UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8931

April 24, 2003

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

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT - NRC INTEGRATED INSPECTION REPORT 50-424/03-02 AND 50-425/03-02

Dear Mr. Gasser:

On April 5, 2003, the US 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 April 14, 2003, with Mr. George Frederick 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 two self-revealing findings of very low safety significance (Green) which were determined to involve violations of NRC requirements. However, because of the very low safety significance and because the violations were entered into your corrective action program, the NRC is treating these two violations as non-cited violations (NCVs) consistent with Section VI.A of the NRC's Enforcement Policy. If you contest any NCV in this report, 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 accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection 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 Website at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Brian R. Bonser, Chief
Reactor Projects Branch 2
Division of Reactor Projects

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

Enclosure: Inspection Report 50-424, 425/03-02
w/Attachment: Supplemental Information

cc w/encl: (See page 3)

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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.:	50-424/03-02 and 50-425/03-02
Licensee:	Southern Nuclear Operating Company, Inc. (SNC)
Facility:	Vogtle Electric Generating Plant, Units 1 and 2
Location:	7821 River Road Waynesboro, GA 30830
Dates:	January 5, 2003 - April 5, 2003
Inspectors:	J. Zeiler, Senior Resident Inspector T. Morrissey, Resident Inspector S. Rose, Operations Engineer (Section 1R11)
Approved by	Brian R. Bonser, Chief Reactor Projects Branch 2 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000424/2003-02, 05000425/2003-02; Southern Nuclear Operating Company, Inc.; 01/05/2003-04/05/2003; Vogtle Electric Generating Plant, Units 1 and 2; Personnel Performance During Non-Routine Evolutions.

The report covered a three month period of inspection by resident inspectors and a regional Operations Engineer. Two Green non-cited violations (NCVs) were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609 "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Operating Reactor Oversight web site http://www.nrc.gov/reactors/operating/overisht.html.

A. Inspector Identified and Self-Revealing Findings

Cornerstone: Initiating Events

- Green Failure to follow chemistry control procedures resulted in the wrong corrosion control chemicals being added to the feedwater systems on both units, and the unplanned forced shutdown of Unit 1 and Unit 2 to Mode 5, Cold Shutdown, due to high sodium concentrations in both units' feedwater systems.

  A self-revealing non-cited violation of Technical Specification 5.4.1.a was identified. This finding is greater than minor because it affected the initiating events cornerstone objective by causing a perturbation of plant secondary side chemistry resulting in the unplanned forced shutdown of both units. The finding is of very low safety significance because the consequence of the chemical addition error was limited to the unplanned forced shutdown of both units. The direct cause of this finding involved the cross-cutting area of Human Performance. (Section 1R14)

- Green Failure to follow operations startup procedures resulted in a steam generator water level transient and manual reactor trip during transfer of feedwater level control to the Main Feedwater Regulating Valves.

  A self-revealing non-cited violation of Technical Specification 5.4.1.a was identified. This finding is greater than minor because it affected the initiating events cornerstone objective by causing a perturbation in plant stability that resulted in a manual reactor trip. The finding is of very low safety significance because it had no other consequence other than resulting in a reactor trip. The direct cause of this finding involved the cross-cutting area of Human Performance. (Section 1R14)

B. Licensee Identified Violations

None

REPORT DETAILS

Summary of Plant Status

Unit 1 operated at 100 percent rated thermal power (RTP) until January 17 when the unit was down-powered to 90 percent to repair a feedwater heater drain pump. The unit was returned to 100 percent RTP on January 22. The unit operated at 100 percent RTP for the remainder of the inspection period.

Unit 2 operated at 100 percent RTP until March 21 when the unit was shutdown for a planned steam generator hideout return study. The unit was restarted on March 23 and attained 100 percent RTP on March 29. The unit operated at 100 percent RTP for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R04 Equipment Alignment

a. Inspection Scope

The inspectors performed partial walkdowns of the following three systems to verify correct system alignment while redundant or backup equipment was inoperable. The inspectors checked for correct valve and electrical power alignments by comparing positions of valves, switches, and breakers to the procedures and drawings listed in the Attachment. Additionally, the inspectors reviewed the condition report (CR) database to verify that equipment alignment problems were being identified and appropriately resolved.

