

### UNITED STATES NUCLEAR REGULATORY COMMISSION

#### **REGION II**

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

August 31, 2001

EA-01-150

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

SUBJECT: NOTICE OF VIOLATION (VIRGIL C. SUMMER NUCLEAR STATION - NRC

SPECIAL INSPECTION REPORT NO. 50-395/01-08)

Dear Mr. Byrne:

This refers to a special inspection completed on June 23, 2001, at South Carolina Electric & Gas Company's (SCE&G) Virgil C. Summer Nuclear Station. The purpose of the inspection was to follow up on Unresolved Item 50-395/98006-01, Licensee Controls of Steam Propagation Barriers (SPBs), which was identified during a previous NRC inspection completed on July 25, 1998. The results of the special inspection, including one apparent violation, were discussed with members of your staff at an exit meeting conducted on June 29, 2001, and formally transmitted to you by letter also dated June 29, 2001.

In the letter transmitting the inspection report, we provided you the opportunity to address the apparent violation identified in the report by either attending a predecisional enforcement conference or by providing a written response before we made our final enforcement decision. At your request, an open, predecisional enforcement conference was conducted at the NRC Region II office in Atlanta, Georgia, on August 17, 2001, to discuss the apparent violation, the root cause, and your corrective actions. A list of conference attendees, copies of the Nuclear Regulatory Commission's (NRC) slides, and SCE&G's presentation materials are enclosed.

Based on the information developed during the inspection and the information you provided during the conference, we have determined that a violation of NRC requirements occurred. The violation is cited in the enclosed Notice of Violation (Notice), and the circumstances surrounding it are described in detail in the subject inspection report. The violation involved the failure to comply with 10 CFR 50.59, in that SCE&G failed to perform an adequate written safety evaluation which provided the bases for the determination that a change in the facility did not involve an unreviewed safety question. Specifically, a written safety evaluation for revision 1C to procedure FPP-025, Fire Containment, failed to adequately evaluate the impact of disabling of intermediate building door DRIB/315. The disabled door would, under certain conditions, subject the 1DA and 1DB switchgear rooms to a harsh environment. This change in the facility increased the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report, in that, a single high energy line break could potentially result in the loss of both trains of the 7.2 Kilovolt emergency power to safety-related equipment. Consequently, the change to the facility

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involved an unreviewed safety question and was made without prior NRC approval. The disabling of the door existed on seven occasions during 1998 for a total duration of approximately 30 hours.

The disabling of intermediate building door DRIB/315 did not result in any actual safety consequences. However, violations of 10 CFR 50.59 are of concern to the NRC because of the potential for impacting our ability to perform certain regulatory functions. In this case, your plant change process failed to recognize that the practice of disabling the door involved an unreviewed safety question, which required prior Commission approval. This failure to obtain prior Commission approval required by 10 CFR 50.59 for a change to the facility was evaluated as having low to moderate safety significance by the significance determination process, and thus was characterized as a Severity Level III violation in accordance with the "General Statement of Policy and Procedures for Enforcement Actions" (Enforcement Policy), NUREG-1600, as amended on December 18, 2000. We note that issuance of the revised 10 CFR 50.59 rule on March 13, 2001, did not alter this characterization as a Severity Level III violation because the change would represent a more than minimal increase in the likelihood of occurrence of a malfunction of a system, structure, or component important to safety previously evaluated in the Final Safety Evaluation Report.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$55,000 was considered for a Severity Level III violation at the time this violation occurred. Because your facility has not been the subject of an escalated enforcement action within the last two years, we considered whether credit was warranted for <a href="Corrective Action">Corrective Action</a> in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. At the conference, SCE&G presented several corrective actions to address this issue, including: (1) a revision to procedure FPP-025 in December 1998, to discontinue the practice of disabling SPBs except for routine ingress and egress, once SCE&G became aware of the results of NRC's review of a similar issue at another facility; (2) an additional revision to procedure FPP-025 in February 1999, to clarify the conditions under which SPBs could be disabled; (3) the completion of several plant modifications to preclude the need to disable or block open certain SPBs when conducting maintenance or surveillance activities; (4) training of SCE&G staff and management to emphasize the multiple elements of the plant change process; and (5) emphasis on lessons learned as a result of this issue. Based on the above, credit is warranted for Corrective Action.

Therefore, to encourage prompt and comprehensive correction of violations and in recognition of the absence of previous escalated enforcement action, I have been authorized to propose that no civil penalty be assessed in this case. However, similar violations in the future could result in further escalated enforcement action.

