



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

July 27, 2009

Mr. Tom E. Tynan  
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 05000424/2009003 & 05000425/2009003 AND NRC EMERGENCY  
PREPAREDNESS INSPECTION REPORT 05000424/2009501 &  
05000425/2009501

Dear Mr. Tynan:

On June 30, 2008, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Vogtle Electric Generating Plant, Units 1 and 2. The enclosed integrated inspection report documents the inspection findings, which were discussed on July 17, 2009, with you and other members of your staff. In addition, on June 5, 2009, the NRC completed an Emergency Preparedness inspection at your Vogtle Electric Generating Plant. The enclosed inspection report documents the inspection results, which were discussed on June 5, 2009, with you, and other members of your staff.

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

In accordance with the Code of Federal Regulations 10 CFR 2.390 of the NRC's Rules of Practice, a copy of this letter, its enclosures, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly

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Available Records (PARS) component of the NRC's document 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/**

Scott M. Shaeffer, Chief  
Reactor Projects Branch 2  
Division of Reactor Projects

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

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT - NRC INTEGRATED INSPECTION  
REPORT 05000424/2009003 & 05000425/2009003 AND NRC EMERGENCY  
PREPAREDNESS INSPECTION REPORT 05000424/2009501 &  
05000425/2009501

cc w/encl: (See page 3)

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cc w/encl: (See page 3)

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Letter to Tom E. Tynan from Scott M. Shaeffer dated July 27, 2009

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**U. S. NUCLEAR REGULATORY COMMISSION**

**REGION II**

Docket Nos.: 50-424, 50-425

License Nos.: NPF-68, NPF-81

Report Nos.: 05000424/2009003 & 05000425/2009003 and  
05000424/2009501 & 05000425/2009501

Licensee: Southern Nuclear Operating Company, Inc. (SNC)

Facility: Vogtle Electric Generating Plant, Units 1 and 2

Location: Waynesboro, GA 30830

Dates: April 1, 2009 through June 30, 2009

Inspectors: M. Cain, Senior Resident Inspector  
T. Chandler, Resident Inspector  
L. Miller, Senior Emergency Preparedness Inspector  
(Sections 1EP2, 1EP3, 1EP4, 1EP5, 4OA1 and 4OA6)

Approved by: Scott M. Shaeffer, Chief  
Reactor Projects Branch 2  
Division of Reactor Projects

Enclosure

## **SUMMARY OF FINDINGS**

IR 05000424/2009-003, 05000425/2009-003; IR 05000424/2009-501, 05000425/2009-501; 04/01/2009 - 06/30/2009; Vogtle Electric Generating Plant, Units 1 and 2; Routine integrated inspection report.

The report covered a three-month period of inspection by two resident inspectors and an announced inspection by one emergency preparedness inspector. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealing Findings

No findings of significance were identified.

B. Licensee-Identified Violations

None.

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## REPORT DETAILS

### Summary of Plant Status

Unit 1 operated at essentially full RTP for the entire inspection period.

Unit 2 operated at essentially full RTP for the entire inspection period.

### 1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

#### 1R01 Adverse Weather Protection

##### a. Inspection Scope

Grid Reliability. The inspectors reviewed the licensee's procedures to verify communication protocols exist between the transmission system operator and the control room to promptly identify issues that could impact the offsite power system. The inspectors verified the adequacy of these procedures to address measures to monitor and maintain availability and reliability of both the offsite alternating current (AC) power system and the alternate AC power system. The inspectors also conducted walkdowns with appropriate plant personnel to verify material condition of offsite AC power systems and onsite alternate AC power systems to the plant including 500 KV and 230 KV switchyards and transformers. Documents reviewed are listed in the Attachment.

Seasonal Readiness Review. The inspectors performed a walkdown of the following two systems to verify they would remain functional during high temperature conditions. The inspectors walked down the systems to determine component temperatures and interviewed engineers to ensure that the systems would be operable at the observed temperature. Additionally, the inspectors reviewed the CR database to verify that adverse weather related items were being identified and appropriately resolved. Documents reviewed are listed in the Attachment.

