

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION II 245 PEACHTREE CENTER AVENUE NE, SUITE 1200 ATLANTA, GEORGIA 30303-1257

October 29, 2010

Mr. Tom E. Tynan Vice President - Vogtle Southern Nuclear Operating Company, Inc. Vogtle Electric Generating Plant 7821 River Road Waynesboro, GA 30830

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT - NRC INTEGRATED INSPECTION REPORT 05000424/2010004 AND 05000425/2010004

Dear Mr. Tynan:

On September 30, 2010, 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 October 18, 2010, 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.

This report documents one NRC-identified finding of very low safety significance (Green) which was determined to be a violation of regulatory requirements. However, because of the very low safety significance and because it was entered into your corrective action program, the NRC is treating this finding as a non-cited violation (NCV) consistent with the NRC Enforcement Policy. If you contest the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN.: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Vogtle Electric Generating Plant. In addition, if you disagree with the cross-cutting aspect assigned to any finding 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 Senior Resident Inspector at the Vogtle facility. The information you provide will be considered in accordance with Inspection Manual Chapter 0305.

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 Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <u>http://www.nrc.gov/reading-rm/adams.html</u> (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

Enclosures: 1. Inspection Report 05000424/2010004 and 05000425/2010004 w/Attachment: Supplemental Information

cc w/encl: (See page 3)

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/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

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cc w/encl: (See page 3)

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Letter to Tom E. Tynan from Scott M. Shaeffer dated October 29, 2010

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT - NRC INTEGRATED INSPECTION REPORT 05000424/2010004 AND 05000425/2010004

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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.:	05000424/2010004 and 05000425/2010004			
Licensee:	Southern Nuclear Operating Company, Inc. (SNC)			
Facility:	Vogtle Electric Generating Plant, Units 1 and 2			
Location:	Waynesboro, GA 30830			
Dates:	July 1, 2010 through September 30, 2010			
Inspectors:	M. Cain, Senior Resident Inspector T. Chandler, Resident Inspector D. Hardage, Resident Inspector M. King, Senior Project Engineer (Section 1R15)			
Approved by:	Scott M. Shaeffer, Chief Reactor Projects Branch 2 Division of Reactor Projects			

SUMMARY OF FINDINGS

IR 05000424/2010-004, 05000425/2010-004; 07/01/2010 - 09/30/2010; Vogtle Electric Generating Plant, Units 1 and 2; Identification and Resolution of Problems

The report covered a three-month period of inspection by resident inspectors and one senior project engineer. One non-cited violation (NCV) with very low safety significance (GREEN) was identified. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using Inspection Manual Chapter (IMC) 0609, Significance Determination Process (SDP). Findings for which the SDP does not apply may be Green or assigned a severity level after NRC management review. The cross-cutting aspect was determined using IMC 0310, "Components Within The Cross-Cutting Areas." The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, Reactor Oversight Process, Rev 4 dated December 2006.

Cornerstone: Mitigating Systems

 <u>Green</u>: An NRC-identified Green NCV of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, was identified for failure to promptly correct an equipment deficiency. Specifically, in February 2006, the licensee identified an issue with the instrument uncertainty associated with the pressure transmitters installed on the emergency core cooling system (ECCS) accumulators. However, several outages later, the design change packages requiring the transmitter change out had been inexplicably deleted and the instrument uncertainty issue remains uncorrected.

This issue was more than minor because it was associated with a cornerstone attribute and adversely affected the objective of the Mitigating Systems cornerstone. Specifically, the performance deficiency was an equipment performance issue which affected the availability, reliability, and capability of the ECCS accumulators to respond to a loss of coolant accident. The finding was determined to be of very low safety significance (Green) because the finding did not result in the actual loss of safety function of a single train for greater than its technical specification (TS) allowed outage time. The inspectors determined that the cause of this finding was related to the Work Control component of the Human Performance cross-cutting area due to the licensee's failure to appropriately coordinate work activities by incorporating actions to address the impact of changes to the work scope on the plant and human performance [H.3(b)]. (Section 4OA2.2)

REPORT DETAILS

Summary of Plant Status

Unit 1 operated at essentially full rated thermal power (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

- 1R04 Equipment Alignment
 - a. Inspection Scope

<u>Partial System Walkdown</u>. 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 reviewed the condition report database to verify that equipment alignment problems were being identified and appropriately resolved.

