



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

April 19, 2005

South Carolina Electric & Gas Company  
ATTN: Mr. Jeffrey B. Archie  
Vice President, Nuclear Plant Operations  
Virgil C. Summer Nuclear Station  
P. O. Box 88  
Jenkinsville, SC 29065

SUBJECT: VIRGIL C. SUMMER NUCLEAR STATION - NRC INTEGRATED INSPECTION  
REPORT 05000395/2005002 AND ANNUAL ASSESSMENT SUMMARY

Dear Mr. Archie:

On March 31, 2005, the United States Nuclear Regulatory Commission (NRC) completed an inspection at your Virgil C. Summer Nuclear Station. The enclosed integrated inspection report documents the inspection findings, which were discussed on April 5, 2005, with Mr. Thomas Gatlin 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.

Based on the results of this inspection, one NRC-identified finding was identified. This finding was determined to involve a violation of NRC requirements. However, because of its 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 Section VI.A of the NRC Enforcement Policy. If you contest the 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 United States 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 Virgil C. Summer Nuclear Station.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC 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/**

Kerry D. Landis, Chief  
Reactor Projects Branch 5  
Division of Reactor Projects

Docket No.: 50-395  
License No.: NPF-12

Enclosure: NRC Integrated Inspection Report 05000395/2005002  
w/Attachment: Supplemental Information

cc w/encl.:

R. J. White  
Nuclear Coordinator (Mail Code 802)  
S.C. Public Service Authority  
Virgil C. Summer Nuclear Station  
Electronic Mail Distribution

Ronald B. Clary, Manager  
Nuclear Licensing (Mail Code 830)  
South Carolina Electric & Gas Company  
Virgil C. Summer Nuclear Station  
Electronic Mail Distribution

Kathryn M. Sutton, Esq.  
Winston and Strawn  
Electronic Mail Distribution

Henry J. Porter, Director  
Division of Radioactive Waste Mgmt.  
Dept. of Health and Environmental  
Control  
Electronic Mail Distribution

R. Mike Gandy  
Division of Radioactive Waste Mgmt.  
S.C. Department of Health and  
Environmental Control  
Electronic Mail Distribution

Thomas D. Gatlin, General Manager  
Nuclear Plant Operations (Mail Code 303)  
South Carolina Electric & Gas Company  
Virgil C. Summer Nuclear Station  
Electronic Mail Distribution

Distribution w/encl.:  
K. Cotton, NRR  
L. Slack, RII  
RIDSNNRRDIPMIIPB  
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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 50-395

License No.: NPF-12

Report No.: 05000395/2005002

Licensee: South Carolina Electric & Gas (SCE&G) Company

Facility: Virgil C. Summer Nuclear Station

Location: P. O. Box 88  
Jenkinsville, SC 29065

Dates: January 1, 2005 - March 31, 2005

Inspectors: J. Zeiler, Senior Resident Inspector  
M. Cain, Resident Inspector  
E. Lea, Senior Operations Engineer, RII (Section 1R11.2)

Approved by: Kerry D. Landis, Chief  
Reactor Projects Branch 5  
Division of Reactor Projects

Enclosure

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## SUMMARY OF FINDINGS

IR 05000395/2005002; 01/01/2005 - 03/31/2005; Virgil C. Summer Nuclear Station; Operator Performance during Non-Routine Evolutions and Events.

The report covered a three-month period of inspection by resident inspectors and an announced inspection by a senior operations engineer. One NRC-identified, Green, non-cited violation (NCV) was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using 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 in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

### A. NRC-Identified and Self-Revealing Findings

#### Cornerstone: Mitigating Systems

- Green. A NCV of Technical Specification 6.8.1.a was identified by the NRC for the failure to establish and implement procedures for events involving the loss of control room annunciators. This resulted in delays in implementing appropriate compensatory actions during an actual event involving partial loss of control room annunciators.