- Unit 2 solid state reactor protection system (SSPS)
- Unit 1 main generator excitation system

##### b. Findings

No findings of significance were identified.

#### 1R04 Equipment Alignment

##### a. Inspection Scope

Partial System Walkdown. The inspectors performed partial walkdowns of the following three systems to verify correct system alignment. The inspectors checked for correct valve and electrical power alignments by comparing positions of valves, switches, and breakers to the documents listed in the Attachment. Additionally, the inspectors

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reviewed the condition report database to verify that equipment alignment problems were being identified and appropriately resolved.

- Unit 2 train A emergency diesel generator (EDG) and fuel oil transfer system while train B EDG was out of service for monthly surveillance operability test
- Unit 1 train B auxiliary feedwater (AFW) system when the train A AFW pump was out of service for maintenance
- Unit 2 train A component cooling water system (CCW) while CCW pump #6 was out of service for maintenance

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

Fire Area Tours. The inspectors walked down the following five plant areas to verify the licensee was controlling combustible materials and ignition sources as required by procedures 92015-C, Use, Control, and Storage of Flammable/Combustible Materials, and 92020-C, Control of Ignition Sources. The inspectors assessed the observable condition of fire detection, suppression, and protection systems and reviewed the licensee's fire protection Limiting Condition for Operation log and condition report (CR) database to verify that the corrective actions for degraded equipment were identified and appropriately prioritized. The inspectors also reviewed the licensee's fire protection program to verify the requirements of Updated Final Safety Analysis Report Section 9.5.1, Fire Protection Program, and Appendix 9A, Fire Hazards Analysis, were met. Documents reviewed are listed in the Attachment.

- Unit 2 control building level A east and west penetration areas
- Unit 2 north and south main steam valve houses
- Unit 2 nuclear service cooling water (NSCW) tower train A
- Unit 1 EDG fuel oil storage tanks and pumphouse
- Unit 1 control building level B east and west penetration areas

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures

a. Inspection Scope

Internal Flood Review. The inspectors walked down the following area which contained risk-significant structures, systems and components below flood level to verify flood barriers were in place. Motor controllers and terminal boxes that could become potentially submerged were inspected to ensure that the sealing gasket material was intact and undamaged. The inspectors reviewed selected licensee alarm response

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procedures to verify alarm setpoints and setpoints for sump pump operation were consistent with the UFSAR, the setpoint index, and Technical Specifications (TSs).

- Unit 2 residual heat removal (RHR) and Containment Spray pump rooms (both trains) in auxiliary building

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Regualification

a. Inspection Scope

Resident Quarterly Observation. The inspectors observed operator performance on April 14, during licensed operator simulator training described on simulator exercise guide Dynamic Simulator Scenarios V-RQ-SE-07703. The simulator scenarios covered operator actions resulting from a leaking steam generator U-tube followed by a subsequent steam generator tube rupture and loss of containment spray. Documents reviewed are listed in the Attachment. The inspectors specifically assessed the following areas:

- Correct use of the abnormal and emergency operating procedures
- Ability to identify and implement appropriate actions in accordance with the requirements of the Technical Specifications
- Clarity and formality of communications in accordance with procedure 10000-C, Conduct of Operations
- Proper control board manipulations including critical operator actions
- Quality of supervisory command and control
- Effectiveness of the post-evaluation critique

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

a. Inspection Scope

The inspectors reviewed one equipment problem to evaluate the effectiveness of the licensee's handling of equipment performance problems and to verify the licensee's maintenance efforts met the requirements of 10 CFR 50.65 (the Maintenance Rule) and licensee procedure 50028-C, Engineering Maintenance Rule Implementation. The inspector also reviewed one safety-significant system to verify that the licensee's maintenance efforts met the requirements of 10 CFR 50.65 (the Maintenance Rule) and licensee procedure 50028-C, Engineering Maintenance Rule Implementation. The reviews included adequacy of the licensee's failure characterization, establishment of performance criteria or 50.65(a)(1) performance goals, and adequacy of corrective actions. Other documents reviewed during this inspection included control room logs,

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system health reports, the maintenance rule database, and maintenance work orders. Also, the inspectors interviewed system engineers and the maintenance rule coordinator to assess the accuracy of identified performance deficiencies and extent of condition.