- Unit 1 Nuclear Service Cooling Water (NSCW) Train A and NSCW pumps #4 and #6 on January 16 while NSCW pump #2 was out of service
- 1B Emergency Diesel Generator (EDG) on January 27 while 1A EDG was out of service
- 1A EDG on February 11 while 1B EDG was out of service

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

Fire Area Walkdowns: The inspectors toured the following seven plant areas to verify the licensee was controlling combustible materials and ignition sources as required by licensee procedures 92015-C, Use, Control, and Storage of Flammable/Combustible Materials; and 92020-C, Control of Ignition Sources. The inspectors also assessed the condition of fire detection, suppression, and protection systems and reviewed the licensee's fire protection Limiting Condition for Operation (LCO) log and CR database to

verify that the corrective actions for degraded equipment were identified and appropriately prioritized. The inspectors reviewed the licensee's fire protection program to verify the requirements of Updated Final Safety Analysis Report (UFSAR) Section 9.5.1, Fire Protection Program, and Appendix 9A, Fire Hazards Analysis were met. Other licensee documents reviewed to support these inspection activities are listed in the Attachment.

- Unit 1 NSCW Train A and Train B
- Unit 2 NSCW Train A and Train B
- 1B EDG room and associated fuel transfer pump building
- 1A EDG room
- Unit 1 Auxiliary Feedwater building
- Unit 1 Main Steam Isolation Valve Room North
- Unit 2 Main Steam Isolation Valve Room South

Plant Fire Drill Observation: On February 5, the inspectors observed an unannounced fire drill conducted in the Unit 2 Cable Spreading Room involving an electrical cable fire scenario. The inspectors assessed the adequacy of the fire drill and fire brigade response using licensee procedures 92000-C, Fire Protection Program; 92005-C, Fire Response Procedure; 92030-C, Fire Drill Program; 92795-2, Zone 95 - Control Building - Level A, Train A Spreading Room Fire Fighting Preplan; 13304-C, Control Building Normal HVAC System; and 17103A-C, Annunciator Response Procedures for Fire Alarm Computer. The inspectors evaluated fire brigade performance to verify that they responded to the fire in a timely manner, donned proper protective clothing, used self-contained breathing apparatus, and had equipment necessary to control and extinguish the fire. The inspectors assessed the adequacy of the fire brigade's fire fighting strategy including entry into the fire area, communications, search and rescue, and fire equipment usage.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification

a. Inspection Scope

Resident Observations: On February 24, the inspectors observed operator performance during licensed operator simulator training associated with Requalification Segment 20032. The inspectors evaluated operator performance during the conduct of Simulator Exercise Guide RQ-SE-0302, Loss of Annunciators. The exercise began with a power range nuclear instrument channel failure followed by a loss of all control room annunciators, a condensate pump trip, and ended with a steam generator tube leak. The inspectors specifically assessed the following areas:

- Correct use of abnormal and emergency operating procedures including: 18002-C, Nuclear Instrumentation System Malfunction; 19000-C, E-0 Reactor Trip or Safety Injection; 19002-C, ES-0.1 Reactor Trip Response; and 18009-C, Steam Generator Tube Leak

- Ability to identify and implement appropriate Technical Specification actions
- Ability to identify and implement appropriate reporting and emergency plan actions in accordance with licensee procedure 91001-C, Emergency Classification and Implementing Instructions
- Clarity and formality of communications in accordance with licensee 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

Annual Operating Test Results: The inspectors reviewed the overall pass/fail results of the individual Job Performance Measures operating tests and the simulator operating tests (required to be given per 10 CFR 55.59(a)(2)) administered by the licensee during calender year 2002. These results were compared to the thresholds established in Manual Chapter 609 Appendix I, Operator Requalification Human Performance Significance Determination Process.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

a. Inspection Scope

The inspectors reviewed the following two equipment issues and associated licensee condition reports 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 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 (MWOs). Also, the inspectors interviewed system engineers and the maintenance rule coordinator, to assess the accuracy of identified performance deficiencies and extent of condition. Documents reviewed are listed in the Attachment.

