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

January 24, 2006

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

SUBJECT: VIRGIL C. SUMMER NUCLEAR STATION - NRC INTEGRATED INSPECTION REPORT 05000395/2005005

Dear Mr. Archie:

On December 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 January 13, 2006, with Mr. Jeff Archie 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.

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 05000395/2005005
w/Attachment: Supplemental Information

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.:	50-395
License No.:	NPF-12
Report No.:	05000395/2005005
Licensee:	South Carolina Electric & Gas (SCE&G) Company
Facility:	Virgil C. Summer Nuclear Station
Location:	P. O. Box 88 Jenkinsville, SC 29065
Dates:	October 1, 2005 - December 31, 2005
Inspectors:	J. Zeiler, Senior Resident Inspector M. Cain, Resident Inspector K. VanDoorn, Senior Reactor Inspector, RII (Sections 1R02, 1R17) R. Taylor, Reactor Inspector, RII (Sections 1R02, 1R17) C. Peabody, Reactor Inspector, RII (Sections 1R02, 1R17)
Approved by:	K. D. Landis, Chief Reactor Projects Branch 5 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000395/2005005; 10/01/2005 - 12/31/2005; Virgil C. Summer Nuclear Station; Routine Integrated Report.

The report covered a three-month period of inspection by resident inspectors and one announced inspection by regional inspectors. No findings of significance were identified by the NRC. 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

No findings of significance were identified.

B. Licensee-Identified Violations

None.

Enclosure

REPORT DETAILS

Summary of Plant Status

The unit began the inspection period at 100 percent rated thermal power (RTP). On November 8, power was reduced to 97 percent following malfunction of the air operated 1A high pressure feedwater heater level control valve that caused heater level perturbations. That same day, power was reduced to 80 percent in order to remove the 1A feedwater heater from service in order to effect repairs of the valve. The plant returned to 100 percent RTP on November 9 and operated at full power for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather Protection

a. Inspection Scope

The inspectors performed one adverse weather inspection for readiness of cold weather. The inspectors verified the licensee had implemented applicable sections of operations administrative procedure (OAP)-109.1, "Guidelines for Severe Weather." The inspectors walked down accessible area of risk-significant equipment, including level instrumentation associated with the refueling water storage tank (RWST), condensate storage tank, sodium hydroxide tank, and reactor makeup water storage tank, to assess whether the equipment was adequately protected from cold weather conditions. Also, the inspectors reviewed the licensee's corrective action program (CAP) database to verify that freeze protection problems were being identified at the appropriate level, entered into the CAP, and appropriately resolved.

b. Findings

No findings of significance were identified.

1R02 Evaluations of Changes, Tests or Experiments

a. Inspection Scope

The inspectors reviewed selected samples of evaluations to confirm that the licensee had appropriately considered the conditions under which changes to the facility, Final Safety Analysis Report (FSAR), or procedures may be made, and tests conducted, without prior NRC approval. The inspectors reviewed evaluations for two changes and additional information, such as calculations, supporting analyses, the FSAR, and drawings to confirm that the licensee had appropriately concluded that the changes could be accomplished without obtaining a license amendment. The two evaluations reviewed are listed in the Attachment.

The inspectors also reviewed samples of changes for which the licensee had determined that evaluations were not required, to confirm that the licensee's conclusions to "screen out" these changes were correct and consistent with 10 CFR 50.59. One commercial grade dedication was also credited as a 10 CFR 50.59 screen. The 13 "screened out" changes reviewed are listed in the Attachment.

The inspectors also reviewed the licensee's CAP database to confirm that problems were identified at an appropriate threshold, were entered into the corrective action process, and appropriate corrective actions had been initiated.

Note: A previous inspection was also performed in this area (see NRC Integrated Inspection Report 05000395/2004009).

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

1. Routine Inspection

a. Inspection Scope

The inspectors conducted three 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), 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.

- "A" and "B" service water (SW) pumps while "C" SW pump was OOS for scheduled maintenance;
- "A" emergency diesel generator (EDG) while the "B" EDG was OOS for scheduled maintenance and testing; and,
- "B" service water booster pump (SWBP) and associated piping while the "A" SWBP was OOS for piping repairs.

b. Findings

No findings of significance were identified.

