



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

January 25, 2002

Southern Nuclear Operating Company, Inc.  
ATTN: Mr. J. B. Beasley, Jr., Vice President  
Vogtle Electric Generating Plant  
P. O. Box 1295  
Birmingham, AL 35201-1295

**SUBJECT: VOGTLE ELECTRIC GENERATING PLANT - NRC INTEGRATED INSPECTION  
REPORT 50-424/01-06 AND 50-425/01-06**

Dear Mr. Beasley:

On December 29, 2001, the Nuclear Regulatory Commission (NRC) completed an inspection at your Vogtle Electric Generating Plant facility. The enclosed report documents the inspection findings which were discussed on January 8, 2002, with Mr. J. Gasser 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.

No findings of significance were identified.

Immediately following the terrorist attacks on the World Trade Center and the Pentagon, the NRC issued an advisory recommending that nuclear power plant licensees go to the highest level of security, and all promptly did so. With continued uncertainty about the possibility of additional terrorist activities, the nation's nuclear power plants remain at the highest level of security and the NRC continues to monitor the situation. This advisory was followed by additional advisories, and although the specific actions are not releasable to the public, they generally include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with law enforcement and military authorities, and more limited access of personnel and vehicles to the sites. The NRC has conducted various audits of the Southern Nuclear Operating Company's response to these advisories and Vogtle Electric Generating Plant's ability to respond to terrorist attacks with the capabilities of the current design basis threat. From these audits, the NRC has concluded that the Vogtle Electric Generating Plant's security program is adequate at this time.

SNC

2

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be publicly available in the NRC Public Document Room or from the Publicly Available Records (PARS) component of 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/**

Stephen J. Cahill, Chief  
Reactor Projects Branch 2  
Division of Reactor Projects

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

Enclosure: Integrated Inspection Report  
50-424/01-06 and 50-425/01-06  
w/Attachment

cc w/encl: (See page 3)

SNC

3

cc w/encl:

J. D. Woodard  
Executive Vice President  
Southern Nuclear Operating Company, Inc.  
Electronic Mail Distribution

J. T. Gasser  
General Manager, Plant Vogtle  
Southern Nuclear Operating Company, Inc.  
Electronic Mail Distribution

J. A. Bailey  
Manager-Licensing  
Southern Nuclear Operating Company, Inc.  
Electronic Mail Distribution

Director, Consumers' Utility Counsel  
Division  
Governor's Office of Consumer Affairs  
2 M. L. King, Jr. Drive  
Plaza Level East; Suite 356  
Atlanta, GA 30334-4600

Office of Planning and Budget  
Room 615B  
270 Washington Street, SW  
Atlanta, GA 30334

Office of the County Commissioner  
Burke County Commission  
Waynesboro, GA 30830

Director, Department of Natural Resources  
205 Butler Street, SE, Suite 1252  
Atlanta, GA 30334

Manager, Radioactive Materials Program  
Department of Natural Resources  
Electronic Mail Distribution

Attorney General  
Law Department  
132 Judicial Building  
Atlanta, GA 30334

Resident Manager  
Oglethorpe Power Corporation  
Alvin W. Vogtle Nuclear Plant  
Electronic Mail Distribution

Charles A. Patrizia, Esq.  
Paul, Hastings, Janofsky & Walker  
10th Floor  
1299 Pennsylvania Avenue  
Washington, D. C. 20004-9500

Arthur H. Domby, Esq.  
Troutman Sanders  
NationsBank Plaza  
600 Peachtree Street, NE, Suite 5200  
Atlanta, GA 30308-2216

Senior Engineer - Power Supply  
Municipal Electric Authority  
of Georgia  
Electronic Mail Distribution

SNC

4

Distribution w/encl:  
R. Assa, NRR  
RIDSNRRDIPMLIPB  
PUBLIC

OFFICE	RII:DRP	RII:DRP	RII:DRS	RII:DRS	RII:DRP		
SIGNATURE	<i>jzeiler</i>	<i>tmorrissey</i>	<i>mlesser for</i>	<i>dforbes</i>	<i>bholbrook</i>		
NAME	JZeiler	TMorrissey	RGibbs	DForbes	BHolbrook		
DATE	<b>1/17/02</b>	<b>1/17/02</b>	<b>1/17/02</b>	<b>1/17/02</b>	<b>1/16/02</b>		
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY

