inspectors observed that double swinging fire door V1211L1B57, 125Vdc D train switchgear room, was bowed allowing air flow through gaps around the door frame and in-between the doors. The licensee declared the door non-functional and initiated an hourly fire watch. The licensee inspected the door and determined the clearance gap between the door and frame and between the meeting edges of double doors exceeded 1/4 of an inch, and that the gap at the strike plate area exceeded 1/8 of an inch limits specified in procedure 29124-C. The inspectors noted that procedure 29124-C was a fire protection program (FPP) surveillance.

The licensee also inspected the clearance gaps of several nearby doors. In total, the licensee found 67 doors that did not meet the clearance gap requirement. Hourly fire watches and repairs were initiated for the affected doors. At the end of the inspection period, only three fire doors had not been repaired. Hourly fire watches remain in-place for these three doors.

The licensee performed a cause evaluation (corrective action report (CAR) no. 266477) and determined there was a lack of knowledge from the maintenance shift teams on the importance and where/how to measure the clearance gaps. These inspections were previously performed by a dedicated fire protection maintenance personnel, but are now performed by regular maintenance personnel. As a consequence, the licensee determined the inspection procedure needed more specific guidance on where and how to measure the gaps, including selection and use of appropriate measuring tools. The licensee initiated corrective actions to revise the inspection procedure (TE965579) and provide additional training (TE966859).

Analysis: The licensee's failure to correctly verify fire door gaps at the strike plate area and between meeting edges of double swinging metal doors were within acceptable limits was a performance deficiency. The performance deficiency was more than minor because it was associated with the Mitigating Systems cornerstone attribute of Protection Against External Hazards (i.e. fire) and adversely affected the cornerstone objective in that door gaps outside the required limits compromised the door's fire rating

qualification. The finding was screened in accordance with NRC Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," Attachment 4, "Initial Characterization of Findings," which determined that an IMC 0609, Appendix F, "Fire Protection Significance Determination Process," review was required. The finding category of "Fire Confinement" was assigned. These doors had a nominal fire endurance rating of 3-hours using guidance in IMC 0609, Appendix F. Using Attachment 2, "Degradation Rating Guidance Specific to Various Fire Protection Program Elements," the inspectors assigned a Degradation Level of 'Moderate B' to the affected doors which reduced their fire endurance rating to just over 1 hour. Using Attachment 1, "Fire Protection Significance Determination Process Worksheet," the inspectors determined that the finding was of very low safety significance (Green) because, based upon inspector observations, the combustible loading on both sides of doors was representative of a fire duration of less than 1.5 hours or the affected doors maintained at least a 1-hour fire endurance rating. The inspectors determined that the finding had a cross-cutting aspect of "Training" in the Human Performance area because the licensee did not ensure personnel received training on how to properly inspect station fire doors (H.9).

Enforcement: Technical Specification 5.4.1.d required, in part, that written procedures shall be established, implemented, and maintained covering the activities for the Fire Protection Program. Contrary to this, since the last performance of 29124-C on July 14, 2016, the licensee failed to properly implement the requirements of FPP procedure, 29124-C, to inspect and verify fire door gaps were within acceptable limits. As a result, 67 doors were identified as non-functional. The licensee initiated hourly roving fire watches for these fire doors and took corrective maintenance action to restore affected fire doors within limits under CRs 10254221 and 10252774. This violation is being treated as an NCV in accordance with section 2.3.2.a of the Enforcement policy: NCV 05000424-425/2016003-01, "Failure to Properly Implement Fire Door Inspection Procedure"

4OA3 Follow-Up of Events (71153)

.1 (Closed) Licensee Event Report 05000425/2016-002-00, Unit 2 Trip on Low-Low Steam Generator Level

a. Inspection Scope

On May 25, 2016, Unit 2 experienced an automatic reactor trip due to low-low level in steam generator 1. All safety systems actuated as designed and the plant was stabilized in Mode 3. At the time of the reactor trip, technicians were performing a planned Unit 2 steam generator loop 1 narrow range protection channel calibration and operational test. Investigation into the event found that the low-low steam generator level was the result of a human performance error made by maintenance technicians performing the calibration procedure. The inspectors reviewed the LER, associated condition reports, and cause determination to understand the cause and also reviewed the corrective actions.

b. Findings

A Green NCV associated with this event was previously documented as NCV 05000425/2016002-01, Failure to properly implement a maintenance procedure caused a Reactor Trip. No other findings were identified.

