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

April 27, 2010

Mr. Thomas D. Gatlin
Vice President
South Carolina Electric & Gas Company
Virgil C. Summer Nuclear Station
P.O. Box 88
Jenkinsville, SC 29065

SUBJECT: VIRGIL C. SUMMER NUCLEAR STATION - NRC INTEGRATED INSPECTION REPORT 05000395/2010002

Dear Mr. Gatlin:

On March 31, 2010, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Virgil C. Summer Nuclear Station. The enclosed integrated inspection report documents the inspection results, which were discussed on April 15, 2010, with Mr. George Lippard, General Manager, Nuclear Plant Operations, 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, no findings of significance were identified. However, two licensee-identified violations which were determined to be of very low safety significance are listed in this report. NRC is treating these violations as non-cited violations (NCVs) consistent with Section VI.A.1 of the NRC Enforcement Policy because of the very low safety significance of the violations and because they are entered into your corrective action program. If you contest these non-cited violations, 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 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/

Gerald J. McCoy, Chief
Reactor Projects Branch 5
Division of Reactor Projects

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

Enclosure: Inspection Report 05000395/2010002
w/Attachment: Supplemental Information

cc w/encl: (See page 3)

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).

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Letter to Thomas D. Gatlin from Gerald J. McCoy, dated April 27, 2010

SUBJECT: VIRGIL C. SUMMER NUCLEAR STATION - NRC INTEGRATED INSPECTION REPORT 05000395/2010002

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 50-395

License No.: NPF-12

Report No.: 05000395/2010002

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, 2010 through March 31, 2010

Inspectors: J. Zeiler, Senior Resident Inspector
J. Policikoski, Resident Inspector
J. Dodson, Senior Project Engineer (Sections 1R12, 4OA2, and 4OA7)

Approved by: Gerald J. McCoy, Chief
Reactor Projects Branch 5
Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000395/2010-002; 01/01/2010 - 03/31/2010; Virgil C. Summer Nuclear Station; Routine Integrated Inspection Report.

The report covered a 3-month period of inspection by resident inspectors and a regional senior project engineer**.** No findings of significance were identified by the NRC. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealing Findings

No findings of significance were identified.

B. Licensee-Identified Violations

Violations of very low safety significance that were identified by the licensee have been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. These violations and corrective action tracking numbers are listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

The unit began the inspection period at full Rated Thermal Power (RTP). The unit operated at or near RTP for the entire inspection period except for a power reduction to 15 percent power on February 4, 2010, to take the main generator offline for repair of the bus side disconnect switch for switchyard breaker XCB8902. The unit returned to 100 percent power on February 6, 2010.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather Protection

a. Inspection Scope

The inspectors performed an impending adverse weather readiness inspection for extreme cold weather in response to several days of low temperatures from January 9-12, 2010. The inspectors verified that the licensee had implemented applicable sections of operations administrative procedure (OAP)-109.1, Revision 3A, "Guidelines for Severe Weather." The inspectors walked down the condensate storage tank (CST) and refueling water storage tank (RWST) level instrumentation, the auxiliary and radioactive waste building, and selected heat trace and freeze protection alarm panels to assess whether the equipment was adequately protected from cold weather and was functioning as expected.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

a. Inspection Scope

The inspectors conducted three partial equipment alignment walkdowns which are 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 orders (WOs) and related condition reports (CRs) to verify that the licensee had properly identified and resolved equipment alignment problems that could lead to the initiation of an event or impact mitigating system availability. Documents reviewed are listed in the Attachment.

