

March 23, 1983

Docket No. 50-395

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

Dear Mr. Dixon:

Subject: Issuance of Amendment No. 13 to Facility Operating License NPF-12 Virgil C. Summer Nuclear Station, Unit No. 1

The Nuclear Regulatory Commission has issued Amendment No. 13 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 January 31, 1983. The other change requested in that letter was responded to by Amendment No. 11 dated February 22, 1983.

The amendment changes the Technical Specifications to permit a one time extension of the time interval in which response time tests of the reactor trip system and engineered safety features are to be conducted.

A copy of the related safety evaluation supporting Amendment No. 13 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,

Elinor G. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing

Enclosures:

- 1. Amendment No. 13
- 2. Safety Evaluation
- 3. Federal Register Notice

cc w/enclosure:

See next page

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SUMMER

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South Carolina Electric & Gas Company  
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Resident Inspector/Summer NPS  
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Chairman, Fairfield County Council  
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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. 13  
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 January 31, 1983, 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 changes 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. 13, are hereby incorporated into this license. South

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Carolina Electric & Gas Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION

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Elinor G. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing

Enclosure:  
Technical Specification  
Changes

Date of Issuance: March 23, 1983

*FRN and  
amendment only*

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DATE	3/10/83	3/10/83	3/16/83	3/27/83	3/23/83		

ATTACHMENT TO LICENSE AMENDMENT NO. 13

FACILITY OPERATING LICENSE NO. NPF-12

DOCKET NO. 50-395

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain a vertical line indicating the area of change.

Amended  
Page  
3/4 3-15a  
3/4 3-1

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### 3/4.3 INSTRUMENTATION

#### SURVEILLANCE REQUIREMENTS

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4.3.2.1 Each ESFAS instrumentation channel and interlock and the automatic actuation logic and relays shall be demonstrated OPERABLE by performance of the engineered safety feature actuation system instrumentation surveillance requirements specified in Table 4.3-2.

4.3.2.2 The ENGINEERED SAFETY FEATURES RESPONSE TIME of each ESFAS function shall be demonstrated to be within the limit at least once per 18 months.\* Each test shall include at least one train such that both trains are tested at least once per 36 months and one channel per function such that all channels are tested at least once per N times 18 months where N is the total number of redundant channels in a specific ESFAS function as shown in the "Total No. of Channels" Column of Table 3.3-3.

\*A one time extension of the frequency of response time tests is granted until June 30, 1983 for all tests due to be completed before this date. Surveillance tests for response time will be conducted on or before June 30, 1983.

### 3/4.3 INSTRUMENTATION

#### 3/4.3.1 REACTOR TRIP SYSTEM INSTRUMENTATION

##### LIMITING CONDITION FOR OPERATION

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3.3.1 As a minimum, the reactor trip system instrumentation channels and interlocks of Table 3.3-1 shall be OPERABLE with RESPONSE TIMES as shown in Table 3.3-2.

APPLICABILITY: As shown in Table 3.3-1.

ACTION:

As shown in Table 3.3-1.

##### SURVEILLANCE REQUIREMENTS

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4.3.1.1 Each reactor trip system instrumentation channel and interlock and the automatic trip logic shall be demonstrated OPERABLE by performance of the reactor trip system instrumentation surveillance requirements specified in Table 4.3-1.

4.3.1.2 The REACTOR TRIP SYSTEM RESPONSE TIME of each reactor trip function shall be demonstrated to be within its limit at least once per 18 months\*. Each test shall include at least one train such that both trains are tested at least once per 36 months and one channel per function such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific reactor trip function as shown in the "Total No. of Channels" column of Table 3.3-1.

\*A one time extension of the frequency of response time tests is granted until June 30, 1983 for all tests due to be completed before this date. Surveillance tests for response time will be conducted on or before June 30, 1983.

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 13 TO FACILITY OPERATING LICENSE NPF-12

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

INTRODUCTION

By letter dated January 31, 1983, South Carolina Electric and Gas Company (the Licensee) requested an amendment to the Appendix A, Technical Specifications appended to License No. NPF-12 for the Virgil C. Summer Nuclear Station. The amendment would permit a one time extension of the time interval in which response time tests of the reactor trip system and engineered safety features are to be conducted.

BACKGROUND AND DISCUSSION

Technical Specifications 4.3.1.2 and 4.3.2.2 require that the response time of each reactor trip and ESFAS function as identified in Tables 3.3-1 and 3.3-3 respectively, be demonstrated to be within its limit at least once per 18 months. Each test shall include at least one train and one protection system channel such that each train is tested at least once per 36 months. All channels are tested at least once every N times 18 months where N is the number of redundant channels. Further an allowance is provided that permits the test interval to be exceeded by 25% of the specified time between tests.

The protection system channels and trains are routinely tested every 31 or 62 days in order to demonstrate their functional operability. While these tests would generally identify any large changes in instrument response, the response time tests provide a more accurate measurement of instrument response to assure that over a large period of time the instrument response is consistent with the plant safety analysis. The test frequency for response time tests corresponds to the normal time interval between refueling outages. This allows access to sensors and the conduct of response time tests at a time when systems are not required to be operable. The basis of the 18 month test interval is that changes in response times are not considered to occur over short intervals of time and have a lower probability of occurrence compared to other potential malfunction. This further supports the fact that alternate trains and channels of the protection system are tested during each test.

Since the length of the first fuel cycle for the Virgil C. Summer plant and the time for the previous tests would require a plant shutdown to satisfy the test frequency requirements for response time testing, the licensee has requested relief from these requirements such that they will be conducted during a subsequent plant shutdown. The relief requested would extend the test interval for tests due on March 24, 1983, by about 3 months until June 30, 1983. This increases the test interval by less than 15% of the maximum time interval (22.5 months) permitted by the Technical Specification.

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EVALUATION

A steam generator modification outage is currently scheduled for mid-March 1983. This shutdown corresponds to the limits permitted by the plant technical specifications for conducting response time tests. We conclude that an extension of the time interval for response time tests of up to three months is acceptable considering that the plant will be shutdown and with consideration of the basis for the frequency of these tests. Therefore, we find this one time extension of the test interval for these tests to be acceptable.

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 §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.

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, does not create the possibility of an accident of a type different from any evaluated previously, 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 conducted 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: March 23, 1983

Principal Contributors: J. Hopkins, Licensing Branch No. 4, DL  
T. Dunning, Instrumentation and Control Systems Branch, DSI

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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. 13 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. The amendment changes the Technical Specifications to permit a one time extension of the time interval in which response time tests of the reactor trip system and engineered safety features are to be conducted. The amendment was 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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For further details with respect to this action, see (1) South Carolina Electric & Gas Company letter, dated January 31, 1983, (2) Amendment No. 13 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. 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 23<sup>rd</sup> day of March 1983.

FOR THE NUCLEAR REGULATORY COMMISSION

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Elinor G. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing

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DATE	3/10/83	3/10/83	3/16/83	3/22/83			

AMENDMENT NO. 13 TO FACILITY OPERATING LICENSE NPF-12 - Virgil C. Summer Unit 1

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