The inspectors determined that the licensee's failure to establish and implement written procedures for responding to loss of control room annunciators was a performance deficiency because the licensee is expected to meet TS requirements for having procedures for abnormal or emergency conditions. This finding is not suitable for SDP evaluation, however, this issue has been reviewed by NRC management and is determined to be a Green finding of very low safety significance because the annunciators are an aid to control room operators to enhance human performance and the lack of specific response procedures could adversely affect the licensee's ability to monitor and control the response of mitigating system equipment. The loss of annunciators was limited to only one train of safety equipment, there was no actual loss of mitigating system equipment, and no other plant transients occurred during the time period the annunciators were inoperable (Section 1R14).

### B. Licensee-Identified Violations

None.

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## REPORT DETAILS

### Summary of Plant Status

The unit began the inspection period at 100 percent rated thermal power (RTP). The unit operated at or near full power for the entire inspection period.

## 1. REACTOR SAFETY

### **Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity**

#### 1R04 Equipment Alignment

##### a. Inspection Scope

The inspectors conducted four partial equipment alignment walkdowns (listed below) to evaluate the operability of selected redundant trains or backup systems with the other train or system inoperable or out-of-service (OOS). Correct alignment and operating conditions were determined from the applicable portions of drawings, system operating procedures (SOPs), final safety analysis report (FSAR), and technical specifications (TS). The inspections included review of outstanding maintenance work requests (MWRs) and related condition evaluation reports (CERs) to verify that the licensee had properly identified and resolved equipment alignment problems that could impact mitigating system availability. Documents reviewed are listed in the Attachment.

- “B” and “C” centrifugal charging pumps (CCPs), while the “A” CCP was OOS during scheduled preventive maintenance;
- “A” emergency diesel generator (EDG), while the “B” EDG was OOS for quarterly scheduled preventive maintenance;
- “B” and “C” component cooling water (CCW) pumps, while “A” CCW pump was OOS during scheduled preventive maintenance; and,
- “A” EDG, while the “B” EDG was OOS for emergent lube oil strainer replacement corrective maintenance.

##### b. Findings

No findings of significance were identified.

#### 1R05 Fire Protection

##### a. Inspection Scope

The inspectors reviewed recent CERs, MWRs, and impairments associated with the fire detection and suppression system. The inspectors reviewed surveillance activities to determine whether they supported the operability and availability of the fire protection system. The inspectors assessed the material condition of the active and passive fire protection systems and features and observed the control of transient combustibles and ignition sources. The inspectors conducted routine inspections of the following nine areas (respective fire zones also noted):

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- Turbine building (fire zone TB-1);
- 1DB switchgear and heating, ventilation and air-conditioning (HVAC) rooms (fire zones IB-16, IB-17, IB-22.2);
- Service water (SW) pumphouse (fire zones SWPH-1, 3, 5.1/5.2);
- Intermediate building general area circulating cooling water pumps and heat exchangers, service water booster pumps (fire zones IB-25.1.1, 1.2, 1.3, 1.5);
- EDG rooms "A" and "B" (fire zones DG-1.1/1.2, DG-2.1/2.2);
- Auxiliary building switchgear room 1DB1/1DB2X (fire zone AB-1.29);
- HVAC chilled water pump rooms "A" and "B" (fire zones IB-7.2, IB-9, IB-23.1);
- Turbine driven emergency feedwater (EFW) pump room (fire zone IB-25.2); and,
- "A," "B," and "C" CCP rooms (fire zones AB-1.5, AB-1.6, AB-1.7).

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification

.1 Quarterly Review

a. Inspection Scope

On March 16, 2005, the inspectors observed performance of senior reactor operators and reactor operators on the plant simulator during licensed operator requalification training. The training scenario (LOR-ST-055E) involved the loss of both trains of residual heat removal (RHR) during reduced reactor coolant system (RCS) inventory conditions. The inspectors verified that training included risk-significant operator actions and implementation of the emergency plan. The inspectors assessed overall crew performance, communication, oversight of supervision, correct emergency classification, and the evaluators' critique. The inspectors verified that any training issues and emergency plan implementation issues were appropriately captured in the licensee's corrective action program (CAP).

b. Findings

No findings of significance were identified.