DOCUMENT NAME: C:\Program Files\Adobe\Acrobat 4.0\PDF Output\2001-06drp.wpd

U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos. 50-424 and 50-425

License Nos. NPF-68 and NPF-81

Report No: 50-424/01-06 and 50-425/01-06

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

Facility: Vogtle Electric Generating Plant, Units 1 and 2

Location: 7821 River Road  
Waynesboro, GA 30830

Dates: September 30, 2001 through December 29, 2001

Inspectors: J. Zeiler, Senior Resident Inspector  
T. Morrissey, Resident Inspector  
R. Gibbs, Senior Reactor Inspector (Section 1R02)  
D. Forbes, Radiation Protection Specialist (Section 2OS2)

Approved by: Stephen J. Cahill, Chief  
Reactor Projects Branch 2  
Division of Reactor Projects

Enclosure

## SUMMARY OF FINDINGS

IR 05000424-01-06, IR 05000425-01-06, on 09/30-12/29/2001; Southern Nuclear Operating Company, Inc., Vogtle Electric Generating Plant, Units 1 and 2, resident inspector report.

The inspection was conducted by resident inspectors, a senior reactor inspector, and a radiation protection specialist. No findings of significance were identified. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website.

A. Inspector Identified Findings

None.

B. Licensee Identified Violations

A violation of very low significance which was identified by the licensee has been reviewed by the inspectors. Corrective actions taken or planned by the licensee appear reasonable. This violation is listed in section 4OA7 of this report.

## Report Details

### Summary of Plant Status

Unit 1 operated at essentially 100% Rated Thermal Power (RTP) throughout the inspection period.

Unit 2 operated at essentially 100% RTP throughout the inspection period.

### **1. REACTOR SAFETY** **Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity.**

#### 1R01 Adverse Weather

##### a. Inspection Scope

The inspectors reviewed the licensee's adverse weather preparations for the Auxiliary Feedwater and Containment Hydrogen Monitoring systems. The inspectors used the Updated Final Safety Analysis Report (UFSAR), licensee procedures, and other documents listed in the attachment of this report to verify that the systems would remain functional when challenged by adverse weather conditions. The inspectors reviewed the preventive maintenance activities for heat tracing and freeze protection equipment associated with the two systems to verify that they were appropriate and completed as scheduled. The inspectors walked down heat trace and freeze protection equipment associated with the two systems to ensure the licensee had appropriately identified and corrected deficiencies that could affect the equipment's ability to function properly. In addition, the inspectors reviewed the Condition Report (CR) database to ensure the licensee was identifying and appropriately resolving adverse weather related problems.

##### b. Findings

No findings of significance were identified.

#### 1R02 Evaluations of Changes, Tests, or Experiments

##### a. Inspection Scope

This inspection was conducted to review implementation of the licensee's program for 10 CFR 50.59, Evaluations of Changes, Tests, or Experiments. The inspection included a review of completed 10 CFR 50.59 safety evaluations performed by the licensee from the Initiating Events, Mitigating Systems, and Barrier Integrity Cornerstones, and included the most risk significant evaluations recently performed by the licensee. Included were evaluations from all site groups performing evaluations and evaluations of plant modifications, procedure revisions, changes to the UFSAR, tests, and non-routine operating configurations. The evaluations were reviewed to verify that the changes could be conducted by the licensee under the provisions of 10 CFR 50.59, without prior NRC approval and that the requirements of 10 CFR 50.59 and licensee procedures were met. In addition, the inspectors reviewed a sample of CRs to confirm that the licensee was identifying issues and initiating actions to resolve concerns. The specific documents reviewed are listed in the Attachment of this report.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

.1 Partial System Walkdowns

a. Inspection Scope

The inspectors conducted partial walkdowns of the following systems to evaluate the operability of selected trains or backup systems when the redundant train or system was inoperable or out of service. The walkdowns included verification of local and control room valve switch and breaker positions to ensure the systems were correctly aligned. Licensee documents used to support this inspection activity are listed in the attachment of this report.