- Unit 2 train A safety injection (SI) system during the Unit 2 train B 2FT-922, B train SI
 pump discharge flow transmitter replacement
- Unit 1 train A nuclear service cooling water (NSCW) system while the train B NSCW system was out of service due to a failed gear box on fan #3 in train B cooling tower
- Unit 1 Train B emergency diesel generator (EDG) and fuel oil transfer system while train A EDG was out of service for six month fast-start surveillance operability test
- b. Findings

No findings were identified.

1R05 Fire Protection

a. Inspection Scope

<u>Fire Area Tours</u>. 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 1 A train and B train cable spreading rooms
- Unit 2 A train EDG building
- Unit 2 A and B train SI pump rooms
- Unit 1 auxiliary feedwater pumphouse
- Unit 1 essential 4.16 kv switchgear rooms, remote shutdown panel rooms, and Unit 1 main control room
- b. <u>Findings</u>

No findings were identified.

- 1R11 Licensed Operator Regualification
 - a. Inspection Scope

<u>Resident Quarterly Observation</u>. The inspectors observed operator performance on September 8, during licensed operator simulator training described on simulator exercise guides V-RQ-SE-10503-1.0 and V-RQ-SE-10505-1.0. The first scenario observed consisted of a rod control issue while in Mode 2. The second scenario consisted of a release of radioactive material to the environment followed by a small tube rupture in one of the steam generators. 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 were identified.

- 1R12 <u>Maintenance Effectiveness</u>
 - a. Inspection Scope

The inspectors reviewed the following two equipment issues and associated safety significant systems 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 reviews included adequacy of the

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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, 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 2010110486, 2A ESF chiller inoperable
- Unit 1 and 2 main steam systems return to maintenance rule a(2) status
- b. Findings

No findings 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.

- Unit 1 in-service testing of the residual heat removal (RHR) valves
- Unit 2 A train essential chilled water system out of service
- Unit 1 NSCW fan #3 out of service
- WO 1101876801, Unit 1 1FV0530, loop #3 main feedwater regulating valve (MFRV) feedback potentiometer replacement
- WO 1091148101, Unit 1 SI accumulator #1 out of service due to 1HV-0943, nitrogen header vent valve failure
- b. <u>Findings</u>

No findings 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 2010108447, engineered safety feature (ESF) chilled water system chemical addition tank isolation valves not safety grade
- CR 2010109304, 2B EDG lube oil sump reading low -0.75 inches
- CR 2010110285, 2A EDG fuel oil leak from fuel rack
- CR 2010109265, air found in Unit 2 chemical volume control system (CVCS) centrifugal charging pump (CCP) suction header
- CR 2010111424, motor space heater on the Unit 2 NSCW pump #3 not working
- b. Findings

No findings were identified.

- 1R18 Plant Modifications
 - a. Inspection Scope

<u>Temporary Modifications</u>. Reviewed temporary modification TM 1101735501 and associated 10CFR50.59 screening criteria against the system design bases documentation and procedure 00307-C, Temporary Modifications. This temporary modification installed vibration probes on the rebuilt gearbox on fan #3 in the Unit 1 NSCW tower B during initial startup to provide trending data. The inspectors reviewed the implementation, engineering justification, and operator awareness for this temporary modification.

b. <u>Findings</u>

No findings were identified.

- 1R19 Post-Maintenance Testing
 - a. Inspection Scope

The inspectors either observed post-maintenance testing or reviewed the test results for the following six 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 restoration. The inspectors also reviewed the test procedures to verify the acceptance criteria were sufficient to meet the TS operability requirements.