4OA6 Other Activities

Operation of an Independent Spent Fuel Storage Installation (ISFSI) (60855.1)

a. Inspection Scope

The inspectors performed a walkdown of the onsite ISFSI. The inspectors reviewed surveillance records to verify that daily surveillance requirements were performed as required by technical specifications.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On October 18, 2016, the resident inspectors presented the inspection results to Mr. Daniel Komm and other members of the licensee's staff. The inspectors confirmed that proprietary information provided or examined during the inspection period was properly controlled.

4OA7 Licensee-Identified Violations

The following violation of very low safety significance (Green) was identified by the licensee and is a violation of NRC requirements which meets the criteria of the NRC Enforcement Policy, for being dispositioned as a Non-Cited Violation.

- Title 10 CFR Part 50.54(q)(2) required, in part, that a licensee shall follow and maintain the effectiveness of its emergency plan that meets the planning standards of 10 CFR 50.47(b). 10 CFR 50.47(b)(4) required, in part, that a standard emergency classification and action level scheme is in use by the nuclear facility licensee. Contrary to these requirements, since 2008, emergency action level EAL HA1 #5 was not translated from the emergency plan to implementing procedure NMP-EP-110 GL03 (formally 91001-C) during the 2008 revision of the emergency plan. The licensee entered the issue into their corrective action program as CR 10251396. The inspectors determined that the finding was of very low safety significance (Green) because the finding constituted an ineffective EAL rather than a failed risk-significant planning standard.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel:

T. Baker, Security Manager
D. Komm, Operations Director
J. Crites, Maintenance Rule Coordinator
J. Dixon, Radiation Protection Manager
T. Fowler, Chemistry Manager
G. Gunn, Regulatory Affairs Director
S. Harris, Operations Manager
T. Krienke, Work Management Director
D. Myers, Plant Manager
D. Stiles, Training Director
Steve Kowalski, (Acting) Engineering Director
K. Taber, Site Vice-President
K. Walden, Licensing Engineer
I. White, Licensing Engineer

NRC personnel:

Shane Sandal, Chief, Region II Reactor Projects Branch 2

LIST OF REPORT ITEMS

Opened and Closed

NCV 05000424-425/2016003-01, Failure to Properly Implement Fire Door Inspections (4OA2)

Closed

LER 05000425/2016-002-00, Unit 2 Trip on Low-Low Steam Generator Level (4OA3)

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Procedures

11889-C, Severe Weather Checklist, Ver. 25

NMP-OS-017, Severe Weather, Ver. 1.1

20054-C, Maintenance Support of the Severe Weather Checklist, Rev. 2.4

Section 1R04: Equipment Alignment

Procedures

92745-1, Zone 45 – Auxiliary Building – Level 1 Fire Fighting Preplan, Rev 2.2

13150B-2, Train B Nuclear Service Cooling Water System, Rev. 11

Drawings

1X4DB133-1, Ver. 55, Unit 1 P&I Diagram – Nuclear Service Water System – System No. 1202

X4DB149-2, Ver. 4.0, Unit 2 Flow Diagram – Cooling Water System – Systems 1202, 1203, 1217

2X4DB133-1, Ver. 54.0, Unit 2 P&I Diagram – Nuclear Service Cooling Water System – Systems No. 1202

2X4DB159-2, Unit 1 P&I Diagram – Main Steam System – System No. 1301

Other

Tagout 2-DT-16-1202-00150, Unit 1 NSCW transfer pump (1-1202-P4-008)

Tagout 1-DT-16-1806-00216, Isolate Battery Charger 1AD1CB for Service Test

Section 1R05: Fire Protection Annual/Quarterly

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92745-1, Zone 45 – Auxiliary Building – Level 1 Fire Fighting Preplan, Rev 2.2

92799-1, Zone 99 – Control Building Level A Fire Fighting Preplan, Rev 3.2

92862-1, Zone 162 – Diesel Generator Building Fire Fighting Preplan, Rev 3.0

92864-1, Zone 164 – Diesel Generator Building – Train B DFO Tank Fire Fighting Plan, Rev 2.2

92804-1, Zone 104 – MSIV Room North Level 1 Fire Fighting Preplan, Rev 4.2

92723-2, Zone 23 – Auxiliary Building – Electrical Chase Rooms Fire Fighting Preplan, Rev 2.1