- CR 2009105102, 1B EDG high particulates in fuel oil storage tank
- CR 2009103132, Unit 2 containment spray sump suction valve, 2HV-9003B failed to close

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors reviewed the following five work activities to verify plant risk was properly assessed by the licensee prior to conducting the activities. The inspectors reviewed risk assessments and risk management controls implemented for these activities to verify they were completed in accordance with procedure 00354-C, Maintenance Scheduling, and 10 CFR 50.65(a)(4). The inspectors also reviewed the CR database to verify that maintenance risk assessment problems were being identified at the appropriate level, entered into the corrective action program, and appropriately resolved.

- Replacement of Unit 2 loop 4 main feed regulation valve feedback potentiometer while performing K601 slave relay test which makes both the Train A centrifugal charging pump and the RHR pump inoperable
- Performance of the planned outage of the #1 NSCW pump on Unit 2 while simultaneously performing the IST on the 2A MDAPW pump
- Emergent repair of the Unit 1 TDAFW pump electro-hydraulic governor
- Unit 1A MDAPW pump week-long outage
- Unit 1 TDAFW outage in coincident with #2 NSCW pump outage

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the following five evaluations to verify they met the requirements of procedure NMP-GM-002, Corrective Action Program, and NMP-GM-002-001, Corrective Action Program Instructions. The scope of this inspection included a review of the technical adequacy of the evaluations, the adequacy of compensatory measures, and the impact on continued plant operation.

- CR 2009104301, Low oil level in Unit 1 loop #1 ARV (1-PV-3000) actuator sight glass
- CR 2009104706, Hydraulic pump for Unit 1 loop #4 ARV (1-PV-3030) cycling

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- CR 2009104786, Cable spacing inside motor junction box of the 1A CCW pump does not meet minimum required by procedure
- CR 2009104886, Jacket water jumper leaks on several cylinder heads on 2A EDG
- CR 2009104979, 1A Motor driven auxiliary feedwater pump (MDAFWP) high vibrations
- CR 2009105067, Air venting from chemical volume control system (CVCS) centrifugal charging pump (CCP) common suction header vent.

b. Findings

No findings of significance were identified.

1R18 Plant Modifications

a. Inspection Scope

Temporary Modifications. The inspectors reviewed temporary modification TM A090420901 and associated 10 CFR 50.59 screening criteria against the system design bases documentation and procedure 00307-C, Temporary Modifications. The inspectors also reviewed the associated 10 CFR 50.54(p) and 10 CFR 50.54(q) evaluations performed by Security and Emergency Preparedness personnel. This temporary modification provided temporary power to the plant entrance security building during the building's switchgear outage. The inspectors reviewed implementation, configuration control, post-installation test activities, drawing and procedure updates, and operator awareness for this TM.

Permanent Modifications. The inspectors reviewed equivalency determination 1090642801 against the system design bases documentation and procedure NMP-ES-034, Equivalency Determinations. This equivalency determination evaluated the use of braided graphite yarn as a replacement packing material for the engineered safety feature (ESF) chiller pumps 11592P7001000 and 11592P7002000. The inspectors verified that the modification did not degrade the system design bases, licensing bases, or equipment performance capability. Additionally, the inspectors verified that plant risk was not increased unnecessarily during implementation of the modification.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors either observed post-maintenance testing or reviewed the test results for the following five maintenance activities to verify that the testing met the requirements of procedure 29401-C, Work Order Functional Tests, for ensuring equipment operability and functional capability was restored. The inspectors also reviewed the test procedures to verify the acceptance criteria were sufficient to meet the TS operability requirements.