- NSCW pump degraded motor heaters and motor winding support structures (CRs 2001002231 and 2002002068)
- Repeated steam generator atmospheric relief valve stroke time failures (CRs 2003000866 and 2003000341)

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors reviewed the following five risk significant and emergent MWOs 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 licensee 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 power reduction to support repair of 1B heater drain pump (MWO 10203578)
- 1A EDG system outage (MWOs 10201279, 10201513, and 10203184)
- 1B EDG system outage (MWOs 10201280, 10201512, and 10203185)
- 2B Essential Chill Water system outage (MWOs 10103061, 10103062, 10202357, 10202968, and 10203690)
- Unit 2 planned shutdown outage for steam generator hideout return study

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-Routine Plant Evolutions

a. Inspection Scope

For the following four non-routine plant evolutions, the inspectors reviewed operator logs, plant computer data, completed procedures, condition reports, Licensee Event Reports (LERs), and interviewed plant personnel to determine what occurred and how the operators responded. The inspectors verified that the operator response was in accordance with plant procedures.

- On March 21, a Unit 2 planned shutdown to Mode 3 to perform a steam generator hideout return study

- On January 17, a Unit 1 planned power reduction to 90 percent RTP to support repair of 1B heater drain pump

- On November 24, 2002, a dual unit shutdown to Mode 5, Cold Shutdown, was initiated from 100 percent RTP due to high sodium concentrations detected in both units' feedwater systems. The adequacy of the control room operator response following notification of the high sodium concentrations was evaluated previously in Integrated Inspection Report 50-424, 425/02-04.

- On November 13, 2002, a manual reactor trip was initiated during Unit 2 plant startup due to a steam generator high water level transient. The adequacy of the operator response following the reactor trip was evaluated previously in Integrated Inspection Report 50-424, 425/02-04. This event was documented in LER 50-425/02-02.

b. Findings

High Feedwater Sodium Concentration Event

Introduction: A Green self-revealing non-cited violation (NCV) was identified for failure to follow chemistry control procedures which resulted in the wrong corrosion control chemicals being added to the feedwater systems on both units and an unplanned shutdown of Units 1 and 2 due to high sodium concentrations in both units' feedwater systems.

Description: On November 24, 2002, with both units operating at 100 percent RTP, chemistry technicians were required to add methoxypropylamine (MPA), a chemical used for steam generator corrosion control, to the feedwater systems on both units. A chemistry technician incorrectly identified a container of sodium phosphate as MPA in the plant warehouse and the chemistry technicians added it to the condensate chemical injection system on Unit 2 and then on Unit 1. Approximately two hours later high sodium concentration alarms were received on both units' steam generator in-line sodium monitors. Chemistry personnel determined that sodium levels were in excess of allowable concentrations and alerted operators on both units. Licensee procedures required shutdown to Mode 3, Hot Standby. Following discussions with management, a decision was made to shutdown both units to evaluate the impact of the event. Each unit was shutdown without any problems being encountered.

The inspectors determined that the primary root cause of the event was the failure of chemistry personnel to follow chemical control procedure 35535-1/2, Operation of the Condensate Chemical Injection System, which provided instructions for identifying the MPA container. Chemistry personnel were unaware that this activity was covered by procedure and failed to use it during the conduct of the chemical additions.

Analysis: The inspectors determined that the failure to follow procedure was greater than minor because it resulted in an unplanned forced shutdown of both units and affected the initiating events cornerstone objective. This finding was determined to be of very low safety significance because the consequence of the chemical addition error was limited to the unplanned forced shutdown of both units. The direct cause of this finding involved the cross-cutting area of Human Performance.

Enforcement: 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, which includes chemical control procedures for maintaining water quality and limiting concentrations of agents that may cause corrosive attack or fouling of steam generator surfaces. Licensee procedure 35535-1/2 requires that MPA be added to the condensate chemical injection system for steam generator corrosion control. Contrary to the above, chemistry personnel failed to follow procedure 35535-1/2, in that, they did not verify the contents of the refill container were MPA. As a result, sodium phosphate

was added to the condensate chemical injection system on both units. Because the failure to follow procedure is of very low safety significance and has been entered into the licensee's corrective action program (CR 2002003412), this violation is being treated as an NCV in accordance with Section VI.A of the NRC Enforcement Policy and is identified as NCV 50-424,425/03-02-01, Failure to Follow Chemical Control Procedures Results in Excessive Steam Generator Sodium Concentrations and Dual Unit Forced Shutdowns.