- 2A Nuclear Service Cooling Water (NSCW) system
- 1A Safety Injection (SI) system
- 1A Emergency Diesel Generator (EDG) and associated electrical distribution system

b. Findings

No findings of significance were identified.

.2 Complete System Walkdown

a. Inspection Scope

The inspectors conducted a detailed review of the alignment and condition of the Unit 1 Essential Chilled Water (ECW) system. The inspectors used the licensee procedures and other documents listed in the attachment of this report to verify proper system alignment. The detailed review also verified electrical power requirements, labeling, hangers and support installation, and associated support systems status. A review of outstanding maintenance work orders was performed to verify that the deficiencies did not significantly affect the ECW system function. The inspectors reviewed Design Change Package (DCP) 97-VAN0044, which replaced certain ECW control valves and actuators, to ensure that the system design function and alignment was not adversely impacted by the changes. In addition, the inspectors reviewed the CR database to verify that ECW equipment alignment problems were being identified and appropriately resolved.

b. Findings

No findings of significance were identified.



## 1R05 Fire Protection

### a. Inspection Scope

The inspectors conducted plant tours to evaluate the licensee's control of combustible materials and ignition sources and the material condition and operational status of fire detection and suppression systems and fire protection barriers. The inspectors compared the licensee's fire protection procedures to the requirements in UFSAR Section 9.5.1, Fire Protection Program, and Appendix 9A, Fire Hazards Analysis. The inspectors periodically reviewed the licensee's fire protection Limiting Condition for Operation (LCO) log to determine if the corrective actions for fire protection degradations were properly prioritized. Additionally, the inspectors reviewed the CR database to verify that fire protection issues were being appropriately addressed in the corrective action program. Licensee documents used to support this inspection activity are listed in the attachment of this report. Plant areas toured included the following:

- 2A NSCW system building and tunnels
- 1A SI pump room
- 1B EDG room
- Unit 1 Control Building Level B elevation
- 2B Containment Spray (CS) pump room
- 2B High Head Safety Injection (HHSI) pump room and pipe gallery
- 1A HHSI pump room and valve gallery

### b. Findings

No findings of significance were identified.

## 1R06 Flood Protection Measures (Annual Review)

### a. Inspection Scope

The plant internal flooding analysis, design features described in the UFSAR, and plant procedures listed in the attachment to this report were used as criteria for this inspection. The inspectors reviewed licensee procedures that provided guidance for mitigation of internal flooding. The inspectors conducted a walkdown of plant areas to verify that selected risk significant and safety related plant equipment would be protected from internal flooding. The plant areas selected included the Unit 1 and Unit 2 HHSI pump rooms, Residual Heat Removal (RHR) pump rooms, CS pump rooms, and selected switchgear rooms in Level D of the Auxiliary Building. The inspectors evaluated the operational readiness of watertight doors, flood retaining barriers, penetrations, building drain systems, and room leak detection devices and alarm system. In addition, the inspectors reviewed CRs in the licensee's corrective action program to ensure the licensee was identifying and appropriately resolving problems related to this inspectable area.

### b. Findings

No findings of significance were identified.

#### 1R07 Heat Sink Performance (Annual Review)

##### a. Inspection Scope

The inspectors selected the following risk significant heat exchangers (HX's) for evaluation: 2A Component Cooling Water (CCW) and Auxiliary CCW HX's and 2B ACCW HX. The inspectors reviewed heat exchanger test conditions to verify that they were appropriately considered; test acceptance criteria were appropriate; test results appropriately considered differences between testing conditions and design conditions; test frequency was appropriate; and, test results considered test instrument inaccuracies and differences. In addition, the inspectors reviewed chemistry logs (1993 - 2001) for the Unit 2 ACCW system to ensure that system chemistry was controlled in accordance with licensee procedures. The inspectors reviewed performance data from tests completed in April 2001. Licensee documents used to support this inspection activity are listed in the attachment of this report.

##### b. Findings

No findings of significance were identified.