The NRC has concluded that information regarding the reason for the violation and the corrective actions taken and planned to correct the violation and prevent recurrence is already adequately addressed on the docket in the letter transmitting this Notice, the information presented by SCE&G at the predecisional enforcement conference, and in NRC Inspection Report No. 50-395/01-08. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

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In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be made 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 <a href="http://www.nrc.gov/NRC/ADAMS/index.html">http://www.nrc.gov/NRC/ADAMS/index.html</a> (the Public Electronic Reading Room).

If you have any questions regarding this letter, please contact Victor McCree, Acting Director, Division of Reactor Projects, at (404) 562-4500.

Sincerely,

/RA/

Bruce S. Mallett Acting Regional Administrator

Enclosures: 1. Notice of Violation

2. Conference Attendees

Material Presented by NRC
 Material Presented by DEC

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

cc w/encls:

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

K. Sutton

Winston and Strawn Electronic Mail Distribution

Henry J. Porter, Assistant Director Div. of Waste Mgmt. Dept. of Health and Environmental Control

Electronic Mail Distribution

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

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

Melvin N. Browne, Manager Nuclear Licensing & Operating Experience (Mail Code 830) Virgil C. Summer Nuclear Station Electronic Mail Distribution

#### Distribution w/encls:

- W. Travers, EDO
- W. Kane, DEDRP
- S. Collins, NRR
- W. Borchardt, NRR
- L. Chandler, OGC
- D. Dambly, OGC
- E. Julian, SECY
- B. Keeling, OCA

**Enforcement Coordinators** 

- RI, RIII, RIV
- E. Hayden, OPA
- G. Caputo, OI
- H. Bell, OIG
- W. Dean, NRR
- M. Johnson, NRR
- R. Emch, NRR
- H. Berkow, NRR
- R. Assa, NRR
- E. McKenna, NRR
- M. Sykes, NRR
- S. Rosenberg, OEDO
- F. Congel, OE
- D. Nelson, OE
- C. Casto, RII
- V. McCree, RII
- L. Plisco, RII
- W. Rogers, RII
- S. Sparks, RII
- K. Landis, RII
- M. Widmann, RII
- C. Evans, RII
- L. Garner, RII
- R. Hannah, RII
- K. Clark, RII
- **PUBLIC**
- **OEMAIL**
- **OEWEB**

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#### NOTICE OF VIOLATION

V. C. Summer Nuclear Station Unit 1

Docket No. 50-395 License No. NPF-12 EA-01-150

During NRC inspections conducted from July 25, 1998, to June 23, 2001, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions - May 1, 2000," NUREG-1600, as amended on December 18, 2000, the violation is listed below:

10 CFR 50.59(a)(1) states, in part, that the holder of a license authorizing operation of a utilization facility may make changes in the facility as described in the safety analysis report without prior Commission approval, unless the proposed change involves an unreviewed safety question.

10 CFR 50.59(a)(2) states, in part, a proposed change shall be deemed to involve an unreviewed safety question if the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased.

10 CFR 50.59(b)(1) requires, in part, that the licensee shall maintain records of changes in the facility to the extent that these changes constitute changes in the facility as described in the safety analysis report. These records must include a written safety evaluation which provides the bases for the determination that the change does not involve an unreviewed safety question.

Final Safety Analysis Report Section 3.11.1.1 defines harsh and mild environments and references drawing SS-021-018. The drawing depicts the 7.2 Kilovolt 1DA and 1DB emergency switchgear rooms as mild environments and the hallway adjacent to the 1DB room as a harsh environment.

Fire Protection Procedure FPP-025, "Fire Containment," Revision 1C, allowed steam propagation barriers to be disabled, one at a time, for a maximum of 12 hours.

Contrary to the above, on March 25, 1997, the licensee failed to perform an adequate written safety evaluation which provided the bases for the determination that a change in the facility did not involve an unreviewed safety question. Specifically, a written safety evaluation for revision 1C to procedure FPP-025 failed to adequately evaluate that the licensee's disabling of intermediate building door DRIB/315 would change the 1DA and 1DB switchgear rooms from a mild environment to a harsh environment. This change in the facility increased the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report, in that, a single high energy line break could potentially result in the loss of both trains of the 7.2 Kilovolt emergency power to safety-related equipment. Consequently, the change to the facility involved an unreviewed safety question and was made without prior NRC approval. The disabling of the door existed on seven occasions during 1998 for a total of approximately 30 hours.

This is a Severity Level III violation (Supplement I).