.2 Annual Operating Test Results

a. Inspection Scope

On September 16, 2004, the licensee completed the requalification annual operating tests, required to be given to all licensed operators per 10 CFR 55.59(a)(2). The inspectors reviewed the overall pass/fail results of the individual operating tests, and the crew simulator operating tests. These results were compared to the thresholds established in NRC Manual Chapter 0609, 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 evaluated two equipment issues described in the CERs listed below to verify the licensee's effectiveness of the corresponding preventive or corrective maintenance associated with structures, systems or components (SSCs). The inspectors reviewed maintenance rule (MR) implementation to verify that component and equipment failures were identified, entered, and scoped within the MR program. Selected SSCs were reviewed to verify proper categorization and classification in accordance with 10 CFR 50.65. The inspectors examined (a)(1) corrective action plans to determine if the licensee was identifying issues related to the MR at an appropriate threshold and that corrective actions were established and effective. The inspectors' review also evaluated if maintenance preventable functional failures (MPFF) or other MR findings existed that the licensee had not identified. The inspectors reviewed the licensee's controlling procedures, i.e., engineering services procedure (ES)-514, "Maintenance Rule Implementation," and the Virgil C. Summer "Important To Maintenance Rule System Function and Performance Criteria Analysis" to verify consistency with the MR requirements.

- CER 0-C-04-3262, "A" RHR pump motor breaker (XSW1DA1 06A) failed to close during attempted start per surveillance test procedure (STP)-205.004 ("B" train); and,
- CER 0-C-04-3573, "B" hydrogen recombiner failed to reach its maximum power setting during surveillance testing.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors reviewed the licensee's assessments of the risk impacts of removing from service those components associated with planned and emergent work items. The inspectors evaluated the six selected work activities listed below for: (1) the effectiveness of the risk assessments performed before maintenance activities were conducted; (2) the management of risk; (3) that, upon identification of an unforeseen situation, necessary steps were taken to plan and control the resulting emergent work activities; and (4) that emergent work problems were adequately identified and resolved. The inspectors evaluated the licensee's work prioritization and risk characterization to

determine, as appropriate, whether necessary steps were properly planned, controlled, and executed for the planned and emergent work activities listed below:

- “B” electro-hydraulic control (EHC) pump OOS for routine preventive maintenance;
- “C” channel vital inverter XIT5903 OOS due to inadvertent failure;
- “A” CCP OOS for scheduled preventive maintenance;
- Cleaning/polishing main generator exciter brushes to address observed arcing;
- Review of maintenance for week of February 14, 2005 (including emergent work for power range nuclear instrument N41A); and,
- “B” EDG OOS for emergent lube oil strainer replacement.

b. Findings

No findings of significance were identified.

1R14 Operator Performance During Non-Routine Evolutions and Events

a. Inspection Scope

The inspectors evaluated operator response and preparations for the three listed non-routine events to ensure they were appropriate and in accordance with the required procedures. The inspectors also evaluated performance and equipment problems to ensure that they were entered into the CAP.

- Inadvertent failure of vital inverter XIT5903 (CER 0-C-05-0204);
- Failure of backup controller for the feedwater heater digital control system (CER 0-C-05-0668); and,
- Failure of 10 percent of the control room annunciators due to loss of power supply (CER 0-C-05-0969).

b. Findings

Introduction. A Green non-cited violation (NCV) of TS 6.8.1.a was identified by the NRC for the failure to establish and implement procedures for responding to events involving loss of control room annunciators.

Description. On March 24, 2005, while replacing a failed time delay relay circuit board associated with Main Control Board (MCB) annunciator control panel window XCP-604-2-3, for “A” service water booster pump low discharge flow, a power supply failure occurred on annunciator panel XPN06091. This caused all annunciators supplied from the panel to go into a locked-in alarm condition. Seven separate annunciator control panel groups were impacted affecting approximately 108 “A” train equipment annunciators associated with the EDG, CCW, SW, Reactor Building Cooling Water, Spent Fuel Pool, and motor and turbine driven EFW systems. The cause of the power supply failure was later determined to be blown power supply fuses in the annunciator

panel as a result of installing a new vendor supplied time delay relay card that contained the incorrect size resistors.

