



South Carolina Electric & Gas Company
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Gary J. Taylor
Vice President
Nuclear Operations

April 4, 1997
RC-97-0071

Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Gentlemen:

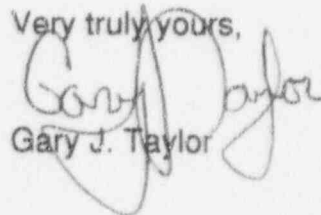
Subject: VIRGIL C. SUMMER NUCLEAR STATION
DOCKET NO. 50-395
OPERATING LICENSE NO. NPF-12
REPLY TO NOTICE OF VIOLATION
NRC INSPECTION REPORT 96-15

Attached is the South Carolina Electric & Gas Company (SCE&G) response to the Level IV violation 96015-02 delineated in NRC Inspection Report No. 50-395/96-15. SCE&G accepts the violation.

Also attached is South Carolina Electric & Gas (SCE&G) Licensing Event Report (LER) No. 96-10 which is being provided in response to Notice of Violation 96015-03. SCE&G is in agreement with the violation. The enclosed response addresses the reasons and corrective actions taken to prevent recurrence. SCE&G is in full compliance with respect to the stated corrective actions. Following discovery of the events discussed in LER 96-10, an in-depth root cause analysis was performed to further evaluate the missed surveillances. This effort confirmed the conclusions reached in the LER.

If there are any questions, please contact Mr. Kelley Marsh at (803) 345-4796 or Ms. April Rice at (803) 345-4232.

Very truly yours,


Gary J. Taylor

RKM/GJT
Attachments

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PDR ADOCK 05000395
G PDR



IEDI/

Document Control Desk
IE961502 & IE961503
RC-97-0071
Page 2 of 2

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RTS (IE 961502 & IE961503)
File (815.01)
DMS (RC-97-0071)

RESPONSE TO NOTICE OF VIOLATION
NUMBER 50-395/96-15

I. RESTATEMENT OF NRC VIOLATION

Technical Specification (TS) 4.9.4, Reactor Building Penetration, requires that Reactor Building Penetration shall be determined to be either in its closed/isolated condition or capable of being closed by an OPERABLE automatic Reactor Building Purge and Exhaust isolation valve within 100 hours prior to the start of CORE ALTERATIONS by verifying the penetrations are in their closed/isolated condition.

Contrary to the above, on April 22, 1996, a core alteration was performed prior to verifying that the Reactor Building penetrations were in their closed/isolated condition. Specifically, the fuel handling bridge gripper was lowered into the pressure vessel at approximately 3:30 a.m. on April 22. The surveillance procedure that verified the penetrations were in their closed/isolated condition was not signed as complete until 10:30 a.m. on April 22.

II. STATEMENT OF POSITION

SCE&G accepts the violation; however, SCE&G disagrees with the NRC's literal interpretation of the Technical Specification definition of CORE ALTERATION. VCSNS believes the intent of the VCSNS Technical Specification definition of CORE ALTERATION is the movement or manipulation of any CORE component(s) that would affect CORE reactivity. This would be in keeping with the literal and intended interpretation provided by the improved Standard Technical Specifications (ref. NUREG-1431, Revision 1).

Based on the VCSNS literal interpretation and the improved Standard Technical Specification definition of CORE ALTERATION, movement of the fuel handling bridge gripper within the pressure vessel with fuel in the vessel, in and of itself, is not considered a core alteration and would not affect core reactivity. Therefore, there was never any safety consequence or impact on the plant due to the condition described in Section I.

III. REASON FOR THE VIOLATION

The cause of this violation is attributed to an interpretation of the definition of CORE ALTERATION which differs from that of the NRC. Therefore, the NRC contends that fuel handling practices at VCSNS were not in compliance with the Technical Specification 4.9.4.

In several discussions with the NRC, SCE&G has requested that this issue be handled on a generic basis. SCE&G conducted a telephone survey and found that the interpretation for CORE ALTERATION used by SCE&G is consistent with industry practice. SCE&G's interpretation is further supported by the improved Standard Technical Specifications which recognizes the need for a more specific listing of core components which affect reactivity.

IV. CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

Upon identification of the subject condition, fuel handling bridge gripper indexing was terminated until the interpretation of COMPONENTS, within the CORE ALTERATION definition in VCSNS Technical Specifications, was clarified. An evaluation of the definition was performed which was supported by NUREG 1431, Westinghouse Standard Technical Specifications. Based on this evaluation, it was determined that COMPONENTS should be interpreted as pertaining to reactivity control components (e.g., fuel, sources, control rods, etc.). Based on this interpretation, fuel handling bridge gripper indexing was commenced.