- 'A' emergency diesel generator (EDG) while 'B' EDG was OOS for emergent maintenance
- 'B' EDG while 'A' EDG was OOS for emergent maintenance

- 'A' control room ventilation while 'B' control room ventilation was OOS for scheduled maintenance

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors reviewed recent CRs, WOs, and impairments associated with the fire protection 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 five areas (respective fire zones also noted):

- 1DB safety-related switchgear rooms (fire zones IB-16, IB-17 and IB-22.2)
- Diesel generator rooms 'A' and 'B' (fire zones DG-1.1/1.2 and DG-2.1/2.2)
- Heating, Ventilation and Air Conditioning (HVAC) chilled water pump rooms 'A' and 'B' (fire zones IB-7.2, IB-9 and IB-23.1)
- Battery and charger rooms 'A' and 'B' (fire zones IB-2, 3, 4, 5, 6)
- Intermediate building 463 elevation west penetration (fire zone IB-25.9)

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program

a. Inspection Scope

On February 2, 2010, the inspectors observed the performance of senior reactor operators and reactor operators on the plant simulator during licensed operator requalification training. The scenario (LOR-SA-005) involved turbine first stage pressure instrument failure, nuclear instrument channel failure, a design basis loss of coolant accident (LOCA) with the failure of the reactor to automatically trip and perform a safety injection. The inspectors assessed overall crew performance, communications, oversight of supervision, and the evaluators' critique. The inspectors verified that any significant training issues were appropriately captured in the licensee's CAP.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

a. Inspection Scope

The inspectors evaluated three equipment issues described in the CRs listed below to verify the licensee's effectiveness with the corresponding preventive or corrective maintenance associated with structures, systems, and 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 the licensee's 10 CFR 50.65(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 (MPFFs) 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, Revision 4, "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.

- CR-09-04033, Turbine driven emergency feedwater pump (TDEFWP) failed full flow test
- CR-09-04513, Pressurizer level transmitter (ILT-00460) found out of tolerance
- CR-09-05208, CR-09-05602, CR-10-00410, Diesel driven air compressor failed to start due to dead batteries and MR(a)(1) goal setting established

b. Findings

The enforcement aspects associated with CR-09-04033 are discussed in Section 4OA7. No other findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors evaluated, as appropriate, for the six selected work activities listed below: (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.

- Work Week 2010-02: Risk assessment for scheduled maintenance and testing on 'B' service water (SW) pump (yellow risk), 'B' SW booster pump, 'B' reactor building (RB) spray pump, and the 1DB engineered safety features (ESF) switchgear cooling

unit and emergent maintenance to replace the reactor building cooling unit (RBCU) SW discharge valve (XVB-03107B)
- Work Week 2010-05: Risk assessment for scheduled maintenance and testing on switchyard modifications to relocate Parr Line #2 (yellow risk), the electric fire service pump, 'B' residual heat removal (RHR) pump (yellow risk) and emergent maintenance on the 'B' EDG speed lower relay
- Work Week 2010-06: Risk assessment for scheduled maintenance and testing on switchyard activities for relocation of Parr Line #2 (yellow risk), 'C' charging and safety injection pump, reactor coolant system (RCS) Delta-T and Tavg loop calibration, and 'B' train solid state protection system (SSPS) testing and emergent maintenance to repair the bus side disconnect switch for switchyard breaker XCB8902 following a downpower to 15 percent and taking the main generator offline
- Work Week 2010-07: Risk assessment for emergent maintenance, post maintenance, and surveillance testing on 'A' and 'B' emergency diesel generators (EDG) (yellow risk)
- Work Week 2010-10: Risk assessment for scheduled maintenance and testing for the relocation of the Parr Line #2 (yellow risk), 'B' train SW to emergency feedwater (EFW) cross-connect test, and Bus #3 outage removing one of two ESF power sources (yellow risk)
- Work Week 2010-11: Risk assessment for scheduled maintenance and testing for the switchyard Bus #2 outage and related relay house work (yellow risk), replacement of the 'A' feedwater isolation valve pilot tank pressure gauge, replacement of the reactor trip breakers (work later cancelled) and 'A' train SSPS testing

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed five operability evaluations listed below, 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) that the licensee considered other degraded conditions and their impact on compensatory measures for the condition being evaluated; and, (5) the impact on TS limiting conditions for operations and the risk significance in accordance with the significance determination process. Also, the inspectors verified that the operability evaluations were performed in accordance with station administrative procedure (SAP)-209, Revision 0E, "Operability Determination Process," and SAP-999, Revision 4C, "Corrective Action Program."