#### 1R11 Licensed Operator Requalification (Quarterly Review)

##### a. Inspection Scope

On November 26, the inspectors observed a simulator evaluation of licensed operators and evaluated their actions against actions specified in licensee Dynamic Simulator Scenario #3 which included a loss of coolant accident due to a reactor coolant pump seal failure. The inspectors assessed the following items: 1) correct use and implementation of abnormal operating, emergency operating, annunciator response, and emergency classification procedures, 2) proper control board manipulations including high-risk operator actions, 3) quality of crew command and control, 4) quality of communications, and 5) effectiveness of the post evaluation critique. The inspectors also verified that the simulator control boards closely matched the control boards in the actual control room. Licensee documents used to support this inspection activity are listed in the attachment of this report.

##### b. Findings

No findings of significance were identified.

#### 1R12 Maintenance Rule (MR) Implementation

##### a. Inspection Scope

The inspectors reviewed the following equipment issues and associated CRs to assess the effectiveness of licensee maintenance efforts related to the requirements of 10 CFR 50.65 (the Maintenance Rule) and licensee Procedure 50028-C, Engineering Maintenance Rule Implementation. The inspectors reviewed the licensee's implementation of the MR regarding characterization of failures, performance criteria or

(a) (1) performance goals, and corrective actions. The inspectors also reviewed the CR database to verify that equipment problems were being identified at the appropriate level, entered into the corrective action program, and appropriately resolved.

- Failure of remote shutdown panel hand-switch for Unit 2 boric acid transfer pump (CR 2001000239)
- Failure of Turbine Driven Auxiliary Feedwater discharge valve 2HV-5122 to stroke close (CR 2001002327)
- Trip of 1A ECW chiller (CR 2001002224)
- Breaker 1BA03-15 found in the “Removed” versus “Disconnect” position (CRs 2001001914 and 2001002097)
- Isolation of 1B feedwater heater string (CR 2001001478)
- Failure of battery charger 2CD1CA (CR 2001002570)

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessment and Emergent Work Evaluation

a. Inspection Scope

The inspectors reviewed maintenance activities and/or Maintenance Work Orders (MWOs) to evaluate the licensee’s risk management effectiveness and compliance with 10 CFR 50.65(a)(4). The inspectors reviewed risk assessments conducted prior to the work performance and risk management controls implemented to verify they were completed in accordance with licensee Procedure 00354-C, Maintenance Scheduling. The inspectors conducted a review to ensure plant risk was reassessed for emergent work activities. The inspectors also reviewed the CR database to verify that equipment problems were being identified at the appropriate level, entered into the corrective action program, and appropriately resolved. The maintenance activities and MWOs reviewed and evaluated included the following:

- 2A NSCW tower fan outage (MWOs 20100136, 20101140, 20101141, 20101142, 20101143, 20101144, and 20101637)
- 1B SI system outage (MWOs 10100044, 10102092, and 10000989)
- 1B EDG system outage (MWOs 20103107 and 20103074)
- 2A HHSI system outage (MWOs 20101829, 20101935, and 20101950)
- 1B HHSI system outage (MWOs 10100042, 10101450, 10000987 and 10102102)

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed licensee operability evaluations to assess the technical adequacy of the evaluations, the adequacy of compensatory measures, and the impact on continued plant operation. Additionally, the inspectors reviewed the evaluations to verify that they were processed in accordance with licensee Procedure 00150-C, Condition Reporting and Tracking System. Licensee documents used to support this inspection activity are listed in the attachment of this report. Operability evaluations reviewed included the following:

- HHSI and SI pump motor coolers do not meet ASME Code (CR 1999002104)
- Unplanned removal of 1B Containment Hydrogen Monitor heat trace module (CR 2001002610)
- 2B SI pump lube oil cooler end cover found 90 degrees out of alignment (CR 2001002642)