V. CORRECTIVE ACTIONS TAKEN TO AVOID FURTHER VIOLATIONS

SCE&G submitted Technical Specification Change Request - TSP970003 (ref. RC-97-0064) on March 26, 1997. If approved, this Technical Specification change would revise the VCSNS Technical Specification definition of CORE ALTERATION to provide a definition commensurate with that which is stated in the improved Standard Technical Specifications (ref. NUREG-1431, Revision 1), and in keeping with current industry practice.

Attachment to Document Control Desk Letter
IE 961502
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VI. DATE FULL COMPLIANCE WILL BE ACHIEVED

The action described in Section IV is to be completed prior to refueling 10, which is scheduled for the Fall of 1997. This is contingent upon timely NRC approval of the Technical Specification change. SCE&G submitted Technical Specification Change Request - TSP970003 (ref. RC-97-0064) on March 26, 1997. If the NRC does not approve the Technical Specification change, SCE&G will interpret the definition of CORE ALTERATION in keeping with that defined by the NRC.



South Carolina Electric & Gas Company
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(803) 345-4344

Gary J. Taylor
Vice President
Nuclear Operations

January 2, 1997
RC-97-0001

Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555

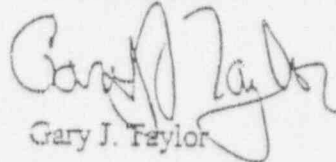
Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
LICENSEE EVENT REPORT (LER 96-010)

Attached is Licensee Event Report No. 96-010 for the Virgil C. Summer Nuclear Station. This report is submitted pursuant to the requirements of 10CFR50.73(a)(2)(i).

Should you have any questions, please call Mr. Kelley Marsh at (803) 345-4796.

Very truly yours,



Gary J. Taylor

RKM:GJT
Attachment

| | | |
|----|------------------------------|------------------------|
| c: | J. L. Skolds | K. R. Jackson |
| | W. F. Conway | D. L. Abstance |
| | R. R. Mahan (w/o attachment) | NPRDS Coordinator |
| | R. J. White | NRC Resident Inspector |
| | S. D. Ebner | J. B. Knotts Jr. |
| | A. R. Johnson | INPO Records Center |
| | R. B. Clary | Marsh & McLennan |
| | S. F. Fipps | NSRC |
| | A. R. Koon | RTS (LER960010) |
| | G. E. Williams | File (818.07) |
| | T. L. Matlosz | DMS (RC-97-0001) |
| | S. A. Byrne | |



97010700 69

NUCLEAR EXCELLENCE - A SUMMER TRADITION!

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THE MANDATORY INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

Virgil C. Summer Nuclear Station

DOCKET NUMBER (2)

05000395

PAGE (3)

1 OF 4

TITLE (4)

Missed Surveillance on Slave Relay (K634)

| EVENT DATE (5) | | | LER NUMBER (6) | | REPORT DATE (7) | | | OTHER FACILITIES INVOLVED (8) | | |
|--------------------|-----|------|---|-------------------|-----------------|-------|-----|-------------------------------|---------------|---------------|
| MONTH | DAY | YEAR | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | MONTH | DAY | YEAR | FACILITY NAME | DOCKET NUMBER |
| 12 | 02 | 96 | 96 | 010 | 0 | 01 | 02 | 97 | FACILITY NAME | DOCKET NUMBER |
| | | | | | | | | | | 05000 |
| | | | | | | | | | | 05000 |
| OPERATING MODE (9) | | 1 | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11) | | | | | | | |
| POWER LEVEL (10) | | 100 | 20.2201(b) 20.2203(a)(2)(v) X 50.73(a)(2)(i) 50.73(a)(2)(viii) | | | | | | | |
| | | | 20.2203(a)(1) 20.2203(a)(3)(i) 50.73(a)(2)(ii) 50.73(a)(2)(x) | | | | | | | |
| | | | 20.2203(a)(2)(i) 20.2203(a)(3)(ii) 50.73(a)(2)(iii) 73.71 | | | | | | | |
| | | | 20.2203(a)(2)(ii) 20.2203(a)(4) 50.73(a)(2)(iv) OTHER | | | | | | | |
| | | | 20.2203(a)(2)(iii) 50.35(c)(1) 50.73(a)(2)(v) Specify in Abstract below | | | | | | | |
| | | | 20.2203(a)(2)(iv) 50.35(c)(2) 50.73(a)(2)(vi) or in NRC FORM 366A | | | | | | | |