2. Semiannual Inspection: Charging and Volume Control System/Safety Injection (CVCS/SI) System

a. Inspection Scope

The inspectors performed a detailed review and walkdown of the CVCS/SI system from the RWST up to the reactor building penetrations for both hot and cold leg injection lines. The inspectors also reviewed and walked down related support systems to identify any discrepancies between the current operating system equipment lineup and the designed lineup. This walkdown included all accessible areas outside the containment. In addition, the inspectors reviewed completed surveillance procedures, outstanding MWRs, leakage assessments and CVCS/SI system related CERs to verify that the licensee had properly identified and resolved equipment problems that could affect the availability and operability of the CVCS/SI system. Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R05 Fire Protection

1. Routine Inspection

a. Inspection Scope

The inspectors reviewed recent CERs, MWRs, and impairments associated with the fire 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 ten areas (respective fire zones also noted):

- 1DA switchgear room (fire zone IB-20);
- Relay room solid state protection system (SSPS) instrumentation and inverter (fire zones CB-6, CB-10, CB-12);
- 1DB switchgear and heating, ventilation, and air conditioning (HVAC) rooms (fire zones IB-16, IB-17, IB-22.2);
- SW pump house (fire zones SWPH-1, SWPH-3, and SWPH-5.1/5.2);
- Intermediate building general area component cooling water (CCW) pumps/heat exchangers - SWBPs (fire zones IB-25.1.1, 1.2, 1.3, 1.5);
- “A” and “B” EDG rooms (fire zones DG-1.1/1.2 and DG 2.1/2.2);
- Auxiliary building switchgear room 1DB1/1DB2X (fire zone AB-1.29);
- “A” and “B” battery and charger rooms (fire zone IB-2, 3, 4, 5 and 6);
- Turbine driven emergency feedwater pump room (fire zone IB-25.2); and,
- “A,” “B,” and “C” charging pump rooms (fire zones AB-1.5, AB-1.6, and AB-1.7).

b. Findings

No findings of significance were identified.

2. Annual Fire Drill Inspection

a. Inspection Scope

The inspectors observed the performance of the licensee's fire drill on December 8, to evaluate the readiness of licensee personnel to prevent and fight fires. The fire drill scenario (Drill Scenario No. 22) involved a simulated class "C" electrical fire on the 480 Volt safety-related switchgear, XSW1DB1, located in the Auxiliary Building. The inspectors evaluated the readiness of licensee personnel to prevent and fight fires including the following aspects:

- Observe whether protective clothing and self-contained breathing apparatus (SCBA) equipment were properly worn;
- Determine whether fire hose lines were properly laid out and nozzle pattern simulated being tested prior to entering the fire area of concern;
- Verify that the fire area was entered in a controlled manner;
- Review if sufficient firefighting equipment was brought to the scene by the fire brigade to properly perform their firefighting duties;
- Verify that the fire brigade leader's fire fighting directions were thorough, clear and effective, and that, if necessary, offsite fire team assistance was requested;
- Verify that radio communications with plant operators and between fire brigade members were efficient and effective;
- Confirm that fire brigade members checked for fire victims and fire propagation into applicable plant areas;
- Observe if effective smoke removal operations were simulated;
- Verify that the fire fighting pre-plans were properly utilized and were effective; and,
- Verify that the licensee pre-planned drill scenario was followed, drill objectives met the acceptance criteria, and deficiencies were captured in post drill critiques.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures

a. Inspection Scope

The inspectors reviewed and walked down two areas (i.e., intermediate building IB-412' elevation and auxiliary building AB-388' elevation) regarding internal flood protection features and equipment to determine consistency with design requirements, FSAR and flood analysis documents. Risk significant structures, systems, and components in these areas included the 125 volt direct current safety-related batteries and associated

chargers, reactor building HVAC chillers, CCW pumps, SWBPs, emergency feedwater pumps, residual heat removal (RHR) pumps, and reactor building spray pumps.