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds

a. Inspection Scope

The inspectors used NRC inspection Procedure 71111.16, Operator Workarounds, and reviewed abnormal plant configurations and conditions that might require compensation by the operators existing on both units during the report period. For any abnormal configurations identified, the inspectors evaluated whether they would be considered operator workarounds and could increase the likelihood of an initiating event or could affect multiple mitigating systems. The inspectors also reviewed the cumulative effects of potential workarounds on the operators' ability to correctly and timely respond to plant transients.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications

a. Inspection Scope

The inspectors reviewed DCP 01-V1N0009, which involved the replacement of the Unit 1 480 Volt AC Inverter 1ND3I1. The inspectors evaluated whether the modified systems' design had been degraded and if the modification left the plant in an unsafe condition. The inspectors compared the DCP to the requirements of licensee Procedure 58007-C, Design Change Packages.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testinga. Inspection Scope

The inspectors reviewed or witnessed post-maintenance testing for maintenance activities to verify that the testing adequately demonstrated that the equipment was operable. The inspectors also compared testing activities to the requirements in licensee Procedure 29401-C, Work Order Functional Tests, and the system outage schedule where applicable. Licensee documents used to support this inspection activity are listed in the attachment of this report. Post maintenance testing associated with the following maintenance activities were reviewed or witnessed.

- 2A NSCW tower fan outage (MWOs 20100136, 20101140, 20101141, 20101142, 20101143, 20101144, and 20101637)
- 2A CS system outage (MWOs 20100087, 20101943, 20101192, 20101191, 29902028 and 20101916)
- 1B HHSI system outage (MWOs 10100042, 10101450, 10000987 and 10102102)
- Replace faulty control circuit board for Unit 2 NSCW Pump #1 (MWO 20103790)
- Repair 2B EDG jacket water cooling leak (MWO 20103798)

b. Findings

No findings of significance were identified.

1R22 Surveillance Testinga. Inspection Scope

The inspectors reviewed surveillance test procedures and either witnessed the testing or reviewed completed records 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 witnessed or reviewed included the following:

- Procedure 14667-2, Train B Diesel Generator and ESFAS Test, Section 5.1, 24 Hour Diesel Run
- Procedure 14420-1, Solid State Protection System and Reactor Trip Breaker Train A Operability Test
- Procedure 14546-1, Turbine Driven Auxiliary Feedwater Pump Operability Test
- Procedure 14808-2, Centrifugal Charging Pump and Check Valve IST and Response Time Test
- Procedure 14980-2, Diesel Generator Operability Test, (2A EDG)
- Procedure 88009-C, Moderator Temperature Coefficient Determination (EOL), Unit 1

b. Findings

No findings of significance were identified.

### 1R23 Temporary Plant Modifications (TMs)

#### a. Inspection Scope

The inspectors evaluated TMs 2001-V1T041 and TM 2001-V1T042 and associated 10 CFR 50.59 screenings against the system design basis documentation to verify that the modifications did not adversely affect the safety functions of important safety systems. Additionally, the inspectors assessed if the modifications were developed and implemented in accordance with licensee Procedure 00307-C, Temporary Modifications. Licensee documents used to support this inspection activity are listed in the attachment of this report.

#### b. Findings

No findings of significance were identified.

#### **Cornerstone: Emergency Preparedness**

### 1EP6 Drill Evaluation

#### a. Inspection Scope

On November 28, the inspectors observed an emergency response facility activation drill. The inspectors observed licensee activities in the main control room to assess whether classification, notification, and operator actions were in accordance with licensee Procedures 91001-C, Emergency Classification and Implementing Instructions, 91002-C, Emergency Notifications, and Abnormal Operating Procedure 18037-C, Imminent Security Threat. In addition, the inspectors attended the licensee critique following the drill to ensure that any weaknesses were appropriately identified so that corrective actions could be implemented.

#### b. Findings

No findings of significance were identified.