LICENSEE CONTACT FOR THIS LER (12)

NAME

TELEPHONE NUMBER (PLEASE PRINT)

A. R. Rice, Manager, Nuclear Licensing & Operating Experience

(803) 345-4232

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NRPDS | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NRPDS |
|-------|--------|-----------|--------------|---------------------|-------|--------|-----------|--------------|---------------------|
| D | JK | | | N | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

SUPPLEMENTAL REPORT EXPECTED (14)

EXPECTED SUBMISSION DATE

MONTH DAY YEAR

YES

(If yes, complete EXPECTED SUBMISSION DATE)

X

NO

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On December 2, 1996, plant personnel discovered that the portion of surveillance test procedure STP-220.002, "Turbine Driven Emergency Feedwater Pump Test," which started the pump from the Train A, Steam Generator Low-Low Actuation Slave Relay (K634), had not been performed within the time allowed by Technical Specification (TS) 4.3.2.1, Table 4.3-2. The test was completed with a manual start instead of the required Train A Slave Relay (K634) start. This quarterly slave relay test should have been performed by November 30, 1996.

The cause of this event is attributed to personnel oversight in not individually tasking each surveillance contained in the STPs. Individual surveillance tests could be delayed but there was no tracking mechanism in place to alert the responsible parties that the task would be overdue on a specific date. The emergency feedwater pump procedures contain multiple tasks; therefore, the failure to individually track each monthly or quarterly surveillance resulted in the test frequency error.

Review of testing performed with these procedures since Refueling Outage No. 8 (Fall of 1994) has identified an additional four (4) surveillance tests which were not performed within the allowed Technical Specification time frames. Each task contained in these procedures has now been individually identified and will be independently tracked during future testing to prevent recurrence. Reviews are currently being made of other plant procedures to verify that this problem is isolated to the emergency feedwater pump procedures. This review will be completed by February 28, 1997.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

| FACILITY NAME (1) | DOCKET NUMBER | LER NUMBER (6) | | | PAGE (3) |
|------------------------------|---------------|----------------|-------------------|-----------------|----------|
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | |
| V. C. Summer Nuclear Station | 05000395 | 96 | ---010--- | 0 | 2 OF 4 |

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

PLANT IDENTIFICATION

Westinghouse - Pressurized Water Reactor

EQUIPMENT IDENTIFICATION

Train A, Steam Generator Low-Low Actuation Slave (K634) Relay
EHS System Code - JK

IDENTIFICATION OF EVENT

Plant test personnel determined that the portion of surveillance test procedure STP-220.002, "Turbine Driven Emergency Feedwater Pump Test," which started the pump from the Train "A" Steam Generator Low-Low Actuation Slave Relay K634, had not been performed within the time allowed by Technical Specification Surveillance 4.3.2.1, Table 4.3-2 (Item 6). The test was completed with a manual start instead of the required Train A Slave Relay (K634) start. This quarterly slave relay test, with allowed extension, should have been completed on November 30, 1996. The testing missed was associated with only one of six channels available to start the Turbine Driven Emergency Feedwater pump. All other surveillances specific to the Turbine Driven Emergency Feedwater Pump were current, as specified in Technical Specification 4.3.2.1. Therefore, the Turbine Driven Emergency Feedwater pump was operable and available to be started.

EVENT DATE

December 2, 1996

REPORT DATE

January 2, 1997

This report was initiated by CER 960418.

CONDITIONS PRIOR TO EVENT

MODE 1 - 100% Reactor Power

DESCRIPTION OF EVENT

On December 2, 1996, plant personnel discovered that the portion of surveillance test procedure STP-220.002, "Turbine Driven Emergency Feedwater Pump Test," which starts the pump from the Train "A" Steam Generator Low-Low Actuation Slave Relay K634 had not been performed within the time allowed by Technical Specification 3.3.2, "Engineered Safety Feature Actuation System Instrumentation." Surveillance 4.3.2.1 (Table 4.3-2, Item 6) requires a quarterly test to verify the operability of this slave relay. Review of the surveillance history determined that the test had last been performed on August 7, 1996; therefore, the next test should have been performed no later than November 30, 1996, with the test frequency extension allowed under Technical Specification 4.0.2. The required testing of the Train A Slave Relay (K634) was subsequently performed on December 2, 1996.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

| FACILITY NAME (1) | DOCKET NUMBER | LER NUMBER (6) | | | PAGE (3) |
|------------------------------|---------------|----------------|-------------------|-----------------|----------|
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | |
| V. C. Summer Nuclear Station | 05000395 | 95 | --010-- | 0 | 3 OF 4 |

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

CAUSE OF EVENT

The cause of this event is attributed to personnel oversight in not individually tasking each surveillance contained in the STPs. Individual surveillance tests could be delayed but there was no tracking mechanism in place to alert the responsible parties that the task would be overdue on a specific date. The emergency feedwater pump procedures contain multiple tasks; therefore, the failure to individually track all monthly/quarterly surveillance tests contained in the procedures resulted in the test frequency error.