Upon arriving in the control room (about 50 minutes after the initial power failure), the inspectors were told by the Control Room Supervisor (CRS) that some of the illuminated alarms might still retain their reflash capability, thus, not rendering them inoperable. However, after discussions with Instrumentation and Control (I&C) personnel, the inspectors learned that the extent of the condition rendered all the annunciators affected by the loss of power inoperable. The inspectors determined that there was miscommunication between the CRS and I&C that led to this incorrect assumption. The operators estimated that approximately 10 percent of the control room annunciators were affected by the loss of power. The inspectors confirmed that this condition did not meet the Emergency Action Level limit for an ALERT declaration (i.e., greater than 75 percent of the MCB annunciators inoperable) or SITE AREA EMERGENCY declaration (i.e., greater than 75 percent of the MCB annunciators inoperable concurrent with a reactor trip or safety injection). However, the inspectors learned that the operators had not entered any abnormal or emergency response procedure that specifically addressed response to a loss of annunciator condition, nor had they responded to the Alarm Response Procedures for the individual alarms that were illuminated since the alarms were considered invalid. The inspectors discussed whether it was prudent to consider possible compensatory actions to address the condition in lieu of the lack of procedural guidance. At this time, the CRS discussed the matter with the Shift Supervisor and began actively pursuing the formulation of actions to schedule walkdowns of the equipment areas where annunciator alarms were inoperable. Normal annunciator status was restored within three hours of the initial power loss following replacement of the annunciator panel power supply fuses without any further complications arising.

Analysis. The inspectors determined that the licensee's failure to establish and implement written procedures for responding to loss of control room annunciators was a performance deficiency because the licensee is expected to meet TS requirements for having procedures for abnormal or emergency conditions. This finding is not suitable for SDP evaluation, however, this issue has been reviewed by NRC management and is determined to be a Green finding of very low safety significance because the annunciators are an aid to control room operators to enhance human performance and the lack of specific response procedures could adversely affect the licensee's ability to monitor and control the response of mitigating system equipment. The loss of annunciators was limited to only one train of safety equipment, there was no actual loss of mitigating system equipment, and no other plant transients occurred during the time period the annunciators were inoperable.

Enforcement. TS 6.8.1.a requires, in part, that written procedures be established, implemented and maintained covering activities listed in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978, which includes procedures for abnormal, offnormal, or alarm conditions (Section 5), and procedures for combating emergencies and other significant events (Section 6). Contrary to the above, since initial plant operation, the licensee had failed to establish procedural guidance for responding to an emergency condition as defined by the licensee's EALs involving a loss of control room

annunciators. Because the finding is of very low safety significance and has been entered into the corrective action program as CER 0-C-05-1101, this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000395/2005002-01, Failure to Establish Procedures for Responding to a Loss of Control Room Annunciators Emergency Event.

#### 1R15 Operability Evaluations

##### a. Inspection Scope

The inspectors reviewed five operability evaluations affecting risk significant mitigating systems to assess, as appropriate: (1) the technical adequacy of the evaluations; (2) whether operability was properly justified and the subject component or system remained available, such that no unrecognized increase in risk occurred; (3) whether other existing degraded conditions were considered; (4) where compensatory measures were involved, whether the compensatory measures were in place, would work as intended, and were appropriately controlled; and (5) the impact on TS limiting conditions for operations and the risk significance in accordance with the NRC's Significance Determination Process (SDP). Also, the inspectors verified that the operability evaluations were performed in accordance with station administrative procedure (SAP)-1131, "Corrective Action Program."

- CER 0-C-05-0069, unexpected trip of pressurizer group #2 control bank heaters;
- CERs 0-C-05-0204 and 0-C-05-0374, capacitor failures associated with vital inverter XIT5903;
- CER 0-C-05-0433, "B" motor driven EFW pump service water suction valve (XVC01013B-EF) failure to fully seat during testing;
- CER 0-C-05-0669, digital rod position indication non-urgent alarm while reducing plant load; and,
- CER 0-C-05-0993, high differential pressure on "B" EDG lube oil strainer during surveillance testing.