## 2. **RADIATION SAFETY**

### **Cornerstone: Occupational Radiation Safety**

### 2OS2 As Low As Reasonably Achievable (ALARA) Planning and Controls

#### a. Inspection Scope

The inspectors reviewed pertinent information regarding plant collective exposure history, current exposure trends, and ongoing or planned activities in order to assess current performance and exposure challenges to evaluate if the licensee was implementing ALARA processes as required by 10 CFR 20.1101(b) and licensee Procedures 00910-C, VEGP ALARA Program; 41001-C, ALARA Job Review; and 41006-C, Temporary Shielding. During plant tours, the inspectors reviewed plant ALARA policy by observing radiation worker performance; the use of low dose waiting

areas; the use of temporary shielding; and the use of cameras, teledosimetry, and communications for controlling personnel exposures. The inspectors attended ALARA briefings and observed a resin liner movement, a Unit 2 waste tank decontamination, a Unit 2 containment entry, and work on fuel pool underwater lights to assess licensee performance. The inspectors reviewed post outage summaries and discussed source term reduction initiatives with ALARA management. The inspectors also evaluated doses for declared pregnant workers. Radiation Work Permits (RWPs) evaluated included RWP-01-0149, RWP-01-0148, RWP-01-0102, and RWP-01-0112.

b. Findings

No findings of significance were identified.

**4. OTHER ACTIVITIES**

4OA1 Performance Indicator (PI) Verification

.1 Mitigating Systems Cornerstone

a. Inspection Scope

The inspectors completed a review of the Unit 1 and Unit 2 safety system unavailability PI data for the following systems:

- High Pressure Injection system for the first through third quarters of 2001
- Auxiliary Feedwater system for the fourth quarter 2000 through third quarter of 2001
- Residual Heat Removal system for the first through third quarters of 2001

The inspectors verified the PI data accuracy and completeness against the guidance of NEI 99-02, Regulatory Assessment Performance Indicator Guideline, Revision (Rev.) 1, and licensee Procedure 00163-C, NRC Performance Indicator Preparation and Submittal. Documentation reviewed included Monthly Operating Reports, operator logs, licensee maintenance rule database, licensee event reports, and licensee monthly PI Summary Reports.

b. Findings

No findings of significance were identified.

.2 Occupational and Public Radiation Safety Cornerstone

a. Inspection Scope

The inspectors completed a review of the Unit 1 and Unit 2 PI data for the Occupational and Public Radiation Safety cornerstone areas for the period between January 1, 2001 and November 1, 2001. The inspectors verified the PI data accuracy and completeness against the guidance of NEI 99-02, Regulatory Assessment Performance Indicator Guideline, Rev. 1. Documentation reviewed included Safety Audit and Engineering

Review special audit report OP26-01/19, dated November 2, 2001, and CRs 2001001857, 2001001876, 2001001883, 2001001938, 2001002230, and 2001001844.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up

(Closed) Licensee Event Report (LER) 50-424/01-001-00: Reactor Trip Due to Loss of Generator Excitation

This event was previously discussed in sections 1R14 and 4OA3 of NRC Inspection Report 50-424,425/01-05. The loss of main generator excitation field voltage occurred as a result of a short circuit of the silicon controlled rectifiers (SCRs) in Rectifier Bridge No. 4 during maintenance to replace SCRs in Rectifier Bridge No. 1. The failure analysis of the cause of the short circuit in the SCRs was indeterminate. No findings of significance or violations of regulatory requirements were identified and this LER was closed.

4OA6 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on January 8, 2002. No proprietary information was identified.

4OA7 Licensee Identified Violations

The following finding of very low significance was identified by the licensee and is a violation of NRC requirements which met the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as a Non-Cited Violation (NCV).

If the licensee denies this violation, they should provide a response with the basis for their denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 2055-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 2055-001; and the NRC Resident Inspector at the Vogtle facility.

NCV Tracking Number

Requirement Licensee Failed to Meet

NCV 50-424/01-06-01

Unit 1 Technical Specification (TS) 5.4.1.a requires that written procedures be implemented covering the activities listed in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Regulatory Guide 1.33, Appendix A includes equipment control activities such as equipment



locking and tagging. The failure to correctly position breaker 1BA03-15 in the disconnect position as required by the clearance step was a failure to follow licensee Procedure 00304-C, Equipment Clearance and Tagging, and was a violation of TS 5.4.1. a which is being treated as a non-cited violation. This failure rendered the adjacent breakers (1B Containment Spray pump and Component Cooling Water pump #6) inoperable for a period of approximately 17.5 hours. This issue was placed in the licensee's corrective action program as CR 2001001914. (Green)