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- 1B ESF chilled water system outage (ref. CR 2009103553)
- WO 1081412001 Unit 1 CCW pump #3 outage
- WO 1090934301 Unit 1 TDAFW pump trip & throttle valve repair
- 1B NSCW pump #2 outage
- WO 2009137801 Unit 2 leading edge flow meter (LEFM) (ref. CR 2009105493)
- WO 1080244401 1A NSCW pump #5 agastat 162-1 replacement

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors reviewed the following five surveillance test procedures and either observed the testing or reviewed test results to verify that testing was conducted in accordance with the procedures and that the acceptance criteria adequately demonstrated that the equipment was operable. Additionally, the inspectors reviewed the CR database to verify that the licensee had adequately identified and implemented appropriate corrective actions for surveillance test problems.

Surveillance Tests

- 14980B-2, Diesel Generator 2B Operability Test
- 14545-2, Motor Driven Auxiliary Feedwater Pump Operability Test
- 24531-1, Pressurizer Level Protection Channel III 1L-461 Channel Operational Test and Channel Calibration

In-Service Tests (IST)

- 14807B-1, Train B Motor Driven Auxiliary Feedwater Pump and Check Valve In-service and Response Time Test
- 14808A-1, Train A Centrifugal Charging Pump and Check Valve IST and Response Time Test

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP2 Alert and Notification System Testing

a. Inspection Scope

The inspector evaluated the adequacy of licensee's methods for testing the alert and notification system in accordance with NRC Inspection Procedure 71114, Attachment 02, Alert and Notification System Evaluation. The applicable planning standard 10 CFR Part 50.47(b)(5) and its related 10 CFR Part 50, Appendix E, Section IV.D requirements were

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used as reference criteria. The criteria contained in NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, Revision 1, was also used as a reference.

The inspector reviewed various documents which are listed in the Attachment to this report. This inspection activity satisfied one inspection sample for the alert and notification system on a biennial basis.

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization (ERO) Augmentation

a. Inspection Scope

The inspector reviewed the licensee's Emergency Response Organization (ERO) augmentation staffing requirements and process for notifying the ERO to ensure the readiness of key staff for responding to an event and timely facility activation. The qualification records of key position ERO personnel were reviewed to ensure all ERO qualifications were current. A sample of problems identified from augmentation drills or system tests performed since the last inspection were reviewed to assess the effectiveness of corrective actions.

The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 03, Emergency Response Organization Staffing and Augmentation System. The applicable planning standard, 10 CFR 50.47(b)(2) and its related 10 CFR 50, Appendix E requirements were used as reference criteria.

The inspector reviewed various documents which are listed in the Attachment to this report. This inspection activity satisfied one inspection sample for the ERO staffing and augmentation system on a biennial basis.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

Since the last NRC inspection of this program area, Revisions 51 and 52 of the Emergency Plan was implemented based on the licensee's determination, in accordance with 10 CFR 50.54(q), that the changes resulted in no decrease in the effectiveness of the Plan, and that the revised Plan continued to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR Part 50. The inspector conducted a sampling review of the Plan changes and implementing procedure changes made between November 1, 2008 and May 15, 2009 to evaluate for potential decreases in effectiveness

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of the Plan. However, this review was not documented in a Safety Evaluation Report and does not constitute formal NRC approval of the changes. Therefore, these changes remain subject to future NRC inspection in their entirety.

The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 04, Emergency Action Level and Emergency Plan Changes. The applicable planning standard (PS), 10 CFR 50.47(b)(4) and its related 10 CFR 50, Appendix E requirements were used as reference criteria.

The inspector reviewed various documents which are listed in the Attachment to this report. This inspection activity satisfied one inspection sample for the emergency action level and emergency plan changes on an annual basis.