92754-2, Zone 54 – Auxiliary Building – Level 2 Train A CCW HX Fire Fighting Preplan, Rev 0.2

92755-2, Zone 55 – Auxiliary Building – Level 2 Train B CCW HX Fire Fighting Preplan, Rev 0.2

92787-2, Zone 87 – Control Building – Level A Fire Fighting Preplan, Rev 2.2

92788-2, Zone 88 – Control Building – Level A Fire Fighting Preplan, Rev 2.2

92789-2, Zone 89 – Control Building – Level A Fire Fighting Preplan, Rev 3.1

92790-2, Zone 90 – Control Building – Level A Fire Fighting Preplan, Rev 2.2

92791-2, Zone 91 – Control Building Level A Fire Fighting Preplan, Rev 3.2

92792-2, Zone 92 – Control Building – Level A Fire Fighting Preplan, Rev 3.1

92793-2, Zone 93 – Control Building – Level A Fire Fighting Preplan, Rev 3.2

92797-2, Zone 97 – Control Building – Level A Fire Fighting Preplan, Rev 3

92798-2, Zone 98 – Control Building – Level A Fire Fighting Preplan, Rev 3

92802-2, Zone 102 – Control Building – Level A Fire Fighting Preplan, Rev 2.2

92803-2, Zone 103 – Control Building – Level A Fire Fighting Preplan, Rev 2.2

92847-2, Zone 147 – Auxiliary Building – Level 2 Fire Fighting Preplan, Rev 1.2

92848-2, Zone 148 – Auxiliary Building – Level 2 Fire Fighting Preplan, Rev 0.2

92858-2, Zone 158 – Control Building – Level A Fire Fighting Preplan, Rev 1.2

92589-2, Zone 159 – Control Building – Level A Fire Fighting Preplan, Rev 1.2
 92872-2, Zone 172 – Auxiliary Building – Level 2 Fire Fighting Preplan, Rev 1.2

Section 1R06: Flood Protection Measures

NMP-ES-051-004 Rev. 3.4, Pull Box Inspection Procedure
 CRs 10265576, 10265582, 10265584

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

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NMP-EP-110, Emergency Classification Determination and Initial Action, Ver. 8.1
 NMP-EP-110-GL03, VEGP EALs – ICs, Thresholds Values and Basis, Ver. 5.2
 NMP-EP-111, Emergency Notifications, Ver. 11.0
 14804A-2, Safety Injection Pump A Inservice and Response Time Tests, Ver. 7.1
 24803-2, Steam Pressure Loop 2 (Protection III) 2P-526 Channel Operational Test and Channel Calibration, Rev. 17.5
 24804-2, Steam Pressure Loop 3 (Protection III) 2P-536 Channel Operational Test and Channel Calibration, Ver. 15.4
 14804A-2, Safety Injection Pump A Inservice and Response Time Tests, Ver. 7.1

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DS#19, Rev. 9.0, Operating Test Dynamic Simulator Scenario

Section 1R12: Maintenance Effectiveness

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 TE 946733
 CAR 264759
 System Health Reports, 1902 – Gaseous Waste System
 Gaseous Effluents Discharge Permit G-20160818-234-B, dated August 18, 2016
 Maintenance Strategy for Equipment ID 2HV0877A
 Maintenance Rule Functions for System 2412, Turbine Drain System

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

Procedure NMP-GM-31-001, Ver. 3.0, Online Maintenance Rule (a)(4) Risk Calculations
 Unit 2, EOOS Integrated Risk Report for September 19, 2016 at 15:46
 Unit 2, EOOS Importance Calculator Results for September 19, 2016 at 22:53
 Unit 2, EOOS Integrated Risk Report for September 28, 2016 at 08:11
 Unit 2, Narrative Control Room Logs for July 18, 2016
 Unit 2, Narrative Control Room Logs for September 19, 2016
 Unit 2, Narrative Control Room Logs for September 27 and 28, 2016
 Clearance C-ET-00, Tagout 2-ET-16-1202-00094(001)