- Unit 2 NSCW pump #1 motor refurbishment and system outage
- WO 20712918, Unit 2 B train SI pump discharge flow transmitter 2FT-922 replacement
- Unit 1 B train NSCW tower fan #3 gearbox replacement
- WO 1101876801, Unit 1 loop 3, MFRV feedback potentiometer replacement
- Unit 1 SI accumulator #1 nitrogen vent valve, 1HV-0934 failure
- WO 1062046101, spent fuel pool cooling pump 1A replace mechanical seals

b. Findings

No findings were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors reviewed the following six 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

- 14980A-1, Rev 23.2, Diesel Generator 1A Operability Test (fast start)
- 24614-1, Rev 36.4, Safety Features Sequencer Train B Channel Operational Test and Channel Calibration
- 14620-2, Rev. 8, SSPS Slave Relay K647 Train A Test Safety Injection
- 24212-1, Rev. 16.2, Feedwater Regulating (REG-Bypass Valve) 1L-550 Channel Calibration

In-Service Tests (IST)

- 14545A-1, Rev. 1, Motor Driven Auxiliary Feedwater Pump A Operability Test
- 14810-1/2, Rev. 45/39, Turbine Driven Auxiliary Feedwater Pump Operability, Response Time and Check Valve IST
- b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness (EP)

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

• On September 23, the licensee conducted an after-hours emergency preparedness drill involving a loss of coolant accident from the reactor head, followed by a loss of both safety-related emergency busses. The emergency recall system, technical

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support center, emergency operations facility, and operations support center were activated and the site participated in the exercise.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors sampled licensee submittals for the listed PIs during the period from July 1, 2009, through June 30, 2010, 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, and Nuclear Energy Institute (NEI) 99-02, Regulatory Assessment Indicator Guideline.

Mitigating Systems Cornerstone

- Mitigating Systems Performance Index, High Pressure Injection System
- Mitigating Systems Performance Index, Residual Heat Removal System
- Mitigating Systems Performance Index, Heat Removal System

The inspectors reviewed Unit 1 and Unit 2 operator log entries, the Vogtle mitigating systems performance index (MSPI) basis document, the monthly operating reports and monthly PI summary reports to verify that the licensee had accurately submitted the PI data.

b. <u>Findings</u>

No findings were identified.

4OA2 Identification and Resolution of Problems

.1 <u>Daily Condition Report Review</u>. 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.

.2 Focused Review

a. Inspection Scope

The inspectors performed a detailed review of the following CR which addressed the failure of a Unit 1 accumulator vent valve in the open position and the resultant loss of nitrogen pressure in the accumulator. The goal of the review was to verify that 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, Criterion XVI, Corrective Action. Documents reviewed are listed in the Attachment.

CR 2010110985, 1HV-0943B mechanically bound in open position

b. Findings

Introduction. A Green NRC-identified non-cited violation (NCV) was identified for failure to promptly correct an equipment deficiency. In February 2006, the licensee identified an issue with the instrument uncertainty associated with the pressure transmitters installed on the emergency core cooling system (ECCS) accumulators. However, several outages later, the design change packages requiring the transmitter change out have been inexplicably deleted and the instrument uncertainty issue remains unresolved. 10 CFR 50, Appendix B, Criterion XVI, Corrective Action, requires the licensee to establish measures to assure that conditions adverse to quality be promptly identified and corrected.