Unit 2 Steam Generator Water Level Transient and Manual Reactor Trip

Introduction: A Green self-revealing NCV was identified for failure to follow plant startup procedures which resulted in a steam generator level transient and manual reactor trip.

Description: On November 13, 2002, Unit 2 was manually tripped from 21 percent RTP when a feedwater level transient occurred while operators were attempting to transfer steam generator feedwater level control from the bypass feedwater regulating valves (BFRVs) to the main feedwater regulating valves (MFRVs).

The inspectors determined that the root cause of the steam generator water level transient was the result of the designated Steam Generator Water Level Control Operator's failure to transfer feedwater level control to the MFRVs one generator at a time, as required by the plant startup procedure, versus simultaneous transfer.

Analysis: The inspectors determined that the failure to follow procedure was greater than minor because it resulted in an unexpected manual reactor trip and challenged plant safety systems which affected the initiating events cornerstone. This finding was determined to be of very low safety significance because it had no other consequence other than resulting in a reactor trip. The direct cause of this finding involved the cross-cutting area of Human Performance.

Enforcement: Unit 2 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, which includes procedures for startup, operation, and shutdown of portions of the feedwater system from the feedwater pumps to the steam generators. Licensee procedure 12004-C, Power Operation (Mode 1), Revision 59, requires that feedwater level control be transferred from the BFRVs to the MFRVs one steam generator at a time. Contrary to the above, operators failed to follow procedure 12004-C, in that, they attempted to transfer feedwater level control on all four steam generators simultaneously. Because the failure to follow procedure is of very low safety significance and has been entered into the licensee's corrective action program (CR 2002003321), this violation is being treated as an NCV in accordance with Section VI.A of the NRC Enforcement Policy and is identified as NCV 50-425/03-02-02, Failure to Follow Power Ascension Procedure Results in Manual Reactor Trip.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the following three evaluations to verify that they met the requirements of licensee procedure 00150-C, Condition Reporting and Tracking System. This scope included a review of the technical adequacy of the evaluations, the adequacy of compensatory measures, and the impact on continued plant operation.

- 1A EDG fuel oil storage tank transfer pump run with discharge valve closed (CR 2003000249)
- Housing cracks in 120 Volt DC Vital Battery cell containers (CRs 2003000617 and 2003000631)
- Solenoid valve o-rings exceeded vendor recommended equipment qualification dates (CR 2003000774)

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds

a. Inspection Scope

The inspectors assessed the cumulative effects of operator workarounds, i.e., abnormal plant configurations and conditions requiring compensatory operator action, on the operators' ability to effect a correct and timely response to plant transients and events. The inspectors periodically reviewed the control room logs, caution tag log, abnormal configuration log, MWOs, and the clearance and tagging database, to identify any abnormal configurations. For any abnormal configuration 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.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

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

- Unit 1 NSCW pump #2 system outage (MWOs 10103231, 10103232, and 10103233)
- 2B Piping Penetration Area Filtration and Exhaust System investigation of low differential pressure problem (MWO 20300128)
- 1A EDG system outage (MWOs 10201279, 10201513, and 10203184)
- 1B EDG system outage (MWOs 10201280, 10201512, and 10203185)
- 1B Essential Chill Water system outage (MWOs 10103061, 10103062, 10202357, 10202968, and 10203690)

b. Findings

No findings of significance were identified.

1R20 Refueling and Other Outage Activities

Unit 2 Planned Outage to Conduct Steam Generator Chemistry Hideout Study

a. Inspection Scope

On March 21, the licensee initiated a shutdown to Mode 3 to conduct a steam generator chemistry hideout study. The inspectors reviewed the outage plans to confirm that the licensee had appropriately considered risk in developing and implementing the plans. During the outage, the inspectors observed or reviewed portions of the unit cooldown, outage activities, and the subsequent heatup and unit restart activities. The inspectors verified that these activities were conducted in accordance with TS and licensee procedures. Licensee documents reviewed for the inspection are listed in the Attachment.

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. This review included two inservice test (IST) surveillance activities (14810-2 and 14545-1). Additionally, the inspectors reviewed the CR database to verify that the licensee had adequately identified and implemented appropriate corrective actions for surveillance test problems.