- CR-10-00045, 'A' train extent of condition operability review (XVB-3107A-SW) following XVB-3107B-SW exceeding its allowed stroke time during surveillance testing
- CR-10-00263, RCS Loop 'B' Tavg reading lower than actual Tavg
- CR-10-00343, XVB-3107B-SW failed stroke test

- CR-10-00545, high temperature on switchyard disconnect switch 8901
- CR-10-00632, 'A' EDG inoperable due to attached jacket water pump shift water seal leak

b. Findings

No findings of significance were identified.

1R18 Plant Modifications

.1 Temporary Modification

a. Inspection Scope

For the equipment change listed below that was considered a temporary modification, the inspectors evaluated the changes for adverse effects on system availability, reliability, and functional capability. Documents reviewed, as applicable, included associated 10 CFR 50.59 reviews, engineering calculations, WOs and implementation packages, plant electrical drawings, corrective action documents, applicable sections of the FSAR, supporting analyses, TS, and design basis information.

- Digital rod position indication (DRPI) troubleshooting plan (via MWR 1000013) to temporarily install a data logging maintenance computer and install electrical grounds between the main control board and the DRPI display consoles

b. Findings

No findings of significance were identified.

.2 Permanent Modification

a. Inspection Scope

The inspectors reviewed a permanent modification associated with the RBCU SW discharge valve (XVB03107B) actuator replacement to evaluate the changes for adverse effects on system availability, reliability, and functional capability. Documents reviewed included engineering change request (ECR) implementation procedures, modification design and implementation packages, engineering calculations, WOs, site drawings, applicable sections of the FSAR, supporting 10 CFR 50.59 evaluations, TS, and design basis information. The inspectors witnessed aspects of the modification implementation and observed aspects of post-modification testing to verify adequate testing of the changes.

The inspectors evaluated the change documents and associated 10 CFR 50.59 reviews against the system design basis documentation and FSAR to verify that the changes did not adversely affect the safety function of safety systems.

The permanent modification and the associated attributes reviewed are as follows:

ECR 50567L, RBCU SW discharge valve (XVB03107B) actuator replacement;

- Licensing Basis;
- Failure Modes;
- Energy Needs;
- Control Signals;
- Timing;
- Plant Document Updating;
- Operations;
- Flow paths;
- Implementation;
- Post Modification Testing; and
- Operability/Surveillance Testing.

The inspectors also reviewed selected CRs associated with the modification to confirm that problems were identified at an appropriate threshold, were entered into the CAP, and appropriate corrective actions had been initiated.

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing

a. Inspection Scope

For the six maintenance activities listed below, the inspectors reviewed the associated post-maintenance testing (PMT) procedures and either witnessed 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, Revision 5A, “Post Maintenance Testing Guideline.”

- MWR 1000223, PMT for ‘B’ RBCU SW discharge isolation valve following replacement with Cycle 17 Generation I valve
- MWR 0914751, PMT for ‘B’ RHR pump following scheduled preventive maintenance
- MWR 1001045, PMT for ‘B’ EDG following failure to unload during routine surveillance testing
- MWR 1000013, PMT for troubleshooting for potential panel grounding issues and display flicker with the DRPI system
- MWR 0915933, 0915934, 0515935, PMT for tuning of the feedwater regulating valve (FRV) digital valve controllers (DVCs)
- MWR 1003104, PMT for troubleshooting for potential ‘A’ reactor trip bypass breaker X4A relay degradation

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors observed and/or reviewed the six surveillance test procedures (STPs) listed below to verify that TS surveillance requirements were followed and that test acceptance criteria were properly specified to ensure that the equipment could perform its intended safety function. The inspectors verified that proper test conditions were established as specified in the procedures, that no equipment preconditioning activities occurred, and that acceptance criteria were met.

In-Service Tests:

- STP-125.002B, Revision 1I, "Diesel Generator B Operability Test," during TS common mode failure operability test;
- STP-223.002A, Revision 9A, "Service Water Pump Test," for increased frequency testing of XVB03107A;
- STP-302.002, Revision 13A, "Delta T-Tavg Protection Loop B Operational Test Critical Surveillance Test Category I";
- STP-345.037, Revision 18, "Solid State Protection System Actuation Logic and Master Relay Test," Train 'A'; and
- STP-220.001A, Revision 9, "Motor Driven Emergency Feedwater Pump and Valve Test."