The inspectors also reviewed external flood protection measures during a site walkdown. As part of this inspection, the inspectors examined the storm drain system (inside the protected area) to verify that the drains were not blocked by debris and grading directed runoff into the drainage system. Also, the inspectors reviewed the licensee's CAP database to verify that internal and external flood protection problems were being identified at the appropriate level, entered into the CAP, and appropriately resolved.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program

a. Inspection Scope

On November 7, the inspectors observed an initial operator license class perform various drill scenarios in preparation for operator license exams. The inspectors verified that training included risk-significant operator actions and implementation of emergency classification and the emergency plan. The inspectors assessed overall crew performance, communication, oversight of supervision, and the evaluators' critique. The inspectors verified that any 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 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-04-3786, "B" main steam isolation valve failed to stroke closed;
- CER 0-C-05-0374, XIT-5903 inverter output not staying in synchronization with backup alternating current power source; and,
- CER 0-C-05-2001, SSPS master relay K507 contacts found sticking and corroded.

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 unforseen 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" EDG OOS for scheduled quarterly maintenance and testing in conjunction with XIT-5905 swapover to alternate feed due to "A" main feedwater pump DCS power supply failure;
- "C" SW pump OOS for scheduled maintenance in conjunction with "B" condensate pump OOS for corrective maintenance to discharge valve;
- Work Week 2005-40, risk assessment for "A" EDG OOS for scheduled maintenance and repair the 1B normal feedwater heater drain valve;
- Work Week 2005-41, risk assessment for "B" EDG OOS for scheduled maintenance and repair of the "C" phase 230 kilo-volt air disconnect switch 8903;
- Work Week 2005-43, risk assessment for emergent work to repair pin hole leak in "A" SWBP recirculation line; and,
- Work Week 2005-47, risk assessment for emergent work to replace failed "A" SSPS circuit card.

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 listed non-routine event to ensure they were appropriate and in accordance with required alarm response, abnormal and emergency procedures. The inspectors also evaluated performance and equipment problems to ensure that they were entered into the CAP.

- November 8, initial downpower to 97 percent RTP and subsequent downpower to 85 percent RTP for malfunction of the 1A high pressure feedwater level control valve in accordance with general operating procedure (GOP)-4B, "Power Operation (Mode 1 - Decreasing)," and SOP-204, "Extraction Steam, Reheat Steam, Heater Vents and Drains." (CER 0-C-05-4167)

b. Findings

No findings of significance were identified

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 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," and new SAP-999, "Corrective Action Program," Revision 0, approved November 8, 2005.

- CER 0-C-05-3965, fuel top nozzle adapter plate non-conformance identified by manufacturer;
- CER 0-C-05-3982, "B" reactor trip bypass breaker failed to close when racked-in;
- CER 0-C-05-4009, RWST level transmitter reads low;
- CER 0-C-05-4023, "A" SWBP recirculation piping has through wall leak; and,
- CER 0-C-05-4055, crack in body of diesel fire service isolation valve.

b. Findings

No findings of significance were identified.

1R16 Operator Work-arounds

a. Inspection Scope

The inspectors reviewed the licensee's list of identified operator work-arounds, burdens, and challenges to determine whether any new items since the previous inspection period would adversely affect the operators' ability to implement abnormal or emergency operating procedures. No risk significant operator work-arounds were identified during this inspection period.

Additionally, the inspectors reviewed the licensee's list of identified operator work-arounds, burdens, and challenges to assess the cumulative effect on the functional capability, reliability or availability of any related mitigating system. The inspectors reviewed the human reliability aspect of the cumulative effect of the work-arounds to determine if they affected the operators' ability to respond in a correct and timely manner to any initiating event or their ability to implement abnormal or emergency operating procedures.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications

a. Inspection Scope

The inspectors evaluated engineering change request (ECR) packages for **five** modifications, in the Mitigating Systems and **Barrier Integrity** cornerstone areas, to evaluate the modifications for adverse effects on system availability, reliability, and functional capability. The five modifications and the associated attributes reviewed are as follows:

ECR 50316, "Automatic Transfer to the Reactor Building Sump" (Mitigating Systems):
- Plant Document Updating
- Post-Modification Testing
- Installation Records
- Control Signals

ECR 50547, "Reactor Coolant Pump C Seal Injection Fix" (Barrier Integrity):
- Vibration Evaluation
- Materials/ Replacement Components
- Post-Modification Testing
- Installation Records
- System Flow Requirements

ECR 50527, “Reactor Building Sump Vent Addition” (Mitigating Systems, Barrier Integrity):
- Vent sizing calculation
- Material Selection - corrosion effects
- Work Orders - verify QC steps performed