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved is already adequately addressed on the docket in the letter transmitting this Notice of Violation (Notice), the information presented by South Carolina Electric and Gas Company at the predecisional enforcement conference, and in NRC Inspection Report No. 50-395/01-08. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 with a copy to the Regional Administrator, Region II within 30 days of the date of the letter transmitting this Notice.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because any response will be made 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), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room). If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated this 31st day of August 2001

#### LIST OF PREDECISIONAL ENFORCEMENT CONFERENCE ATTENDEES

#### NUCLEAR REGULATORY COMMISSION:

- L. Reyes, Regional Administrator, Region II (RII)
- L. Plisco, Director, Division of Reactor Projects (DRP), RII
- V. McCree, Deputy Director, DRP, RII
- S. Sparks, Acting Enforcement Officer, RII
- K. Landis, Branch Chief, DRP, RII
- M. Widmann, Acting Branch Chief, DRP, RII
- C. Evans, Regional Counsel, RII
- O. DeMiranda, Acting Senior Enforcement Specialist, RII
- P. Van Doorn, Acting Branch Chief, Division of Reactor Safety (DRS), RII
- W. Rogers, Senior Reactor Analyst, DRS, RII
- L. Garner, Senior Project Engineer, DRP, RII
- D. Nelson, Senior Enforcement Specialist, Office of Enforcement
- E. McKenna, Office of Nuclear Reactor Regulation (NRR) (video conference)
- R. Assa, Licensing Project Manager, NRR, (video conference)
- M. Sykes, Enforcement Coordinator, NRR, (video conference)
- L. Olshan , NRR, (video conference)
- J. Lehning, NRR, (video conference)

#### SOUTH CAROLINA ELECTRIC AND GAS COMPANY:

- S. Byrne, Senior Vice President, Nuclear Operations
- M. Browne, Manager, Nuclear Licensing
- A. Cribb, Jr., Licensing Engineer
- T. Keckeisen, Supervisor, Fire Protection

## PREDECISIONAL ENFORCEMENT CONFERENCE AGENDA VIRGIL C. SUMMER NUCLEAR STATION

# AUGUST 17, 2001, 10:00 A.M. NRC REGION II OFFICE, ATLANTA, GEORGIA

- I. OPENING REMARKS AND INTRODUCTIONS
  L. Reyes, Regional Administrator
- II. NRC ENFORCEMENT POLICY
  S. Sparks, Acting Director, Enforcement and Investigation
  Coordination Staff
- III. SUMMARY OF THE ISSUES
  V. McCree, Deputy Director, Division of Reactor Projects
- IV. APPARENT VIOLATION / STATEMENT OF CONCERNS
  V. McCree, Deputy Director, Division of Reactor Projects
- V. LICENSEE PRESENTATION
- VI. BREAK / NRC CAUCUS
- VII. NRC FOLLOWUP QUESTIONS
- VIII. CLOSING REMARKS
  L. Reyes, Regional Administrator

### **Apparent Violation**

10 CFR 50.59(a)(1) states, in part, that the holder of a license authorizing operation of a utilization facility may make changes in the facility as described in the safety analysis report without prior Commission approval, unless the proposed change involves an unreviewed safety question.

10 CFR 50.59(a)(2) states, in part, a proposed change shall be deemed to involve an unreviewed safety question if the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased.

10 CFR 50.59(b)(1) requires, in part, that the licensee shall maintain records of changes in the facility to the extent that these changes constitute changes in the facility as described in the safety analysis report. These records must include a written safety evaluation which provides the bases for the determination that the change does not involve an unreviewed safety question.

Final Safety Analysis Report Section 3.11.1.1 defines harsh and mild environments and references drawing SS-021-018. The drawing depicts the 7.2 Kv AC 1DA and 1DB emergency switchgear rooms as mild environments and the hallway adjacent to the 1DB room as a harsh environment.

Fire Protection Procedure FPP-025, "Fire Containment," Revision 1C, allowed steam propagation barriers to be disabled one at a time for a maximum of 12 hours.

On March 25, 1997, the licensee failed to include a written safety evaluation which provided the bases for the determination that the change in a facility did not involve an unreviewed safety question. As a result, on seven occasions during 1998, the licensee modified the facility as described in FSAR Section 3.11.1.1 and referenced drawing by changing the 1DA and 1DB rooms from a mild environment to a harsh environment when FPP-025 was used to disable the steam propagation barrier (door) between room 1DB and the adjacent hallway. Room 1DA was effected since 1DA and 1DB rooms share a common ventilation system. The 1DB door was disabled by removing the mullion (center support of a double door) which prevented the door from being closed and sealed in the normal manner. These changes in the facility increased the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report, in that, a single high energy line break could potentially result in the loss of both trains of the 7.2 Kv emergency power to safety-related equipment. This condition existed for a total of approximately 30 hours in 1998.