Other Surveillance Tests:

- STP-109.001, Revision 9F, "Reactor Building Closeout Inspection"

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation

a. Inspection Scope

On February 2, 2010, the inspectors reviewed and observed the performance of an emergency planning simulator drill that involved a turbine first stage pressure transmitter failure and failure of the N-43 nuclear instrument followed by design basis LOCA (LOR-SA-005). The inspectors assessed emergency procedure usage, emergency plan classifications, notifications, and protective action recommendation development. The inspectors evaluated the adequacy of the licensee's conduct of the drill and critique performance. The inspectors verified that the drill critique identified drill performance weaknesses and entered these items into the licensee's CAP.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

Cornerstone: Mitigating Systems

a. Inspection Scope

The inspectors verified the accuracy of the licensee's PI submittals listed below for the period January 1, 2009 through December 31, 2009. The inspectors used the performance indicator definitions and guidance contained in NEI 99-02, Revision 6, "Regulatory Assessment Performance Indicator Guideline," and licensee procedure SAP-1360, Revision 1, "NRC and INPO/WANO Performance Indicators," to check the reporting of each data element. The inspectors sampled licensee event reports (LERs), operator logs, tagout records, plant risk records, plant status reports, CRs, and performance indicator data sheets to verify that the licensee had properly reported the PI data. Also, the inspectors discussed the PI data with the licensee personnel associated with the performance indicator data collection and evaluation.

- Unplanned Scrams per 7000 Critical Hours
- Unplanned Power Changes per 7000 Critical Hours
- Unplanned Scrams with Complications

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

.1 Review of Items Entered into the Corrective Action Program

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 CAP. This review was accomplished by either attending daily screening meetings that briefly discussed major CRs, or accessing the licensee's computerized corrective action database and reviewing each CR that was initiated.

b. Findings

No findings of significance were identified.

.2 Annual Sample Reviews

Quarterly Sample Review

a. Inspection Scope

The inspectors reviewed the issue listed below in detail to evaluate the effectiveness of the licensee's corrective actions for important safety issues.

- CR-09-05567, Steam dumps failed to actuate following a manual turbine trip and reactor trip

The inspectors assessed whether the issues were identified; 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 procedure SAP-999, Revision 4C, "Corrective Action Program."

b. Findings and Observations

The inspectors identified one weakness with the licensee's documentation and investigation with the CR reviewed. This CR reviewed the event on December 16, 2009, where the licensee performed a downpower from 100 percent to approximately 45 percent power to perform a main turbine trip and effect repairs to #4 turbine control valve. Following the planned main turbine trip, the steam dumps failed to actuate necessitating a manual reactor trip due to the transient induced on the RCS. The condition evaluation, corrective actions, and review of additional CRs related to the turbine and reactor trip revealed the weakness that an Unplanned Power Change PI, as defined by NEI 99-02, Revision 6, "Regulatory Assessment Performance Indicator Guideline," was not reported to the NRC from the above event for the fourth quarter of 2009. Additionally, the inspectors performed an extent of condition review for related PI reporting concerns, and the licensee did not identify the downpower from 100 percent to 15 percent on February 4-6, 2010 within the licensee performance indicator data sheets. The inspectors evaluated this issue using the IMC 0612, Appendix B Screening Process as a minor issue and therefore it does not need to be documented as a non-cited violation. This issue resulted in the first unplanned power change and more than six unplanned power changes are required to change the color of the PI to white. The licensee documented this weakness in their CAP as CR-10-01397.

4OA3 Event Followup

.1 (Closed) LER 05000395/2009004-00: Manual Reactor Trip Due to Main Steam Dump System Fault

The inspectors reviewed the subject LER and applicable condition report (CR-09-05566) associated with the issue to verify the LER accuracy and appropriateness of the specified corrective actions. The cause of the main steam dump system failure was determined by the licensee to be a failed circuit card. The licensee replaced the card, successfully conducted post maintenance testing, and placed the card in the station's

preventative maintenance program. No findings of significance were identified. This LER is closed.