Section 1R15: Operability Determinations and Functionality Assessments

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1X3D-AA-H01A, One Line Diag., 125Vdc Class 1E Dist. Train A, 1-1806-S3-DSA/DCA, Ver. 18
 1X3D-AA-H02A, One Line Diag., 125Vdc Class 1E Dist. Train B, 1-1806-S3-DSB/DCB, Ver. 20
 1X3D-AA-H04A, One Line Diag., 125Vdc Class 1E Dist. Train C, 1-1806-S3-DSC/DCC, Ver. 27
 1X3D-AA-H05A, One Line Diag., 125Vdc Class 1E Dist. Train D, 1-1806-S3-DSD, Ver. 22.0
 2X3D-AA-H02A, One Line Diag., 125Vdc Class 1E Dist. Train B, 2-1806-S3-DSB/DCB, Ver. 14
 2X3D-AA-H04A, One Line Diag., 125Vdc Class 1E Dist. Train C, 2-1806-S3-DSC/DCC, Ver. 21
 2X3D-AA-H05A, One Line Diag., 125Vdc Class 1E Dist. Train D, 2-1806-S3-DSD, Ver. 15
 1X4DB122, P&I Diagram – Residual Heat Removal Sys. No 1205, Ver. 52
 2X4DB122, P&I Diagram – Residual Heat Removal Sys. No 1205, Ver. 54
 AX5AF05-00039, 323 Transmitter, Bottoming Type, J/Box Output Bracket & Flange MTD

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Procedure NMP-AD-012, Operability Determinations and Functionality Assessments, Ver. 13
 Part 21 Report Log No. 2016-29-00, Notification of Deviation Related to K-Line Circuit Breaker
 Secondary Trip Latch, 6/3/16
 AX5AF05-00033, Wyle Test Report 45700-2 for Level Transmitters, Rev. C
 X5AF05, Environmental Summary Sheets (1/2LT-0764 and 1/2LT-0765), Rev. 13
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Section 1R18: Plant Modifications

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13405-1/2, 125V DC 1E Electrical Distribution System, Version 54/49
 28810-C, Battery Service Test, Version 37.4
 17034-1/2, Annunciator Response Procedures for ALB 34 on EAB Panel, Rev. 29/26

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Section 1R19: Post Maintenance Testing

Completed Procedures

14802B-2, Train B NSCW Pump/Check Valve IST and Response Time Test, completed 8/12/16
 25210-C Data Sheet 30, 1202 – NSCW Fan, completed 7/19/16
 14430-2, NSCW Cooling Tower Fans Monthly Test, completed 7/19/16
 27080-C Ingersoll Rand Model 10 X 18 SE CCW Pump Maintenance, Ver. 27.2

Other

Tagout: 2-DT-16-1203-00262, CCW Train B Pmp-4 PM Outage
 NRC Information Notice 2001-19, Improper Maintenance and Reassembly of Automatic Oil
 Bubblers, December 17, 2001
 SEV-2864, Plant Response to IN 2001-19, May 14, 2002
 CRs 10241484, 10260403, 10260036, 10271080, 10272893
 FSAR, Rev. 16, Chapters 3, 7, 9, and 15
 Technical Evaluation 962913 Unit 2 Train A ESF Chiller Purge Unit in Alarm
 Work Orders SNC799545, SNC398880

Section 1R22: Surveillance Testing**Completed Procedures**

14802B-2, Train B NSCW Pump/Check Valve IST and Response Time Test, completed 7/12/16
 14802A-1, Train A NSCW Pump/Check Valve IST and Response Time Test, completed 8/26/16
 14668A-1, Train A Diesel Generator Operability Test (24 hour run), completed 7/27/16
 11885A-1 Diesel Generator Operating Log, completed 7/27/16

Work Orders

SNC687096, 1A EDG 24Hr Run 18-Month, 7/27/16

Other

FSAR, Rev. 15, Chapter 3, 7, and 9

Section 1EP06: Drill Evaluation**Procedures**

NMP-EP-110, Emergency Classification Determination and Initial Action, Ver 8.1,
 NMP-EP-110-GL03, VEGP EALs – ICs, Thresholds Values and Basis, Ver 8.0
 NMP-EP-111, Emergency Notifications, Ver 11.0

Other

Facility Activation Drill package, dated August 24, 2016

Section 4OA1: Performance Indicator Verification**Procedures**

NRC Mitigating System Performance Index (MSPI) Basis Document Vogtle Electric Generating
 Plant Units 1 and 2, Ver. 8
 NEI 99-02, Regulatory Assessment Indicator Guideline, Rev. 7