- 14030-1, Nuclear Instrument Calorimetric Calibration
- 14666-1, Train A Diesel Generator and ESFAS Test (24-hour surveillance test)
- 14667-1, Train B Diesel Generator and ESFAS Test (24-hour Surveillance Test)
- 14810-2, TDAFW Pump and Check Valve IST Response Time Test
- 14545-1, Motor Driven Auxiliary Feedwater Pump Operability Test (A Train)

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors evaluated the following two Temporary Modifications (TMs) and the associated 10 CFR 50.59 screenings against the system design basis documentation and UFSAR to verify that the modifications did not adversely affect the safety functions of important safety systems. Additionally, the inspectors assessed if the modification was developed and implemented in accordance with licensee procedure 00307-C, Temporary Modifications.

- TM 03-V2T001, Remove insulation from Unit 2 Letdown Heat Exchanger to support repair of leaking weld
- TM 02-V1T012, V2T044, Installation of vibration monitoring equipment on Residual Heat Removal loop suction valves 1/2HV8701B, 1/2HV8702B and associated leakoff lines

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation

a. Inspection Scope

The inspectors observed and reviewed the following two emergency response activities to verify the licensee was properly classifying emergency events, making the required notifications, and making appropriate protective action recommendations. The inspectors verified that classifications, notifications, and protective action recommendations were performed in accordance with licensee procedures 91001-C, Emergency Classification and Implementing Instructions; 91002-C, Emergency Notifications; and 91305-C, Protective Action Guidelines. Additionally, the inspectors verified that adequate critiques were conducted in order to identify performance weaknesses and improvements.

- On February 12, the licensee conducted an emergency response facility activation drill involving fuel failure during a steam generator tube rupture with an unmonitored release pathway through a steam generator atmospheric relief valve.

- On February 24, licensed operator Requalification Segment #20032 was conducted under Simulator Exercise Guide RQ-SE-03202, involving the loss of all control room annunciators followed by a steam generator tube rupture.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors sampled licensee submittals for the PIs listed below for the period from April 1, 2002, through December 31, 2002, for Units 1 and 2. To verify the accuracy of the PI data reported during the period, PI definitions and guidance contained in licensee procedure 00163-C, NRC Performance Indicator Preparation and Submittal, and NEI 99-02, Regulatory Assessment Performance Indicator Guideline, Revision 2, were used to verify the basis in reporting for each data element.

Initiating Events Cornerstone

- Unplanned Scrams per 7,000 Critical Hours
- Scrams with Loss of Normal Heat Removal
- Unplanned Power Changes per 7,000 Critical Hours

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

b. Findings

No findings of significance were identified.

4OA2 Problem Identification and Resolution

a. Inspection Scope

The inspectors reviewed CR 2002003412 and Event Report 1-2002-002 which documented the November 24, 2002, unexpected shutdown of both units due to high sodium levels in both unit's steam generators. The inspectors reviewed licensee procedures 00150-C, Condition Reporting and Tracking System; 00057-C, Event Investigations; and 00058-C, Root Cause Determination to verify that all issues were identified, the evaluation was appropriate, and licensee corrective actions were specific and prioritized.

b. Findings and Observations

No findings of significance were identified. The inspectors noted that the licensee's review was thorough and the corrective actions were appropriate.

4OA3 Event Followup

(Closed) LER 50-425/2002-002: Steam Generator Level Control Problems Lead to Manual Reactor Trip

On November 13, 2002, Unit 2 was manually tripped from 21 percent RTP when a feedwater level transient occurred while the operators were attempting to transfer steam generator feedwater control from the BFRVs to the MFRVs. The cause of the steam generator water level transient was the result of the designated Steam Generator Water Level Control Operator's failure to transfer feedwater level control to the MFRVs one generator at a time, as required by the power ascension procedure, versus simultaneous transfer. This failure to follow procedure was identified as an NCV and is discussed in Section 1R14 of this report.