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies

a. Inspection Scope

The inspector reviewed the corrective actions identified through the Emergency Preparedness program to determine the significance of the issues and to determine if repeat problems were occurring. The facility's self-assessments and audits were reviewed to assess the licensee's ability to be self-critical, thus avoiding complacency and degradation of their emergency preparedness program. In addition, the inspector reviewed self-assessments and audits to assess the completeness and effectiveness of all emergency preparedness related corrective actions.

The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 05, Correction of Emergency Preparedness Weaknesses. The applicable planning standard, 10 CFR 50.47(b)(14) and its related 10 CFR 50, Appendix E requirements were used as reference criteria.

The inspector reviewed various documents which are listed in the Attachment to this report. This inspection activity satisfied one inspection sample for the correction of emergency preparedness weaknesses on a biennial basis.

Findings

No findings of significance were identified.

1EP6 Drill Evaluation

a. Inspection Scope

The inspectors reviewed the facility activation exercise guide and observed the following emergency response activity to verify the licensee was properly classifying emergency events, making the required notifications and making appropriate protective action

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recommendations in accordance with procedures 91001-C, Emergency Classifications, and 91305-C, Protective Action Guidelines.

- On June 24, the licensee conducted an emergency preparedness drill involving a steam generator tube rupture, followed by a stuck open steam generator safety relief valve. The technical support center, emergency operations facility and operations support center were activated and the site participated in the exercise.

b. Findings

No findings of significance were identified.

#### 4. **OTHER ACTIVITIES**

##### 4OA1 Performance Indicator (PI) Verification

##### .1 Cornerstone: Mitigating Systems

a. Inspection Scope

The inspectors sampled licensee submittals for the listed PIs during the period from April 1, 2008 through March 31, 2009, for Unit 1 and Unit 2. The inspectors verified the licensee's basis in reporting each data element using the PI definitions and guidance contained in procedures 00163-C, NRC Performance Indicator and Monthly Operating Report Preparation and Submittal.

Barrier Integrity Cornerstone

- reactor coolant system (RCS) specific activity
- reactor coolant system leakage

The inspectors reviewed Unit 1 and Unit 2 chemistry and operator log entries, the monthly operating reports and monthly PI summary reports to verify that the licensee had accurately submitted the PI data.

b. Findings

No findings of significance were identified.

##### .2 Cornerstone: Emergency Preparedness

a. Inspection Scope

The inspector sampled licensee submittals relative to the PIs listed below for the period April 2008 through March 2009. To verify the accuracy of the PI data reported during that period, PI definitions and guidance contained in NEI 99-02, Regulatory Assessment Performance Indicator Guideline, Revision 5, was used to confirm the reporting basis for each data element.



### Emergency Preparedness Cornerstone

- Emergency Response Organization Drill/Exercise Performance
- ERO Drill Participation
- Alert and Notification System Reliability

For the specified review period, the inspector examined data reported to the NRC, procedural guidance for reporting PI information, and records used by the licensee to identify potential PI occurrences. The inspector verified the accuracy of the PI for ERO drill and exercise performance through review of a sample of drill and event records. The inspector reviewed selected training records to verify the accuracy of the PI for ERO drill participation for personnel assigned to key positions in the ERO. The inspector verified the accuracy of the PI for alert and notification system reliability through review of a sample of the licensee's records of periodic system tests. The inspector also interviewed the licensee personnel who were responsible for collecting and evaluating the PI data. Licensee procedures, records, and other documents reviewed within this inspection area are listed in the Attachment to this report.

#### b. Findings

No findings of significance were identified.

### 4OA2 Identification and Resolution of Problems

#### a. Inspection Scope

Daily Condition Report Review. As required by Inspection Procedure 71152, Identification and Resolution of Problems, and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's corrective action program. This review was accomplished by either attending daily screening meetings that briefly discussed major CRs, or accessing the licensee's computerized corrective action database and reviewing each CR that was initiated.

Focused Review. The inspectors performed a detailed review of the following CRs to verify the full extent of the issue was identified, an appropriate evaluation was performed, and appropriate corrective actions were specified and prioritized. The inspectors evaluated the CR against the licensee's corrective action program as delineated in licensee procedure NMP-GM-002, Corrective Action Program, and 10 CFR 50, Appendix B. Documents reviewed are listed in the Attachment.