ECR 50599, “Main Steam Power Operated Relief Valve Control Circuit Fix” (Mitigating Systems):
- Installation Records
- Post-Modification Testing
- Document Updating

ECR 50576, “Modifications to Two Supports on Train B Service Water Piping” (Mitigating Systems):
- Material Certifications
- Installation & Inspection Records
- Design Analysis

For the selected modification packages, the inspectors observed the as-built configuration. Documents reviewed included procedures, engineering calculations, modification design and implementation packages, work orders, site drawings, corrective action documents, applicable sections of the living FSAR, supporting analyses, technical specifications, and design basis information.

The inspectors also reviewed selected CERs and an audit associated with modifications to confirm that problems were identified at an appropriate threshold, were entered into the CAP, and appropriate corrective actions had been initiated. Documents reviewed are listed in the Attachment.

Note: A previous inspection was also performed in this area (see NRC Report 05000395/2004009).

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

For the five 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 "B" EDG following scheduled quarterly preventive maintenance activities;
- PMT for "A" SWBP following emergent pipe replacement for pin hole leak;
- PMT for "B" SW pump motor cooler line replacement;
- PMT for "A" SSPS card failure replacement; and,
- PMT for "C" charging pump/motor preventive maintenance.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors observed and/or reviewed the three surveillance tests 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 had been met.

In-Service Tests:

- STP-205.004, "RHR Pump and Valve Operability Test" (for "A" RHR pump).

Reactor Coolant System Leakage Tests:

- STP-114.002, "Operational Leakage Test."

Other Surveillance Tests:

- STP-345.074, "Solid State Protection System Actuation Logic and Master Relay Test - Train B."

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors reviewed the following three plant equipment changes that were considered temporary modifications. The inspectors evaluated the change documents and the associated 10 CFR 50.59 screening against the system design basis documentation and FSAR to verify that the changes did not adversely affect the safety functions of important safety systems. In addition, the inspectors verified that the changes were developed and implemented in accordance with licensee procedures SAP-148, "Temporary Bypass, Jumper, and Lifted Lead Control," and SAP-300, "Conduct of Maintenance."

- Bypass Authorization Request (BAR) 05-03, involving the temporary bypass of a faulty reactor building incore sump level alarm;
- ECR 50624, "Installation of a Pneumatic Bypass on ILV03773A-HD Control Valve Around Solenoid Valve;" and,
- MWR 0523469, involving non-standard repair to install jumpers across each phase of main transformer air disconnect circuit breaker XCB8903.

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation

a. Inspection Scope

On October 19, the inspectors reviewed and observed the performance of a licensee quarterly training emergency planning drill that involved a simulated steam generator tube rupture followed by a main steam line break inside containment and stuck open steam generator power-operated relief valve (PORV) and the associated PORV isolation valve. The inspectors assessed emergency procedure usage, verified the licensee was properly classifying emergency events and making the required notifications and protective action recommendations in accordance with emergency plan procedures (EPP)-001, "Activation and Implementation of Emergency Plan," EPP-001.2, "Alert," EPP-001.3, "Site Area Emergency," EPP-001.4, "General Emergency," EPP-002, "Communication and Notification," and EPP-005, "Offsite Dose Calculations." The inspectors evaluated the adequacy of the licensee's conduct of the drill and critique performance. Drill issues were captured by the licensee in CERs 0-C-05-3997, 0-C-05-3998, 0-C-05-3999, and 0-C-05-4000 and were reviewed by the inspectors.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA2 Identification and Resolution of Problems

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

No findings of significance were identified.

2. Annual Sample Review

a. Inspection Scope

The inspectors reviewed one issue in detail to evaluate the effectiveness of the licensee's corrective actions for important safety issues documented in CER 0-C-05-2620. This CER was associated with the licensee's common cause evaluation of three significant human performance configuration control errors that were committed during the April - May 2005 refueling outage. The inspectors assessed whether the licensee adequately addressed all of the applicable causal factors and identified effective corrective actions. Also, the inspectors verified the issue was processed in accordance with SAP-1131, "Corrective Action Program."

b. Findings

No findings of significance were identified.