##### b. Findings

No findings of significance were identified.

#### 1R19 Post-Maintenance Testing

##### a. Inspection Scope

For the seven maintenance activities listed below, the inspectors reviewed the associated post-maintenance testing (PMT) procedures and witnessed either the testing and/or reviewed test records to assess whether: (1) the effect of testing on the plant had been adequately addressed by control room and/or engineering personnel; (2) testing was adequate for the maintenance performed; (3) test acceptance criteria were clear and adequately demonstrated operational readiness consistent with design and licensing basis documents; (4) test instrumentation had current calibrations, range, and

accuracy consistent with the application; (5) tests were performed as written with applicable prerequisites satisfied; (6) jumpers installed or leads lifted were properly controlled; (7) test equipment was removed following testing; and (8) equipment was returned to the status required to perform its safety function. The inspectors verified that these activities were performed in accordance with general test procedure (GTP)-214, "Post Maintenance Testing Guideline."

- PMT for quarterly preventive maintenance on "B" EDG;
- PMT for Limitorque inspection on XVG03001A-0-SP, refueling water storage tank reactor building spray pump "A" suction valve;
- MWR 502304; PMT for intermittent N41 Channel Deviation Alarm;
- MWR 503527; PMT for digital rod position indication non-urgent alarm receipt;
- MWRs 416157, 420430, and 419069; PMT for scheduled mechanical and electrical preventive maintenance on "A" CCW pump;
- PMT for "A" chilled water pump using STP-229.001 following scheduled preventive maintenance; and,
- MWR 50517, PMT for replacing lube oil strainer on "B" EDG.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

For the six surveillance tests listed below, the inspectors examined the test procedure and either witnessed the testing and/or reviewed test records to determine whether the scope of testing adequately demonstrated that the affected equipment was functional and operable:

- STP-125.002B, "Diesel Generator B Operability Test;"
- STP-220.001A, "Motor Driven Emergency Feedwater Pump and Valve Test," Train "B;"
- STP-345.037, "Solid State Protection System Actuation Logic and Master Relay Test (Train "A");"
- STP-396.012, "Emergency Feed Pump Suction Pressure II Instrument (IPT03633) Operator Test," and STP-396.13, "Emergency Feed Pump Suction Pressure III Instrument (IPT03634) Operator Test;"
- STP-106.001, "Moveable Rod Insertion Test;" and,
- STP-125.009, "Diesel Generator B 24-Hour Load Test."

b. Findings

No findings of significance were identified.

## Cornerstone: Emergency Preparedness

### 1EP6 Drill Evaluation

#### a. Inspection Scope

On March 16, 2005, the inspectors reviewed and observed the performance of a simulator drill that involved loss of both RHR trains in reduced RCS inventory conditions which required an Alert to be declared (LOR-ST-055E). The inspectors assessed emergency procedure usage, emergency plan classification, notifications and the licensee's identification and entrance of any problems into their CAP. This inspection evaluated the adequacy of the licensee's conduct of the drill and critique performance.

#### b. Findings

No findings of significance were identified.

## 4. OTHER ACTIVITIES

### 4OA2 Identification and Resolution of Problems (PI&R)

#### .1 Daily Screening of Corrective Action Items

##### a. Inspection Scope

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 CERs, or accessing the licensee's computerized corrective action database and reviewing each CER that was initiated.

##### b. Findings and Observations

No findings of significance were identified.

#### .2 Annual Sample Review

##### a. Inspection Scope

The inspectors reviewed two issues in detail to evaluate the effectiveness of the licensee's corrective actions for important safety issues documented in CER 0-C-04-3386, CER 0-C-05-0299, and CER 0-C-04-3856. The first two CERs were associated with an operator error resetting the "A" train Engineered Safety Features (ESF) loading sequencer self-test circuitry resulting in an inadvertent safety system actuation and the third CER was associated with the "C" SW pump motor breaker failure to close. The inspectors assessed whether the issues were identified in a timely manner; documented

accurately and completely; properly classified and prioritized; adequately considered extent of condition, generic implications, common cause, and previous occurrences; adequately identified root causes/apparent causes; and, identified appropriate corrective actions. Also, the inspectors verified the issues were processed in accordance with SAP-1131, "Corrective Action Program."

b. Findings and Observations

No findings of significance were identified.