<u>Description</u>. An NRC-identified NCV of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, was identified for failure to promptly correct an equipment deficiency. On August 27, 2010 during routine maintenance calibration, Unit 1, SI Accumulator #1 vent valve, 1HV-0943, stuck open. A containment entry was made and the vent valve was isolated. Accumulator pressure decreased to a minimum pressure of approximately 621 psig. The licensee entered a 24 hour TS limiting condition for operation (LCO) action statement that had been administratively limited to 626 psig versus the documented and licensed TS limit of 617 psig. Accumulator pressure was subsequently increased to within the normal the pressure band and the TS action statement was exited. Resident inspectors questioned why the accumulator TS pressure limits were being administratively controlled at setpoints different from what were documented in TS and the subsequent investigation revealed the following:

In February 2006, the licensee identified that the Tobar/Veritrak pressure transmitters installed to monitor ECCS accumulator pressure had instrument uncertainty in excess of the uncertainty values assumed in the updated final safety analysis report (UFSAR) design basis calculation (ref. CR 2006100187). In April 2006, the licensee evaluated three options; either 1) replace the Tobar/Veritrak pressure transmitters with Rosemount transmitters that had the required instrument uncertainty: 2) recalculate the loss of coolant accident analysis in the UFSAR: or 3) revise the technical specifications (ref. Al 2006200605). At the outcome of the evaluation, the licensee decided to replace the

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Tobar/Veritrak pressure transmitters with Rosemount transmitters during the next available outage. In June 2007, design change packages 1071098301 and 2071098501 were generated to change out the Tobar/Veritrak pressure transmitters with Rosemount transmitters. However, several outages later, the design change packages requiring the transmitter change out have been inexplicably deleted, and the Tobar/Veritrak pressure transmitters remain installed in both units. The instrument uncertainty issue remains unresolved; however, the licensee has administratively controlled the technical specification value for ECCS accumulator pressure during this period of time to compensate for the instrument uncertainty. The inspectors determined that the cause of this finding was related to the Work Control component of the Human Performance cross-cutting area due to the licensee's failure to appropriately coordinate work activities by incorporating actions to address the impact of changes to the work scope on the plant and human performance [H.3(b)].

Analysis. The licensee failed to promptly correct a condition adverse to quality that had been identified and entered into the licensee's corrective action program. This was a performance deficiency because the licensee failed to meet the requirements of 10 CFR 50, Appendix B, Criterion XVI. This issue was more than minor because it was associated with a cornerstone attribute and adversely affected the objective of the Mitigating Systems cornerstone. Specifically, the performance deficiency was an equipment performance issue which affected the availability, reliability, and capability of the ECCS accumulators to respond to a loss of coolant accident. Using the mitigating systems cornerstone column of the phase 1 screening worksheet, the finding was determined to be of very low safety significance (Green) because the finding did not result in the actual loss of safety function of a single train for greater than its technical specification allowed outage time. The inspectors determined that the cause of this finding was related to the Work Control component of the Human Performance crosscutting area due to the licensee's failure to appropriately coordinate work activities by incorporating actions to address the impact of changes to the work scope on the plant and human performance [H.3(b)].

Enforcement. The inspectors determined that the finding represents a violation of regulatory requirements because it involved inadequate and untimely corrective actions which failed to promptly correct a condition adverse to quality. 10 CFR 50, Appendix B, Criterion XVI requires the licensee to establish measures to assure that conditions adverse to quality be promptly identified and corrected. Contrary to the above, the actions taken following the April 2006 decision to replace the Tobar/Veritrak pressure transmitters with Rosemount transmitters that had the required instrument uncertainty were inadequate. Consequently, the instrument uncertainty issue has remained uncorrected for 4 years and 7 months from initial discovery in February 2006. However, there were no actual or potential consequences, and the licensee administratively controlled the ECCS accumulator pressure during this time period to compensate for the instrument uncertainty. Because this violation was of very low safety significance, was entered into the licensee's corrective action program (ref. CR 2010111046), and the licensee is developing a plan to restore compliance, this violation is being treated as an NCV, consistent with the NRC Enforcement Policy. This finding will be tracked as NCV 05000424,425/2010004-01, Failure to Correct Instrument Uncertainty Associated with the ECCS Accumulators.

Enclosure

40A5 Other Activities

.1 Quarterly Resident Inspector Observations of Security Personnel and Activities

a. Inspection Scope

During the inspection period, the inspectors conducted 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.