3. Semi-Annual Trend Review

a. Inspection Scope

As required by Inspection Procedure 71152, "Identification and Resolution of Problems," the inspectors performed a review of the licensee's corrective action program and associated documents to identify trends that could indicate the existence of a more significant safety issue. The review was focused on repetitive equipment issues, but also considered trends in human performance errors, the results of daily inspector corrective action item screening discussed in Section 4OA2.1 above, licensee trending efforts, and licensee human performance results. The review nominally considered the

six-month period of July 2005 through December 2005. Documents reviewed included licensee monthly and quarterly corrective action trend reports, engineering system health reports, department self-assessment activities, and quality assurance audit reports.

b. Findings

No findings of significance were identified. The inspectors evaluated the licensee's trending methodology and observed that the licensee had performed a detailed review. The licensee routinely reviewed the cause codes, involved organizations, key words, and system links to identify potential trends in their corrective action program data. The inspectors compared the licensee's reviews with the results of the inspectors' daily screening and did not identify any discrepancies or potential trends in the data which the licensee had failed to identify.

4OA5 Other

1. (Closed) Licensee Event Report (LER) 50-395/2005-001-02: Emergency Diesel Generator Start and Load Due to Loss of Vital Bus, Supplement 2

The inspectors reviewed the subject LER and CER 0-C-05-2042 to verify the accuracy of the LER and the appropriateness of the corrective actions. The supplement to this LER provide revision to the corrective actions following additional licensee management review and revision to the root cause report. No new findings of significance were identified. The regulatory significance of this issue was previously discussed in NRC Integrated Inspection Report 05000395/2005003.

2. (Closed) LER 50-395/2005-003-00: Plant Trip and Associated Fire in "B" Condensate Pump Motor

The inspectors reviewed the subject LER and CER 0-C-05-3349, to verify the cause of the August 25, 2005, reactor trip was identified and that corrective actions were reasonable. The automatic reactor trip occurred as a result of the unexpected trip of the "B" condensate pump motor and subsequent malfunction of the "A" condensate pump discharge valve to open following the manual start of the associated pump. The cause of the trip of the "B" condensate pump was determined to be a phase to ground short in the motor windings. The licensee had not completed its root cause evaluation for the opening failure of the "A" condensate pump discharge valve. The licensee planned to supplement the LER upon completion of this root cause. The inspectors determined that the licensee's actions to date, were adequate to address the event. The inspectors reviewed operating logs, sequence of events log, and post-trip computer equipment response data to verify proper operation of important plant mitigation equipment. The inspectors previously reviewed and documented assessment of the operator response to the event in Section 1R14 of NRC Integrated Inspection Report 05000395/2005004. No findings of significance or violations of regulatory requirements were identified.

4OA6 Meetings, Including Exit

Exit Meeting Summary

The inspectors presented the inspection results to Mr. Jeff Archie and other members of the licensee staff on January 13, 2006. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

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A. Torres, Manager, Planning / Scheduling and Project Management
R. Williamson, Supervisor, Emergency Services
S. Zarandi, Manager, Maintenance Services

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

None.

Closed

05000395/2005001-02	LER	Emergency Diesel Generator Start and Load Due to Loss of Vital Bus, Supplement 2 (Section 4OA5.1)
05000395/2005003-00	LER	Plant Trip and Associated Fire in “B” Condensate Pump Motor (Section 4OA5.2)

Discussed

None.

LIST OF DOCUMENTS REVIEWED

Section 1R02: Evaluation of Changes, Tests, or Experiments

Full Evaluations
ECR 50316, Automatic Transfer to the RB Sump (Mitigating Systems)
Troubleshooting Plan for Steam Generator A Feedwater Flow Spiking (50.59-2004-001)

Screened Out Items
ECR 50527, Reactor Building Sump Vent Addition
ECR 50547, Reactor Coolant Pump C Seal Injection Line
ECR 50552, Inst. of Cal Tees in Process Tubing for Accum Lvl Transmitters
ECR 50605, Install Access taps in SW Xconnect to EF Pumps
ECR 70591, Replacement of Existing Westinghouse SSPS Control Board Demultiplexer 15VDC Power Supply
ECR 50596, Upgrade IPT00950 to Withstand 100% Humidity Effects
ECR 50599, Main Steam Power Operated Relief Valve Control Circuit Fix
ECR 50576, Modifications to Two Supports on Train B Service Water Piping
ECR 50600, Diesel Generator Annunciator Power Supply Transient Filter
50.59-2003-001, Add Capacitor to 12 VDC Input to B EDG Tachometer Signal Generator at Contacts 19 & 20
CER05-1588, Diesel Generator Intercooler Heat Exchanger Tubes Require Plugging
FSAR Revision Notice 05-016, Operations Changes to Allow Low Pressure Letdown Control Valve to be Throttled
PR#: 634039, Commercial Grade Dedication of RHR Pump Motor and Impeller