Records and Data

MSPI Derivation Reports, Vogtle Units 1 & 2 - High Pressure Injection System, June 2016
 MSPI Derivation Reports, Vogtle Units 1 & 2 - Residual Heat Removal System, June 2016
 MSPI Derivation Reports, Vogtle Units 1 & 2 - Auxiliary Feedwater System, June 2016
 System Health Reports for System 1204, Safety Injection System
 System Health Reports for System 1205, Residual Heat Removal
 System Health Reports for System 1302, Auxiliary Feedwater
 Unit 1 Control Room Logs (eSOMS) – 7/1/15 thru 6/30/16; Search Criteria: 3.5.2 and RHR
 Unit 1 Control Room Logs (eSOMS) – 7/1/15 thru 6/30/16; Search Criteria: 3.5.2 and CCP
 Unit 1 Control Room Logs (eSOMS) – 7/1/15 thru 6/30/16; Search Criteria: 3.5.2 and SIP
 Unit 1 Control Room Logs (eSOMS) – 7/1/15 thru 6/30/16; Search Criteria: 3.7.5
 Unit 2 Control Room Logs (eSOMS) – 7/1/15 thru 6/30/16; Search Criteria: 3.5.2 and RHR
 Unit 2 Control Room Logs (eSOMS) – 7/1/15 thru 6/30/16; Search Criteria: 3.5.2 and CCP
 Unit 2 Control Room Logs (eSOMS) – 7/1/15 thru 6/30/16; Search Criteria: 3.5.2 and SIP
 Unit 2 Control Room Logs (eSOMS) – 7/1/15 thru 6/30/16; Search Criteria: 3.7.5
 CR 10275612

Section 4OA2: Problem Identification and ResolutionProcedures

NMP-EP-312, Development of Emergency Preparedness Technical Products, Ver 1.0
 NMP-EP-310, Maintaining the Emergency Plan, Ver 4.1
 NMP-EP-110-GL03, VEGP EALs – ICs, Threshold Values and Basis, Ver 7.0
 29124-C, Fire Doors Inspection (FSAR Fire Protection Surveillance), Ver. 26

Other

Cause Determination Report for CAR 266074, Ver. 1.0
 Vogtle Electric Generating Plant Unit 1 and Unit 2 Emergency Plan, Rev 66
 AXADR802, Combustible Load Calculations for Fire Hazards Analysis, Ver. 14
 AX1D94A57, Control Building Units 1 and 2 Door Schedule, Ver. 5.0
 AX1D94A51, Auxiliary Building Units 1 and 2 Door Schedule Level 2, Ver. 2.0
 AX1D94A50, Auxiliary Building Units 1 and 2 Door Schedule Level 1, Ver. 2.0
 AX1D94A53, Auxiliary Building Units 1 and 2 Door Schedule Level A, Ver. 5.0
 AX1D94A54, Auxiliary Building Units 1 and 2 Door Schedule Level B, Ver. 1.0
 AX1D94A55, Auxiliary Building Units 1 and 2 Door Schedule Level C, Ver. 1.0
 AX1D94A56, Auxiliary Building Units 1 and 2 Door Schedule Level D, Ver. 2.0
 AX1D94A63, Fuel Handling Building Units 1 and 2 Door Schedule Level 3, Ver. 1.0
 AX1D94A62, Fuel Handling Building Units 1 and 2 Door Schedule Level 1, Ver. 2.0
 AX1D94A64, Fuel Handling Building Units 1 and 2 Door Schedule Level A, Ver. 1.0
 AX1D94A65, Fuel Handling Building Units 1 and 2 Door Schedule Level B, Ver. 1.0
 AX1D94A66, Fuel Handling Building Units 1 and 2 Door Schedule Level C, Ver. 1.0
 TE 966859, Procedure Change for Fire Door Inspections
 CRs 10267122, 10252774

Work Orders (Fire Doors Extent of Condition)

SNC806750	SNC806727	SNC805577	SNC805579	SNC805580	SNC806724
SNC806724	SNC806715	SNC805582	SNC805581	SNC806734	SNC806731
SNC806736	SNC806740	SNC806742	SNC806744	SNC806735	SNC806733
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Section 4OA3: Follow-Up of Events and Notices of Enforcement DiscretionOther

Root Cause Report, CAR 265328, approved July 14, 2016