.2 (Closed) LER 05000395/2009001-00: Inadequate Procedure Results in EDG not Obtaining Maximum Load Required by Technical Specification

The inspectors reviewed the subject LER and applicable condition report (CR-09-03120) associated with the issue to verify the LER accuracy and appropriateness of the specified corrective actions. The cause of the EDG not obtaining 110 percent of rated load for two hours as required by TS was determined by the licensee to be that the 'B' EDG fuel rack stop was set too low due to an inadequate mechanical maintenance procedure. The licensee adjusted the fuel rack stop, successfully conducted post maintenance testing, and satisfactorily completed 'B' EDG surveillance testing. The enforcement aspects of this finding are discussed in Section 4OA7. No other findings of significance were identified. This LER is closed.

4OA5 Other Activities

Quarterly Resident Inspector Observations of Security Personnel and Activities

a. Inspection Scope

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

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

b. Findings

No findings of significance were identified.

4OA7 Licensee-Identified Violations

The following violations of very low safety significance (Green) were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC enforcement Policy, NUREG-1600, for being dispositioned as an NCV.

- 10 CFR 50 Appendix B, Criterion XI, Test Control requires, in part, that written test procedures incorporate the requirements and acceptance limits contained in the applicable design documents. Contrary to this, on October 16, 2009, the licensee identified that the acceptance criteria for the TDEFWP were not correct when the TDEFWP failed the full flow surveillance test. As a result, the TDEFWP was declared inoperable. The violation was determined to be of very low safety significance because, when the evaluation was performed, the existing acceptance criteria were coincidentally conservative, and the pump was within the design basis margin limits. The licensee performed calculations and revised

the acceptance criteria within the surveillance test procedure. The licensee addressed this issue in the corrective action program as condition report CR-09-04033.

- TS 3.8.1.1 Electrical Power Systems, Alternating Current (AC) Sources for Modes 1-4 requires, in part, that the two separate and independent EDGs shall be loaded to an indicated target value of 4676 kW (between 4600-4700 kW) and maintained for 2 hours during a 24 hour run at least once every 18 months (Surveillance Requirement (SR) 4.8.1.1.2.g.7.a). Contrary to this, on August 12, 2009, the licensee identified during surveillance testing that the 'B' EDG "as-found" maximum loading was 4575 kW, and 'B' EDG could not be operated within the maximum TS specified load range. As a result, 'B' EDG was declared inoperable. The violation was determined to be of very low safety significance because 'B' EDG was able to meet the design basis limiting, largest short term load (less than two hours) of 4390 kW. The licensee adjusted the fuel rack stop, completed the surveillance test satisfactorily, and revised the mechanical maintenance procedure to address loading measurement instrumentation and the post maintenance test loading range. The licensee addressed this issue in the corrective action program as CR-09-03120.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

J. Archie, Senior Vice President, Nuclear Operations
L. Bennett, Manager, Plant Support Engineering
L. Blue, Manager, Nuclear Training
M. Browne, Manager, Quality Systems
M. Coleman, Manager, Health Physics and Safety
A. Cribb, Supervisor, Nuclear Licensing
G. Douglass, Manager, Nuclear Protection Services
M. Fowlkes, General Manager, Engineering Services
D. Gatlin, Vice President, Nuclear Operations
R. Haselden, General Manager, Organizational / Development Effectiveness
M. Jordan, HP Supervisor, Rad Waste
R. Justice, Manager, Nuclear Operations
G. Lippard, General Manager, Nuclear Plant Operations
M. Mosley, Manager, Chemistry Services
J. Nesbitt, Manager, Materials and Procurement
D. Shue, Manager, Maintenance Services
W. Stuart, Manager, Design Engineering
B. Thompson, Manager, Nuclear Licensing
R. Williamson, Manager, Emergency Planning
S. Zarandi, General Manager, Nuclear Support Services