4OA6 Meetings, Including Exit

.1 Exit Meeting Summary

On April 14, 2003, the resident inspectors presented the inspection results to Mr. G. Frederick and other members of his staff, who acknowledged the findings. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

.2 Annual Assessment Meeting

On April 1, 2003, the NRC's Chief of Reactor Project's Branch 2 and Senior Resident Inspector assigned to the Vogtle Electric Generating Plant (VEGP) met with Southern Nuclear Operating Company to discuss the NRC's Reactor Oversight Process (ROP) and the NRC's annual assessment of VEGP safety performance for the period of January 1, 2002 - December 31, 2002. The major topics addressed were: the NRC's assessment program, the results of the VEGP assessment, and NRC security activities. Attendees included VEGP site management, members of site staff, corporate management and staff, and members of the local news media.

This meeting was open to the public. Information used for the discussions of the ROP is available from the NRC's document system (ADAMS) as accession number ML030990055. ADAMS is accessible from the NRC Web site at *http://www.nrc.gov/reading-rm/adams.html*.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

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W. Burmeister, Manager Engineering Support
G. Frederick, Nuclear Plant General Manager
K. Holmes, Manager Training and Emergency Preparedness
P. Rushton, Plant Operations Assistant General Manager
T. Tynan, Manager Operations
I. Kochery, Health Physics & Chemistry Manager
J. Dixon, Superintendent Health Physics
D. Carter, Superintendent Chemistry

NRC Personnel:

B. Bonser, Chief, Region II Reactor Projects Branch 2

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

50-424,425/03-02-01	NCV	Failure to Follow Chemical Control Procedures Results in Excessive Steam Generator Sodium Concentrations and Dual Unit Forced Shutdowns (Section 1R14)
50-425/03-02-02	NCV	Failure to Follow Power Ascension Procedure Results in Manual Reactor Trip (Section 1R14)

Closed

50-425/02-02	LER	Steam Generator Level Control Problems Lead to Manual Reactor Trip (Section 4OA3)

Discussed

None

LIST OF DOCUMENTS REVIEWED

Section 1R04: Equipment Alignment
Procedures and Drawings:

Procedure 11150-1, Nuclear Service Cooling Water System Alignment
Procedure 13150-1, Nuclear Service Cooling Water System
Drawings Nos. 1X4DB133-1, 1X4DB133-2, 1X4DB134, 1X4DB135-1, and 1X4DB135-2 (NSCW system)
Procedure 13145-1, Diesel Generators

Section 1R05: Fire Protestion
Procedures:

92846-1, Zone 146 - Tunnels 1T2B and 1T5B Fire Fighting Preplan
92845-2, Zone 145 - NSCW Cooling tower 2A, Mechanical and Electrical Tunnels 2T2A, 2T3A and 2T5A Fire Fighting Preplan
92846-2, Zone 146 - NSCW Cooling Tower 2B Mechanical and Electrical Tunnels 2T2B and 2T5B
92860A-2, Zone 160A - NSCW Pumphouse - Train A Fire Fighting Preplan
92860B-2, Zone 160B - NSCW Pumphouse - Train B Fire Fighting Preplan
92862-1, Zone 162 - Diesel Generator Building Fire Fighting Preplan
92866-1, Zone 166 - Diesel Generator Tanks and Pumphouse Fire Fighting Preplan
92861-1, Zone 161 - Diesel Generator Building Fire Fighting Preplan
92804-1, Zone 104 - MSIV Room North Level 1 Fire Fighting Preplan

Section 1R12: Maintenance Effectiveness
Other Documents:

CR 2002002105
MWO 10102520
MWO 10102825
MWO 10102827
MWO 10201996
MWO 10201997
MWO 10200372
SCL00161
OE Report 1943

Section 1R20: Refueling and Other Outage Activities
Procedures:

12001-C, Unit Heatup to Hot Shutdown (Mode 5 to Mode 4)
12002-C, Unit Heatup to Normal Operating Temperature and Pressure
12003-C, Reactor Startup (Mode 3 to Mode 2)
12004-C, Power Operations (Mode 1)
12005-C, Reactor Shutdown to Hot Standby (Mode 2 to Mode 3)
12006-C, Unit Cooldown to Cold Shutdown

Section 1R23: Temporary Plant Modifications
Other Documents:

MWO 20300072, Install Belzona patch on letdown heat exchanger shell
CR 2002003615, ACCW leak on Unit 2 Letdown heat exchanger
10CFR50.59 Screening of Belzona repair of Unit 2 letdown heat exchanger
Product Specification Sheet - Belzona 1111