- CR 2009100558, 1A EDG exhaust silencer has four sheared anchor bolts

Semi-Annual Trend Review. The inspectors performed a review of the licensee's Corrective Action Program and associated documents to identify trends which could indicate the existence of a more significant safety issue. The review was focused on repetitive equipment issues, but also considered the results of inspector daily CR screening and the licensee's trending efforts. The review nominally considered the six

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month period of January 2009 through June 2009 although some examples extended beyond those dates when the scope of the trend warranted. The inspectors also reviewed several CRs associated with operability determinations which occurred during the period. The inspectors compared and contrasted their results with the results contained in the licensee's two latest Integrated Performance Assessments (IPAs). Corrective actions associated with a sample of the issues identified in the licensee's trend reports were reviewed for adequacy. The inspectors also evaluated the trend reports against the requirements of the licensee's corrective action program as specified in licensee procedure NMP-GM-002, Corrective Action Program, and 10 CFR 50, Appendix B. Documents reviewed are listed in the Attachment.

b. Findings and Observations

No findings of significance were identified. The inspectors compared the licensee IPA with the results of the inspectors' daily screening and did not identify any discrepancies or potential trends in the data that the licensee had failed to identify.

4OA5 Other Activities

.1 Quarterly Resident Inspector Observations of Security Personnel and Activities

a. Inspection Scope

During the inspection period, the inspectors conducted the following observations of security force personnel and activities to ensure that the activities were consistent with licensee security procedures and regulatory requirements relating to nuclear plant security. These observations took place during both normal and off-normal plant working hours.

b. Findings and Observations

No findings of significance were identified.

4OA6 Meetings, Including Exit

.1 Exit Meeting

On July, 17th, the resident inspectors presented the inspection results to Mr. T. Tynan and other members of your staff. In addition, on June 5, 2009, the lead reactor inspector presented the emergency preparedness inspection results to Mr. T. Tynan and other members of your staff. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

Enclosure

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### **Licensee personnel:**

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R. Brown, Training and Emergency Preparedness Manager  
C. Buck, Chemistry Manager  
W. Copeland, Performance Analysis Supervisor  
R. Dedrickson, Plant Manager  
K. Dyar, Security Manager  
C. Hartfield, Emergency Planner Coordinator  
I. Kochery, Health Physics Manager  
J. Robinson, Work Control Superintendent  
M. Sharma, Nuclear Specialist  
T. Tynan, Site Vice-President  
D. Vineyard, Operations Manager  
J. Williams, Site Support Manager  
T. Youngblood, Site Engineering Manager

#### **NRC personnel:**

S. Shaeffer, Chief, Region II Reactor Projects Branch 2

### **LIST OF ITEMS OPENED AND CLOSED**

NONE

### **LIST OF DOCUMENTS REVIEWED**

#### **Section 1R01: Adverse Weather Protection**

##### **Procedures**

18017-C, Abnormal Grid Disturbances, Rev. 7.3  
11889-C, Severe Weather Checklist, Rev. 18.2  
AX3BB02-0001, Power Quality Guide for Vogtle Electric Generating Plant  
13830-1, Main Generator Operation, Rev. 56

##### **Condition Reports**

2009106228  
2009106236

##### **Work Orders**

10906549-01

##### **Drawings**

AX3D-AA-A03A, Vogtle – Wilson Master One-Line Diagram, Rev. 6.0

**Section 1R04: Equipment Alignment****Procedures**

11145-2, Diesel Generator Alignment, Rev. 12.2  
 11146-2, Diesel Generator Fuel Oil Transfer System Alignment, Rev. 7.1  
 14980B-2, Diesel Generator 2B Operability Test, Rev. 21.1  
 11610-1, Auxiliary Feedwater System Alignment, Rev. 20.2  
 11715-2, Component Cooling Water System Alignment, Rev. 12.1