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Closed

05000395/2009004-00	LER	Manual Reactor Trip Due to Main Steam Dump System Fault (Section 4OA3.1)
05000395/2009001-00	LER	Inadequate Procedure Results in EDG not Obtaining Maximum Load Required by Technical Specification (Section 4OA3.2)

LIST OF DOCUMENTS REVIEWED

Section 1R04: Partial Equipment Alignment

Procedures and Drawings

SOP 306, Revision 17H, Emergency Diesel Generator
SOP 505, Revision 10C, Control Building Ventilation System
D-912-140, Revision 29, Control Room Normal and Emergency Air Handling System

Section 1R12: Maintenance Effectiveness

STP-220.008A, Turbine Driven Emergency Feedwater Pump Full Flow Test, Rev. 6, October 20, 2008
STP-220.008A, Turbine Driven Emergency Feedwater Pump Full Flow Test, Rev. 6A, October 8, 2009
STP-220.008A, Turbine Driven Emergency Feedwater Pump Full Flow Test, Rev. 6B, October 16, 2009
SAP-1356, Cause Determination, Rev. 2
ES-523, Functional Importance Determination (FID) Process, Rev. 1
CR-04-03120, STP-220.008A, Turbine Driven Emergency Feedwater Pump Full Flow Test
CR-06-03894, During RF-15 smart transmitters were installed during Emergency Feedwater pump in-service testing

Condition Reports Initiated for NRC Identified Issues

CR-10-00302, Fire/steam door (CRIB/105) design does not close under its own power
CR-10-00683, 'A' and 'B' EDG ventilation ductwork and registers have noticeable debris
CR-10-00773, 'C' air start compressor discharge valve for 'B' EDG leaking oil
CR-10-00929, Nameplate is missing from the 'A' SW pump upper oil bearing sight glass
CR-10-01369, 'C' Steam generator motor driven emergency feedwater pump supply stop check valve (XVK01019C-EF) has a pressure seal leak between the body and bonnet
CR-10-01397, Licensee and Operations department did not report the December 16, 2009, unplanned power change to the NRC for the 2009 4Q PI's and did not report the February 2010 unplanned power change internally
CR-10-01579, Out of sequence Maintenance Rule (MR) evaluations caused accounting error in performing MR(a)(1) applicability review

LIST OF ACRONYMS

AC	Alternating-Current
ADAMS	Agency Document Access and Management System
CAP	Corrective Action Program
CFR	Code of Federal Regulations
CR	Condition Report
CST	Condensate Storage Tank
DG	Diesel Generator
DRPI	Digital Rod Position Indication
DVC	Digital Valve Controller
ECR	Engineering Change Request
EDG	Emergency Diesel Generator
EFW	Emergency Feedwater
ES	Engineering Services Procedure
ESF	Engineered Safety Features
FRV	Feedwater Regulating Valve
FSAR	Final Safety Analysis Report
GTP	General Test Procedure
HVAC	Heating, Ventilation, and Air Conditioning
IB	Intermediate Building
INPO	Institute of Nuclear Power Operations
IR	Inspection Report
LER	Licensee Event Report
LOCA	Loss of Coolant Accident
MPFF	Maintenance Preventable Functional Failure
MR	Maintenance Rule
MWR	Maintenance Work Request
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
NUREG	NRC Technical Report Designation
OAP	Operations Administrative Procedure
OOS	Out of Service
PARS	Publicly Available Records
PI	Performance Indicator
PMT	Post-Maintenance Testing
RB	Reactor Building
RBCU	Reactor Building Cooling Units
RCS	Reactor Coolant System
RHR	Residual Heat Removal
RTP	Rated Thermal Power
RWST	Refueling Water Storage Tank
SAP	Station Administrative Procedure
SCE&G	South Carolina Electric and Gas
SOP	System Operating Procedure
SR	Surveillance Requirement
SSC	System, Structures, and Components
SSPS	Solid State Protection System
STP	Surveillance Test Procedure

SW	Service Water
TDEFWP	Turbine Driven Emergency Feedwater Pump
TS	Technical Specification
WANO	World Association of Nuclear Operators
WO	Work Order