## Supplementary Information

### PARTIAL LIST OF PERSONS CONTACTED

#### Licensee

W. Bargeron, Manager Operations  
R. Brown, Manager Training and Emergency Preparedness  
W. Burmeister, Manager Engineering Support  
G. Frederick, Plant Operations Assistant General Manager  
J. Gasser, Nuclear Plant General Manager  
P. Rushton, Plant Support Assistant General Manager

#### NRC

S. Cahill, Chief, Region II Reactor Projects Branch 2  
W. Rogers, Senior Risk Analyst, Region II

### ITEMS OPENED, CLOSED, AND DISCUSSED

#### Open and Closed

50-424/01-06-01      NCV      Failure to Follow Procedures Results in Inoperability of Containment Spray Pump (Section 40A7)

#### Closed

50-424/01-001-00      LER      Reactor Trip Due to Loss of Generator Excitation (Section 40A3)

### INSPECTION DOCUMENTS REVIEWED

#### **Section 1R01**

Procedure 11887-1(2), Cold Weather Checklist  
Procedure 11901-1(2), Heat Tracing System Alignment  
Procedure 13901-1(2), Heat Tracing System  
Procedure 17104-1(2), Annunciator Response Procedures for Heat Tracing Panels  
Procedure 25743-C, Thermon Solid State Heat Tracing and Freeze Protection System Calibration and Maintenance  
Drawing Nos. 2X3AF05-680-6, 2X3AF05-680-8, 2X3AF05-681, and 2X3AF05-674

#### **Section 1R02**

#### 10 CFR 50.59s:

T-ENG-00-06, Test Procedure to Test New Centrifugal Charging Pump Which Replaced the Positive Displacement Charging Pump  
T-ENG-00-07, Test of 2FV-0110A (Boric Acid Flow Control Valve) Following Modification of Internals  
T-ENG-00-09, Test of Charging Pump 1B Following Orifice Replacement  
T-ENG-01-01, Test of Charging Pump 2A Following Replacement of Rotating Element and Orifice

DCP 97-V1N0071-002, Modification of SI Cold Leg Injection Valves 1HV-8801A and B  
 DCP 00-V2N0030-002, Modification to Facilitate Reactor Trip Breaker Surveillance Testing  
 MDC 00-VAM008, Installation of Push Button to Allow Improved Monitoring of Turbine Driven  
 Auxiliary Feedwater Pump Speed Control System  
 MDC 99-V1M044, Modification to Allow Trending of SI Accumulator Level Transmitters  
 MDC 98-V1M012, Modification of SI Accumulator Nitrogen Supply to Facilitate Placement of  
 Nitrogen Blanket on Steam Generators When Drained During an Outage  
 MDC 97-VAM069, Removal of Local DG Day Tank Level Indicator.

10 CFR 50.59 screened out:

T-ENG 99-024, Temporary Procedure to Verify Proper ESFAS Sequencer Operation  
 T-ENG-00-05, Temporary Procedure to Identify SI Header Inleakage  
 Procedure 13405-1/2, 125V DC 1E Electrical Distribution System  
 Procedure 00655-C, Bombs or Other Overt Threats  
 Procedure 13428-C, 480V AC Common Non 1E Electrical Distribution System  
 Procedure 13325-1, Auxiliary Feedwater Pump House & Diesel Generator Building HVAC  
 System  
 Procedure 13150-1, Nuclear Service Cooling Water System  
 Procedure 13011-2, Residual Heat Removal System  
 Procedure 27701-C, 4.16 and 13.8KV Circuit Breaker Refurbishment  
 Procedure 24774-2, Accumulator Tank #1 Pressure 2P-960 Channel Calibration  
 Procedure 24786-1, Reactor Coolant Flow Loop 1 Protection Channel 2 1F 415 Analog  
 Channel Test and Channel Calibration

Condition Reports:

CR2001002285, During the Quarterly ISI Test, 2HV0943B Failed to Reach 100% Open  
 Requiring a 50.59 Evaluation to "Use As Is"  
 CR 2001001183, The 50.59 Evaluation for REA 00-VAA-134 Referenced the Wrong UFSAR  
 Table  
 CR2001001188, The Scaffold Log Is Not Being Maintained As Required, Which Affects the  
 50.59 and Maintenance Rule Programs  
 CR2001001706, Non-compliance With Plant Administrative Procedures

**Section 1R04**

Drawing Nos. 2X4DB133, 134, and 135, Nuclear Service Cooling Water System  
 Drawing No. 1X4DB121, Safety Injection System  
 Drawing Nos. 1X4DB221, 233, and 234, Unit 1 Essential Chilled Water System  
 Procedure 11744-1, Essential Chilled Water System Alignment  
 Procedure 14553-1, ESF Room Cooler and Safety Related Chiller Flow Path Verification  
 Procedure 14980-1, Diesel Generator Operability Test

**Section 1R05**

Procedure 92845-2, Zone 145 - NSCW Cooling tower 2A, Mechanical and Electrical Tunnels  
 2T2A, 2T3A and 2T5A Fire Fighting Preplan  
 Procedure 92860A-2, Zone 160A - NSCW Pumphouse Train A Fire Fighting Preplan  
 Procedure 92732-1, Zone 32 - Auxiliary Building - Level B Firefighting Preplan  
 Procedure 92861-2, Diesel Generator Building Fire Fighting Preplan

Procedure 92863-2, Diesel Generator Building Train A DFO Day Tank, Zone 163, Fire Fighting Preplan

Procedure 92865-2, Diesel Generator Tanks and Pumphouse Zone 165- Fire Fighting Preplan

Procedure 92866-2, Diesel Generator Tanks and Pumphouse Zone 166- Fire Fighting Preplan

Procedure 92705-2, Zone 5 - Auxiliary Building - Level D, Containment Spray Pump B

Firefighting Preplan

Procedure 92720-1, Zone 20- Auxiliary Building CVCS Pump RM Train A Firefighting Preplan

### **Section 1R06**

UFSAR Section 3.4, Water Level (Flood) Design

UFSAR Appendix 3F, Hazards Analysis

UFSAR Section 9.3.3, Equipment and Floor Drainage Systems

Design Control Document (DC)-1003, Flooding - Interdiscipline

Procedure 11219-1, Auxiliary and Containment Buildings and Miscellaneous Drain Alignment

Procedure 11867-1, Safety Related Locked Valve Verification Checklist

Procedure 11889-C, Severe Weather Checklist

Procedure 13219-1, Auxiliary Buildings and Miscellaneous Drain Systems

Procedure 17061-1, Annunciator Response Procedures for ALB 61 on Process Control Panel

Procedure 17062-1, Annunciator Response Procedures for ALB 62 on Process Control Panel

CR 2001002552

### **Section 1R07**

Procedure 83305-C, Heat Exchanger Testing/Maintenance Program

Procedure 83306-C, CCW and ACCW Heat Exchanger Testing

Procedure 85311-C, Chemical Control of Closed Cooling Water Systems

### **Section 1R11**

Procedure 10000-C, Conduct of Operations

Procedure 13003-1, Reactor Coolant Pump Operation

Procedure 13006-1, Chemical and Volume Control System

Procedure 18007-C, Chemical and Volume Control System Malfunction

Procedure 19000-C, E-0 Reactor Trip or Safety Injection

Procedure 19010-C, E-1 Loss of Reactor or Secondary Coolant

Procedure 91001-C, Emergency Classification and Implementing Instructions

### **Section 1R15**

Procedure 83308-C, Testing of Safety-Related NSCW System Coolers

Request for Engineering Assistance (REA) 01-V2A134, Effect on 2B SIP with lube oil cooler in a 2-pass arrangement

**Section 1R19**

Procedure 14430-2, NSCW Cooling Tower Fans Monthly Test

Procedure 14808-1, Centrifugal Charging Pump and Check Valve IST and Response Time Test

Procedure 83308-C, Testing of Safety-Related NSCW System Coolers

**Section 1R23:**

CR 2001002827

Drawings 1X3D-AA-G02B, 120VAC Dist. PNL 1NY3N