**Drawings**

1X4DB161-1, Auxiliary Feedwater System Condensate Storage & Degasifier System, Rev. 44  
 1X4DB161-2, Auxiliary Feedwater System No. 1302, Rev. 28  
 1X4DB168-3, Condensate and Feedwater System No. 1305, Rev. 34  
 1X4DB136, Component Cooling Water System No. 1203, Rev. 33  
 1X4DB137, Component Cooling Water System No. 1203, Rev. 19

**Section 1R05: Fire Protection****Procedures**

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  
 92859-2, Zone 159 – Control Building – Level A Fire Fighting Preplan, Rev. 1.2  
 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  
 92793-2, Zone 93 – Control Building – Level A Fire Fighting Preplan, Rev. 3.2  
 92802-2, Zone 102 – Control Building – Level A Fire Fighting Preplan, Rev. 2.2  
 92858-2, Zone 158 – Control Building – Level A Fire Fighting Preplan, Rev. 1.2  
 92745-2, Zone 45 – Auxiliary Building – Level 1 & 2 Fire Fighting Preplan, Rev. 1.2  
 92799-2, Zone 99 – Control Building – Level A Fire Fighting Preplan, Rev. 4.1  
 92804-2, Zone 104 – MSIV Room North - Level 1 Fire Fighting Preplan, Rev. 3.1  
 92860A-2, Zone 160A – NSCW Pumphouse- Train A Fire Fighting Preplan, Rev. 1.2  
 92865-1, Zone 165 – Diesel Generator Tanks and Pumphouse Fire Fighting Preplan, Rev. 2.2  
 92866-1, Zone 166 - Diesel Generator Tanks and Pumphouse Fire Fighting Preplan, Rev. 1.2  
 92760-1, Zone 60 – Control Building – Level B Fire Fighting Preplan, Rev. 1.2  
 92761-1, Zone 61 – Control Building – Level B Fire Fighting Preplan, Rev. 2.1  
 92764-1, Zone 64 – Control Building – Level B Fire Fighting Preplan, Rev. 4.1  
 92762-1, Zone 62 – Control Building – Level B Fire Fighting Preplan, Rev. 4.0  
 92763-1, Zone 63 – Control Building – Level B Fire Fighting Preplan, Rev. 1.2  
 92782-1, Zone 82 – Control Building – Level B Fire Fighting Preplan, Rev. 1.2

**Section 1R12: Maintenance Effectiveness****Condition Reports**

2009105100  
 2009103132

**Procedures**

32525-C Determination of Particulate Contamination of Diesel Fuel Oil, Rev. 5.1  
 37082-1, Sampling Unit 1 EDG Fuel Oil Storage Tank, Rev. 2.2

**Section 1R15: Operability Evaluations**Condition Reports

2009104863

2009104865

2009105067

Procedures

25719-C Electrical Integrity and Configuration Control, Rev. 18

17035-2, Annunciator Response Procedures for ALB on EAB Panel, Rev. 30.2

14460-2, ECCS Flowpath Verification, Rev. 32

50085-C, Gas Accumulation Monitoring and Trending, Rev. 3

25210-C, General Vibration Measurement, Rev. 16.4

14807A-1, Train A MDAFW Pump and Check Valve Inservice and Response Test, Rev. 1.2

**Section 1R18: Plant Modifications**Procedures

NMP-ES-034 version 7.0, Equivalency Determinations

Drawings

1X4AJ05-00029, Cross Sectional Drawing Pumps ESF parts list, version 8.0 (Goulds vendor drawing N778833#2)