These quarterly resident inspector observations of security force personnel and activities did not constitute any additional inspection samples. Rather, they were considered an integral part of the inspectors' normal plant status reviews and inspection activities.

b. Findings and Observations

No findings were identified.

- 4OA6 Meetings, Including Exit
- .1 Exit Meeting

On October 18, the resident inspectors presented the inspection results to Mr. Tom E. Tynan and other members of the Vogtle Nuclear Plant staff, who acknowledged the finding. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel:

- R. Brigdon, Training and Emergency Preparedness Manager
- C. Buck, Chemistry Manager
- R. Dedrickson, Plant Manager
- K. Dyar, Security Manager
- M. Hickox, Licensing
- I. Kochery, Health Physics Manager
- L. Mansfield, Engineering Director
- D. McCary, Operations Manager
- D. Puckett, Performance Analysis Supervisor
- J. Robinson, Technical Services Manager
- S. Swanson, Site Support Manager
- T. Tynan, Site Vice-President

NRC personnel:

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

LIST OF ITEMS OPENED AND CLOSED

<u>Opened and Closed</u> 05000424,425/2010004-01

NCV Failure to Correct Instrument Uncertainty Associated with the ECCS Accumulators (Section 40A2.2)

LIST OF DOCUMENTS REVIEWED

Section 1R04: Equipment Alignment

Procedures 11150-1, Nuclear Service Cooling Water System Alignment, Rev. 18.0 14980A-1, Diesel Generator 1A Operability Test, Rev. 23 11146-1, Diesel Generator Fuel Oil Transfer System Alignment, Rev. 7.1

11145-1, Diesel Generator Alignment, Rev. 15.1

Drawings

1X4DB170-1, P&I Diagram Diesel Generator System, Train A System No. 2403, Rev. 45 1X4DB133-1, P&I Diagram Nuclear Service Cooling Water System, System No. 1202, Rev. 52 1X4DB133-2, P&I Diagram Nuclear Service Cooling Water System, System No. 1202, Rev. 58 1X4DB134, P&I Diagram Nuclear Service Cooling Water System, System No. 1202, Rev. 31 1X4DB135-1, P&I Diagram Nuclear Service Cooling Water System, System No. 1202, Rev. 29 1X4DB135-2, P&I Diagram Nuclear Service Cooling Water System, System No. 1202, Rev. 34

Section 1R05: Fire Protection

<u>Procedures</u> 92794-1 Rev. 2.1, Zone 94 – Control Building – Level A Fire Fighting Preplan 92795-1 Rev. 3.0, Zone 95 – Control Building – Level A Fire Fighting Preplan

Attachment

92873-1 Rev. 2.2, Zone 173 – Control Building – Level A Fire Fighting Preplan 92874-1 Rev. 2.2, Zone 174 – Control Building – Level A Fire Fighting Preplan 92807-1 Rev. 5.1, Zone 107 – Control Building – Levels 1 and 2 Fire Fighting Preplan 92808-1 Rev. 5.1, Zone 108 – Control Building – Levels 1 and 2 Fire Fighting Preplan 92820-1 Rev. 6.0, Zone 120 – Control Building – Level 2 Fire Fighting Preplan 92821-1 Rev. 4.1, Zone 121 – Control Building – Level 2 Fire Fighting Preplan 92861-2 Rev. 1.1, Zone 161 – Diesel Generator Building Fire Fighting Preplan 92863-2 Rev. 0.2, Zone 163 – Diesel Generator Building – Train A DFO Tank Fire Fighting Preplan 92855-1, Rev. 2.2, Zone 155 – Auxiliary Feedwater Pumphouse – Train B Fire Fighting Preplan 92856-1, Rev. 3.1, Zone 156 – Auxiliary Feedwater Pumphouse Fire Fighting Preplan 92857A-1, Rev. 2.2, Zone 157A – Auxiliary Pumphouse – Train C Fire Fighting Preplan 92857B-1, Rev. 1.2, Zone 157B – Auxiliary Feedwater Pumphouse Fire Fighting Preplan 92791-1, Rev. 4.1, Zone 91 – Control Building Level A Fire Fighting Preplan 92792-1, Rev. 3.1, Zone 92 – Control Building Level A Fire Fighting Preplan 92797-1, Rev. 2.2, Zone 97 – Control Building – Level A Fire Fighting Preplan 92798-1, Rev. 2.2, Zone 98 – Control Building – Level A Fire Fighting Preplan 92803-1, Rev. 2.1, Zone 103 – Control Building – Level A Fire Fighting Preplan 92805-1, Rev. 4.1, Zone 105 - Control Building - Level A Fire Fighting Preplan 92732-2, Rev. 1.0, Zone 32 – Auxiliary Building – Level B, SI Pump, Train A Fire Fighting Preplan 92731-2, Rev. 1.0, Zone 31 – Auxiliary Building – Level B, SI Pump, Train B Fire Fighting Preplan