CERs 0-C-04-3386 and 0-C-05-0299: The inspectors noted that the licensee's review was thorough and the corrective actions were appropriate.

CER 0-C-04-3856: The licensee's investigation identified that the 7.2 kilovolt (kV) General Electric (GE) Magne-Blast circuit breaker for the "C" SW pump motor failed to close on December 13, 2004, due to failure of the breaker's Close Latch Monitoring Switch. The contacts in this switch were found partially vaporized which prevented the charging spring motor from charging the breaker closure springs. The licensee determined that other problems with this GE type CR2940 contact block switch (involving high contact resistance) had been experienced throughout the industry since 1996. The CER stated that the intended corrective actions was to replace the three most challenged switches in all 7.2 kV breakers once replacement parts from the vendor were acquired.

The inspectors identified several weaknesses with the CER documentation as follows:

- The CER was screened (for significance) as a "4," for an enhancement or "find and fix" issue; however, it met the licensee's definition for a higher significance issue, in that, it involved potentially common cause failures with all 7.2 kV safety-related breakers which use this same switch;
- The "Other Components/Systems and Areas Affected" block was answered as "No" versus "Yes;"
- The operability section only addressed the "C" SW pump breaker and not the other equipment using the same 7.2 kV breakers with these switches; and,
- Key corrective actions provided in an attached document to the CER were not specified as separate "Action Items" with individual due dates, which prevented each action from being tracked to completion.

The licensee reclassified the CER as a significance Category 3 issue and initiated CERs 0-C-05-1082 and 0-C-05-1098 to address the inspector's concerns with the quality of the CER documentation.

4OA3 Event Followup

- .1 (Closed) Licensee Event Report (LER) 50-395/2004-003-00: Safety System Actuation Due to Inadvertent Actuation of 1DA Undervoltage Test Switch

The inspectors reviewed the subject LER that assessed the cause and corrective actions for the October 26, 2004, inadvertent safety system actuation. This event was caused by a human performance error when an operator inadvertently actuated the "A" train ESF loading sequencer undervoltage rest toggle switch while attempting to reset the sequencer self-test circuitry following the completion of a maintenance run on the "A" EDG. This caused a bus undervoltage signal to be initiated, which tripped the normal and alternate feeder breakers supplying the safety-related 7.2 kV switchgear bus 1DA, and resulted in the automatic start of the "A" train EDG and other related ESF equipment. This issue was previously reviewed in Section 1R14 of NRC Integrated Inspection Report 05000395/2004005 and was the subject of a Green self-revealing NCV of TS 6.8.1.a for operator failure to follow procedures resulting in an inadvertent safety system actuation. No additional findings of significance were identified during this review.

.2 (Closed) LER 50-395/2004-003-00: Safety System Actuation Due to Inadvertent Actuation of 1DA Undervoltage Test Switch - Supplement 1

The inspectors reviewed the subject LER supplement that assessed the cause and corrective actions for the October 26, 2004, safety system actuation. The licensee supplemented this LER to provide additional details of the root cause for the personnel error which caused the event. No additional findings of significance were identified during this review.

40A6 Meetings, Including Exit

.1 Exit Meeting Summary

The inspectors presented the inspection results to Mr. Thomas Gatlin and other members of the licensee staff on April 5, 2005. The inspectors asked the licensee whether any of the material examined during the inspection should be considered proprietary. No proprietary information was identified.

.2 Annual Assessment Meeting Summary

On March 23, 2005, the NRC Chief of Reactor Projects Branch 5 met with South Carolina Electric and Gas Company to discuss the NRC's Reactor Oversight Process (ROP) and the Virgil C. Summer Nuclear Station annual assessment of safety performance for the period of January 1, 2004 - December 31, 2004. The major topics addressed were the NRC's assessment program and the results of the Virgil C. Summer assessment. Attendees included Virgil C. Summer site management, members of site staff, and a representative of Santee Cooper.

