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OCT 22 1982

Docket No.: 50-395

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Mr. O. W. Dixon, Jr.  
Vice President Nuclear Operations  
South Carolina Electric & Gas Company  
Post Office Box 764  
Columbia, South Carolina 29218

Dear Mr. Dixon:

Subject: Issuance of Amendment No. 4 to Facility Operating License NPF-12  
Virgil C. Summer Nuclear Station, Unit No. 1

The Nuclear Regulatory Commission has issued Amendment No. 4 to Facility Operating License NPF-12 for the Virgil C. Summer Nuclear Station, Unit No. 1 located in Fairfield County, South Carolina.

This amendment is in response to your letter dated October 20, 1982. This amendment provides for entry into Mode 2 for initial criticality with one of the two containment hydrogen monitors inoperable. You were previously notified of this license amendment by telephone on October 20, 1982.

A copy of the related safety evaluation supporting Amendment No. 4 to Facility Operating License NPF-12 is enclosed. Also enclosed is a copy of a related notice which has been forwarded to the Office of the Federal Register for publication.

Sincerely,

B. J. Youngblood, Chief  
Licensing Branch No. 1  
Division of Licensing

Enclosures:

- 1. Amendment No. 4
- 2. Safety Evaluation
- 3. Federal Register Notice

cc w/enclosure:  
See next page

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OCT 22 1982

Mr. O. W. Dixon, Jr.  
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Columbia, South Carolina 29218

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South Carolina Public Service Authority  
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Resident Inspector/Summer NPS  
c/o U. S. NRC  
Route 1, Box 64  
Jenkinsville, South Carolina 29065

Mr. James P. O'Reilly  
U. S. NRC, Region II  
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Suite 3100  
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OCT 22 1982

Chairman, Fairfield County Council  
Post Office Box 293  
Winnsboro, South Carolina 29180

State Clearinghouse  
Office of the Governor  
Division of Administration  
1205 Pendleton Street, 4th Floor  
Columbia, South Carolina 29201

Attorney General  
Box 11549  
Columbia, South Carolina 29211

Mr. Heyward G. Shealy, Chief  
Bureau of Radiological Health  
South Carolina Department of Health  
and Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201

Director, Criteria & Standards (ANR-460)  
Office of Radiation Programs  
U. S. Environmental Protection Agency  
Washington, D. C. 20460

Director, Eastern Environmental Radiation  
Facility  
U. S. Environmental Protection Agency  
Post Office Box 3009  
Montgomery, Alabama 36193

EIS Review Coordinator  
U. S. Environmental Protection Agency  
Region IV  
345 Courtland Street  
Atlanta, Georgia 30308

SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

DOCKET NO. 50-395

VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 4  
License No. NPF-12

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment to the Virgil C. Summer Nuclear Station, Unit No. 1 (the facility) Facility Operating License No. NPF-12 filed by the South Carolina Electric & Gas Company acting for itself and South Carolina Public Service Authority (the licensees), dated October 20, 1982, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations as set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;
  - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
  - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public;
  - E. The issuance of this license amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is hereby amended by page change to the Technical Specifications as indicated in the attachments to this license amendment. Paragraph 2.C(2) of Facility Operating License No. NPF-12 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 4, are hereby incorporated into this license. South Carolina Electric & Gas Company shall operate the facility

in accordance with the Technical Specifications and the Environmental Protection Plan.

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3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



B. J. Youngblood, Chief  
Licensing Branch No. 1  
Division of Licensing

Attachment:  
Technical Specification  
Change

Date of Issuance: OCT 22 1982

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SURNAME ▶	W. K. [unclear]	GILBERT	B. J. Youngblood				
DATE ▶	10/21/82	10/21/82	10/21/82				

ATTACHMENT TO LICENSE AMENDMENT NO. 4

FACILITY OPERATING LICENSE NO. NPF-12

DOCKET NO. 50-395

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the area of the changes.

Amended  
Page

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## CONTAINMENT SYSTEMS

### 3/4.6.5 COMBUSTIBLE GAS CONTROL

#### HYDROGEN MONITORS

#### LIMITING CONDITION FOR OPERATION

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3.6.5.1 Two independent containment hydrogen monitors shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

With one hydrogen monitor inoperable, restore the inoperable monitor to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours. The provisions of Specification 3.0.4 are not applicable for entry into Mode 2 for initial criticality.