ANALYSIS OF EVENT

There were no safety consequences associated with this event. Surveillance tests performed subsequent to each of the missed surveillance tests verified that the equipment had been capable of performing its safety function during the interval between tests. In each case, the testing missed was associated with only one of six channels available to start the associated Emergency Feedwater pump. In every case, all other surveillances specific to each Emergency Feedwater Pump were current as specified in Technical Specification 4.3.2.1. Therefore, the Emergency Feedwater pumps were operable and available to be started.

IMMEDIATE CORRECTIVE ACTIONS:

The surveillance for the K634 Train "A" Steam Generator Low-Low Actuation Relay was subsequently performed on December 2, 1996 with satisfactory results. Following this test, plant personnel initiated a review of all Surveillance Test Procedures associated with the Inservice Testing Program to evaluate the potential for similar programmatic deficiencies. The results of this review showed that only the procedures which directed testing on the Emergency Feedwater Pumps had the potential for surveillance frequency errors. An in-depth review was then made of the following procedures:

STP-220.001A (Train "A" Test), Motor Driven Emergency Feedwater Pump and Valve Test - Procedure contains four monthly and quarterly surveillance items and implements Technical Specification Surveillance 4.3.2.1 and 4.7.1.2.a.1 for pump XPP0021A.

STP-220.001A (Train "B" Test), Motor Driven Emergency Feedwater Pump and Valve Test - Procedure contains four monthly and quarterly surveillance items and implements Technical Specification Surveillance 4.3.2.1 and 4.7.1.2.a.1 for pump XPP0021B.

STP-220.002, Turbine Driven Emergency Feedwater Pump Test - Procedure contains seven monthly, quarterly, and refueling surveillance items and implements Technical Specification Surveillance 4.3.2.1, 4.0.5, 4.7.1.2.a.2 and 4.3.2.2.

A review of the above listed surveillances from the present back to Refueling Outage No. 8 (Fall of 1994) was conducted. The results of this review showed that an additional four (4) surveillances were not performed within the interval specified by Technical Specifications (TS). Details of each finding are as follows:

K633 Train "A", Steam Generator Low-Low Level Actuation Relay, had missed its required quarterly surveillance (TS 4.3.2.1, Table 4.3-2 Item 6.b) on April 29, 1996. The required testing was subsequently completed on July 16, 1996.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

EXPIRES 5/31/95

| FACILITY NAME (1) | DOCKET NUMBER | LER NUMBER (6) | | | PAGE (3) |
|------------------------------|---------------|----------------|-------------------|-----------------|----------|
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | |
| V. C. Summer Nuclear Station | 05000395 | 96 | --010-- | 0 | 4 OF 4 |

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

IMMEDIATE CORRECTIVE ACTIONS (cont.):

K633 Train "A", Steam Generator Low-Low Level Actuation Relay, had missed its required quarterly surveillance (TS 4.3.2.1, Table 4.3-2 Item 6.b) on October 28, 1994. The required testing was subsequently completed on January 17, 1995.

K633 Train "B", Steam Generator Low-Low Level Actuation Relay, had missed its required quarterly surveillance (TS 4.3.2.1, Table 4.3-2 Item 6.b) on November 11, 1994. The required testing was subsequently completed on January 10, 1995.

K634 Train B, Steam Generator Low-Low Level Actuation Relay, had missed its required quarterly surveillance (TS 4.3.2.1, Table 4.3-2 Item 6.b) on October 21, 1994. The required testing was subsequently completed on December 21, 1994.

ADDITIONAL CORRECTIVE ACTIONS:

The following additional corrective actions have been initiated:

- Surveillance's contained in Emergency Feedwater Pump test procedures STP-220.001A and STP-220.002 have been individually tasked under the plant's surveillance control program to insure that the due date for each task is recognized and adhered to during performance of surveillance's.
- A review will be made of surveillance test procedures, outside the Inservice Test Program, that perform multiple tasks to verify that similar problems do not exist in these procedures. This action will be completed by February 28, 1996.

PRIOR OCCURRENCES:

None