This meeting was open to the public. The presentation material used for the discussion is available from the NRC's document system (ADAMS) as accession number ML051030208. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).



## SUPPLEMENTAL INFORMATION

### KEY POINTS OF CONTACT

#### Licensee

J. Archie, Vice President, Nuclear Plant Operations  
F. Bacon, Manager, Chemistry Services  
L. Blue, Manager, Health Physics Services  
M. Browne, Manager, Quality Systems  
R. Clary, Manager, Nuclear Licensing  
M. Findlay, Manager, Nuclear Protection Services  
M. Fowlkes, General Manager, Engineering Services  
T. Franchuk, Supervisor, Quality Assurance  
S. Furstenberg, Manager, Nuclear Operations Training  
D. Gatlin, General Manager, Nuclear Plant Operations  
D. Lavigne, General Manager, Organization Effectiveness  
G. Lippard, Manager, Operations  
J. Nesbitt, Manager, Materials and Procurement  
K. Nettles, General Manager, Nuclear Support Services  
W. Stuart, Manager, Plant Support Engineering  
R. Sweet, Supervisor, Nuclear Licensing  
A. Torres, Manager, Planning / Scheduling and Project Management  
S. Zarandi, Manager, Maintenance Services

### ITEMS OPENED, CLOSED, AND DISCUSSED

#### Opened and Closed

05000395/2005002-01	NCV	Failure to Establish Procedures for Responding to a Loss of Control Room Annunciators Emergency Event (Section 1R14)
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#### Closed

05000395/2004-003-00	LER	Safety System Actuation Due to Inadvertent Actuation of 1DA Undervoltage Test Switch (Section 4OA3.1)
05000395/2004-003-01	LER	Safety System Actuation Due to Inadvertent Actuation of 1DA Undervoltage Test Switch - Supplement 1 (Section 4OA3.2)

#### Discussed

None

## LIST OF DOCUMENTS REVIEWED

### **Section 1R04: Equipment Alignment**

FSAR Sections 9.3.4, 8.3.1, and 9.2.2  
 SOP-102, "Chemical and Volume Control System"  
 SOP-306, "Emergency Diesel Generator"  
 SOP-118, "Component Cooling Water"  
 TS 3/4.5.2, ECCS Subsystems  
 TS 3/4.7.3, Component Cooling Water System  
 TS 3/4.8.1, A.C. Sources  
 Design Basis Documents for EDG, CVCS, and CCW systems  
 CER Database for EDG, CVCS, and CCW systems

## LIST OF ACRONYMS

CAP	Corrective Action Program
CER	Condition Evaluation Report
CFR	Code of Federal Regulations
CCP	Centrifugal Charging Pump
CCW	Component Cooling Water
CRS	Control Room Supervisor
EDG	Emergency Diesel Generator
EFW	Emergency Feedwater
EHC	Electro-Hydraulic Control
ES	Engineering Services Procedure
ESF	Engineered Safety Feature
FSAR	Final Safety Analysis Report
GTP	General Test Procedure
HVAC	Heating, Ventilation, and Air-Conditioning
I&C	Instrumentation and Control
IMC	Inspection Manual Chapter
kV	kilovolt
LER	Licensee Event Report
MCB	Main Control Board
MPFF	Maintenance Preventable Functional Failures
MR	Maintenance Rule
MWR	Maintenance Work Request
NCV	Non-cited Violation
NRC	Nuclear Regulatory Commission
OOS	Out-of-service
PMT	Post-Maintenance Testing
PI&R	Problem Identification and Resolution
RCS	Reactor Coolant System
RHR	Residual Heat Removal

ROP	Reactor Oversight Process
RTP	Rated Thermal Power
SAP	Station Administrative Procedure
SDP	Significance Determination Process
SOP	System Operating Procedure
SSC	Structures, Systems and Components
STP	Surveillance Test Procedure
SW	Service Water
TS	Technical Specifications