Self-Assessment Documents
CER04-1938, Procedures Changed without 50.59 Review
CER05-3307, Procedure Changes not Processed in Accordance with 50.59 Requirements

Section 1R04: Equipment Alignment

SOP-117, “Service Water System”
SOP-306, “Emergency Diesel Generator”
FSAR Chapters 5 and 6
TS Sections 3.5.1, 5.2, 5.3, 5.4, 3.1.2.1, 3.3.2
ECR-50316, ”Automatic Transfer to the RB Sump”
EOP-2.2, “Transfer to Cold Leg Recirculation” Rev. 14
SOP- 112, “Safety Injection System”
SOP- 102, “Chemical and Volume Control System”
STP-105.006, “Safety Injection / Residual Heat Removal Monthly Flowpath Verification Test” for the last two years
AB-3, “Chemical and Volume Control System Description”
AB-10, “Safety Injection System Description”

Design Basis Documents for CVCS and SI
E-302-691, “Safety Injection System”
E-302-693, “Safety Injection System”
D-302-651, “Spent Fuel Cooling”
E-302-675, “Chemical and Volume Control”

CER Data Base search and review of CVCS/SI system CERs from 11/2004-11/2005, (241 CERs reviewed)

Completed CHAMPS Data Base (work order system) search and review of CVCS/SI system from 11/2004 - 11/2005, (273 Work Orders reviewed)

Section 1R17: Permanent Plant Modifications

Self-Assessment Documents
Audit No. QA-AUD-200409-1, Engineering Services Conducted August 23 - September 22, 2004
CER03-3134, Inadequate Testing of Upgrade to Air Supply for Control Room Ventilation Dampers
CER03-3399, Drawing not Updated after Modification
CER03-3482, Procedure not Updated after Removal of Valves from Chilled Water System
CER03-3865, Documents not Updated after Check Valve Modification
CER04-0729, Essential Drawings in Control Room not Identified with Hold Tags
CER04-1363, Long Term Modification Restricts Information to Control Room
CER04-1550, Degraded Pipe Supports on Service Water Piping
CER05-1261, Main Steam Valve Testing Caused High Flow Closure of Emergency Feedwater Valve

LIST OF ACRONYMS

BAR	Bypass Authorization Request
CAP	Corrective Action Program
CCW	Component Cooling Water
CER	Condition Evaluation Report
CFR	Code of Federal Regulations
CVCS/SI	Charging and Volume Control System/Safety Injection
ECR	Engineering Change Request
EDG	Emergency Diesel Generator
EPP	Emergency Plan Procedure
ES	Engineering Services Procedure
FSAR	Final Safety Analysis Report
GOP	General Operating Procedure
GTP	General Test Procedure
HVAC	Heating, Ventilation, and Air Conditioning
IMC	Inspection Manual Chapter
LER	Licensee Event Report
MPFF	Maintenance Preventable Functional Failures
MR	Maintenance Rule
MWR	Maintenance Work Request
NRC	Nuclear Regulatory Commission
OAP	Operations Administrative Procedure
OOS	Out-of-Service
PI	Performance Indicator
PI&R	Problem Identification and Resolution
PMT	Post-Maintenance Testing
PORV	Power-Operated Relief Valve
RHR	Residual Heat Removal
RTP	Rated Thermal Power
RWST	Refueling Water Storage Tank
SAP	Station Administrative Procedure
SCBA	Self-Contained Breathing Apparatus
SDP	Significance Determination Process
SOP	System Operating Procedure
SSC	Structures, Systems, or Components
SSPS	Solid State Protection System
STP	Surveillance Test Procedure
SW	Service Water
SWBP	Service Water Booster Pump
TS	Technical Specification