Section 1R11: Licensed Operator Regualification

Lesson Plans V-RQ-SE-10503-1.0 V-RQ-SE-10505-1.0

Section 1R12: Maintenance Effectiveness

Procedures

VEGP Procedure 500028-C, Engineering Maintenance Rule Implementation, Rev. 18 GEN-92, VEGP Maintenance Rule Scoping Manual, Rev. 5

Drawings

1X4DB159-2, P&I Diagram – Main Steam System, Rev. 32 1X4DB159-1, P&I Diagram – Main Steam System, Rev. 37

<u>Condition Reports</u> 2010110486 2010110443 2010110430 2004000531

Other Records

System health report for essential chilled water system, 2nd quarter 2010 Main Steam System Health Reports, 2Q10, 1Q10, 3Q09 Main Steam MR Availability/Reliability Data 9/09-01/10

Section 1R15: Operability Evaluations

Condition Reports 2010109265 2009105067 2010111424

Procedures

38311-1E(1F), Rev. 3.1, Chemical Addition to Unit One Essential Chilled Water Train A (B) 38311-2E(2F), Rev. 2.1, Chemical Addition to Unit Two Essential Chilled Water Train A (B) 14460-2, Rev. 35, ECCS Flow Path Verification 50085-C, Rev. 6.0, Gas Accumulation Monitoring and Trending

Drawings

1X4AM11-00006, "1/2 Gate Valve – Class 800", Ver. 1, September 22, 2007 1X4DB221, "Safety Related (Essential) Chillers Unit 1 Trains A & B System No. 1592", Ver. 26 2X4DB116-2, Ver. 31.0, PID CVCS System 1208 2X4DR004-1, Ver. 1.0, Fill and Vent Diagram for the CVCS System 1208

Other Records

RER C101525501, "Essential Chilled Water System Chemical Additive Tanks and Piping" Prompt Determination of Operability, OD 1-10-002/1 and OD 2-10-003/1 Documentation of Engineering Judgment, DOEJ-VRC101525501-C001, "Evaluation of Essential Chilled Water Chemical Feed Tanks and Supports"

Vogtle Electric Generating Plant Unit 1 and Unit 2 Technical Specifications Vogtle Electric Generating Plant Unit 1 and Unit 2 Technical Specification Bases

Section 1R18: Plant Modifications

Procedures 00307-C, Rev. 28.1, Temporary Modifications

Section 1R19: Post Maintenance Testing

<u>Procedures</u> 14802A-2, Rev. 3, Train A NSCW Pump/Check Valve IST and Response Time Test 83308-C, Rev. 31, Testing of Safety-Related NSCW System Coolers 14825-1, Rev. 88.2, Quarterly Inservice Valve Test

<u>Condition Reports</u> 2010111060 2010110988

Work Orders

1101708401 1101735502 1101876801

Section 4OA2: Identification and Resolution of Problems Condition Reports

Condition Repo 2005111462 2006100187 2010111046

Action Items 2006200605 2006200436