#### SURVEILLANCE REQUIREMENTS

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4.6.5.1 Each hydrogen monitor shall be demonstrated OPERABLE by the performance of an ANALOG CHANNEL OPERATIONAL TEST at least once per 31 days, and at least once per 92 days on a STAGGERED TEST BASIS by performing a CHANNEL CALIBRATION using sample gas containing 19.8  $\pm 0.1$  volume percent hydrogen, balance nitrogen.

## CONTAINMENT SYSTEMS

### ELECTRIC HYDROGEN RECOMBINERS

#### LIMITING CONDITION FOR OPERATION

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3.6.5.2 Two independent post accident hydrogen recombiner systems shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

With one hydrogen recombiner system inoperable, restore the inoperable system to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours.

#### SURVEILLANCE REQUIREMENTS

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4.6.5.2 Each hydrogen recombiner system shall be demonstrated OPERABLE:

- a. At least once per 6 months by verifying, during a recombiner system functional test, that the minimum heater sheath temperature increases to greater than or equal to 700°F within 90 minutes. Upon reaching 700°F, increase the power setting to maximum power for 2 minutes and verify that the power meter reads greater than or equal to 60 Kw.
- b. At least once per 18 months by:
  1. Performing a CHANNEL CALIBRATION of all recombiner instrumentation and control circuits,
  2. Verifying through a visual examination that there is no evidence of abnormal conditions within the recombiner enclosure (i.e., loose wiring or structural connections, deposits of foreign materials, etc.), and
  3. Verifying the integrity of all heater electrical circuits by performing a resistance to ground test following the above required functional test. The resistance to ground for any heater phase shall be greater than or equal to 10,000 ohms.

SAFETY EVALUATION BY THE  
OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 4  
TO LICENSE NPF-12  
SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

INTRODUCTION

In a letter dated October 20, 1982 from O. W. Dixon, Jr. to H. R. Denton, the licensee requested that temporary relief be granted from Technical Specification 3/4.6.5 "Combustible Gas Control - Hydrogen Monitors" to permit entry into Mode 2 for initial criticality with one of the two containment hydrogen monitors inoperable.

EVALUATION

The current specification requires that each of the two containment hydrogen monitors be operable prior to entry into Modes 1 and 2. The licensee stated that one of the monitors is inoperable due to defective equipment and that replacement parts cannot be procured in a timely manner. The licensee stated that the monitor would be repaired by October 27, 1982 and that unless the requested relief was granted initial criticality would be delayed. The plant is expected to achieve initial criticality on October 21, 1982.

We have reviewed the requested change and conclude that it is acceptable and that the licensee has provided adequate justification. The action statement of the current specification would permit operation in Mode 2 for up to 30 days with one of the two monitors inoperable. Therefore, we find the requested change acceptable on the basis that (1) the plant would not be degraded beyond that permitted by the current specification when operating in Mode 2 and (2) the licensee has committed to make the second monitor operable in several days.

ENVIRONMENTAL CONSIDERATION

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR Section 51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

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CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

DATE: OCT 22 1982

OFFICE ▶	DL: LB#1	DL: LB#1					
SURNAME ▶	W Kane, Lew	B J Young, Lloyd					
DATE ▶	10/21/82	10/22/82					

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-395

VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1

NOTICE OF ISSUANCE OF AMENDMENT TO

FACILITY OPERATING LICENSE NO. NPF-12

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 4 to Facility Operating License No. NPF-12, issued to South Carolina Electric & Gas Company and South Carolina Public Service Authority (the licensees) for the Virgil C. Summer Nuclear Station, Unit No. 1 (the facility) located in Fairfield County, South Carolina. This amendment modifies the Technical Specifications to provide for entry into Mode 2 for initial criticality with one of the two containment hydrogen monitors inoperable. The amendment is effective as of its date of issuance.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5 (d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

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DATE

For further details with respect to this action, see (1) South Carolina Electric & Gas Company letter, dated October 20, 1982, (2) Amendment No. 4 to Facility Operating License No. NPF-12 with Appendix A Technical Specifications page changes, and (3) the Commission's related safety evaluation.

All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. 20555 and the Fairfield County Library, Garden and Washington Streets, Winnsboro, South Carolina 29180. A copy of Amendment No. 4 may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 28<sup>th</sup> day of October 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

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B. J. Youngblood, Chief  
Licensing Branch No. 1  
Division of Licensing

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