Other Records

Field Change Request A090420901-F001 to TM A090420901

**Section 1R19: Post-Maintenance Testing**Procedures

14803A-1 Rev. 1, Train A CCW Pumps and Check Valve IST and Response Time Tests

13744B-1 Rev. 3.3, Train B Essential Chilled Water System

14546-1 Rev. 31, Turbine Driven Auxiliary Feedwater Pump Operability Test

14802B-1 Rev. 2, Train B NSCW Pump/Check Valve IST and Response Time Test

14802A-1 Rev. 2, Train A NSCW Pump/Check Valve IST and Response Time Test

**Section 1EP2: Alert and Notification System Testing**Procedures

25722-C, Emergency Alert Siren Performance Test, Rev. 13.1

Records and Data

Siren logs

Documentation of weekly full-volume ANS tests,

Selected ANS repair and annual preventive maintenance records

**Section 1EP3: Emergency Response Organization (ERO) Augmentation**Procedures

91204-C, Emergency Response Communications, Rev. 34

Records and Data

Communications System Testing Monthly and Quarterly Tests data sheets, 1<sup>st</sup> Quarter 2007 - 4<sup>th</sup> Quarter 2008

Drill package for January 22, 2009

Drill package for January 30, 2009

Drill package for January 17, 2007

Drill package for January 17, 2007

Drill package for May 23, 2007

**Section 1EP4: Emergency Action Level (EAL) and Emergency Plan Changes**Change packages for Plans and Procedures

Emergency Plan, Rev. 51 and 52

91002-C, Emergency Notifications, Rev. 53

91502-C, Core Damage Assessment, Rev. 17

91304-C, Estimating Offsite Dose, Rev. 23

91701-C, Preparation and control of Emergency Preparedness Documents, Rev. 13

91001-C, Emergency Classification and Implementing Instruction, Rev. 31 and 32

**Section 1EP5: Correction of Emergency Preparedness Weaknesses and Deficiencies**

NMP-GM-002, Corrective Action Program, Rev. 8

NMP-EP-303, Drill and Exercise Standards, Rev. 1

Drills and Exercises

NOEP-0051, Critique of February 11, 2009, Facility Activation Drill

NOEP-0031, Critique of December 2, 2008, NRC/FEMA Graded Exercise

NOEP-0028, Critique of November 5, 2008, Facility Activation Drill

NOEP-0008, Critique of June 12, 2008, Facility Activation Drill

NOT-04206, Critique of February 27, 2008, Facility Activation Drill

Audits and Self-Assessments

2007100162 (CS), Fleet Emergency Preparedness Team Self Assessment

J-EP-2008, Joint Fleet Oversight Audit of Emergency Preparedness, March 27, 2008

C-EP-2008, Fleet Oversight Audit of Emergency Preparedness, April 29, 2008

V-FOA-EP-2008-001, EP Practice Drill Issues of 08/06/08

V-FOA-EP-2008-2, Follow-up Assessment of V-FOA-EP-2008-001

Condition Report (CR)

2007102806, Recall system did not function as expected

2007111671, ANS Encoder #2 failure communication error

2008105456, Procedure revision suggestion 91001-C

2008107610, Emergency Notification Siren Encoder #1 did not function

2008109584, Procedure revision suggestion 91001-C

2008111467, Procedure revision suggestion 91001-C

2008112750, December 2, 2008, Graded exercise RSPS 10 not fully met

2008112751, December 2, 2008, Graded exercise RSPS 5 not fully met

2008112758, December 2, 2008, Graded exercise Operations crew remediated

2008112777, Revise 91301-C Onsite Protective Actions section

2008113023, Revise 91602-C to provide scenario material to Ops Requal for use 60 day prior drill or exercise

2008206058, Procedure revision suggestion 91001-C

**Section 40A1: Performance Indicator (PI) Verification**

Procedures

00163-C, NRC Performance Indicator and Monthly Operating Report Preparation and Submittal, Rev. 14

Records and Data

Documentation of DEP opportunities: 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> Quarters 2008 and 1<sup>st</sup> Quarter 2009

Drill/exercise participation records of ERO personnel, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> Quarters 2008 and 1<sup>st</sup> Quarter 2009

Siren testing data 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> Quarters 2008 and 1<sup>st</sup> Quarter 2009

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

Condition Reports:

2009100558, 1A EDG Exhaust Silencer has four sheared anchor bolts