



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

October 24, 1984

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. 30 to Facility Operating
License NPF-12 Virgil C. Summer Nuclear Station,
Unit No. 1

The Nuclear Regulatory Commission has issued Amendment No. 30 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 November 16, 1983.

The amendment modifies the Technical Specifications to add additional containment penetration conductor overcurrent protection devices to Table 3.8-1 and to correct typographical errors. The amendment is effective as of its date of issuance.

A copy of the related safety evaluation supporting Amendment No. 30 to Facility Operating License NPF-12 is enclosed.

Sincerely,

A handwritten signature in cursive script that reads "Elinor G. Adensam".

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

Enclosures:

1. Amendment No. 30
2. Safety Evaluation

cc w/enclosure:
See next page

DESIGNATED ORIGINAL

Certified By A handwritten signature in cursive script, likely of the certifying official, written over a horizontal line.

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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. 30
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 November 16, 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 and 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. 30 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



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

Enclosure:
Technical Specification Changes

Date of Issuance: October 24, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 30

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 vertical lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

Amended
Page

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Overleaf
Page

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
6) CONTINUED:				
200 AMP FUSE	BACKUP	XPN5471	≥.375 Milliohms	N/A
7) XFN00067C-AH CRDM CLNG. SYSTEM FAN C	PRIMARY	XSW1C3/2D	LONG TIME 540 Amps SHORT TIME 2700 Amps INSTANT 2025 Amps	<30 Sec. ≤0.17 Sec. ≤0.09 Sec.
XSW1C3 MAIN INCOMING	BACKUP	XSW1C3/3B	LONG TIME 4800 Amps SHORT TIME 7200 Amps INSTANT N/A	<12 Sec. ≤0.50 Sec. N/A
BUS TIE TO XSWIA3	BACKUP	XSWIA3/4C	LONG TIME 3000 Amps SHORT TIME 4500 Amps INSTANT N/A	<12 Sec. ≤0.32 Sec. N/A
8) MFN0097B-AH R.B. CLNG. UNIT FAN XFN64B EMERGENCY MOTOR	PRIMARY	XSW1DB1/6D	LONG TIME 525 Amps SHORT TIME 1500 Amps INSTANT 2250 Amps	<30 Sec. ≤0.17 Sec. ≤0.09 Sec.
XSW1DB1 MAIN INCOMING	BACKUP	XSW1DB1/4B	LONG TIME 6300 Amps SHORT TIME 9000 Amps INSTANT N/A	<12 Sec. ≤0.50 Sec. N/A
9) MFN0096B-AH R.B. CLNG. UNIT FAN XFN64B NORMAL MOTOR	PRIMARY	XSW1DB1/7B	LONG TIME 1260 Amps SHORT TIME 5400 Amps INSTANT 5400 Amps	<30 Sec. ≤0.17 Sec. ≤0.09 Sec.

SUMMER - UNIT 1

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Amendment No. 30

TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO.-SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
9) CONTINUED:				
XSWIDB1 MAIN INCOMING	BACKUP	XSWIDB1/4B	LONG TIME 6300 Amps SHORT TIME 9000 Amps INSTANT N/A	< 12 Sec. < 0.50 Sec. N/A
10) MFN0096C-AH R.B. CLNG. UNIT FAN XFN65A NORMAL MOTOR	PRIMARY	XSWIDA1/5B	LONG TIME 1260 Amps SHORT TIME 5400 Amps INSTANT 5400 Amps	< 30 Sec. < 0.17 Sec. < 0.09 Sec.
XSWIDA1 MAIN INCOMING	BACKUP	XSWIDA1/4B	LONG TIME 6300 Amps SHORT TIME 9000 Amps INSTANT N/A	< 12 Sec. < 0.50 Sec. N/A
11) MFN0097C-AH R.B. CLNG. UNIT FAN XFN65A EMERGENCY MOTOR	PRIMARY	XSWIDA1/6C	LONG TIME 525 Amps SHORT TIME 1500 Amps INSTANT 2250 Amps	< 30 Sec. < 0.17 Sec. < 0.09 Sec.
XSWIDA1 MAIN INCOMING	BACKUP	XSWIDA1/4B	LONG TIME 6300 Amps SHORT TIME 9000 Amps INSTANT N/A	< 12 Sec. < 0.50 Sec. N/A
12) MFN0096A-AH R.B. CLNG. UNIT FAN XFN64A NORMAL MOTOR	PRIMARY	XSWIDA1/6B	LONG TIME 1260 Amps SHORT TIME 5400 Amps INSTANT 5400 Amps	< 30 Sec. < 0.17 Sec. < 0.09 Sec.
XSWIDA1 MAIN INCOMING	BACKUP	XSWIDA1/4B	LONG TIME 6300 Amps SHORT TIME 9000 Amps INSTANT N/A	< 12 Sec. < 0.17 Sec. N/A
13) MFN0097A-AH R.B. CLNG. UNIT FAN XFN64A EMERGENCY MOTOR	PRIMARY	XSWIDA1/5C	LONG TIME 525 Amps SHORT TIME 1500 Amps INSTANT 2250 Amps	< 30 Sec. < 0.17 Sec. < 0.09 Sec.

TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
CRDM PWR. CAB. 2 BD, CONTINUED:				
XCA2B-CR A55-Fu2	PRIMARY	XCA2B	≥ 1.4 Milliohms	N/A
XCA2B-CR A57-Fu2	BACKUP	XCA2B	≥ 1.4 Milliohms	N/A
XCA2B-CR A61-Fu50	PRIMARY	XCA2B	≥ 6 Milliohms	N/A
XCA2B-CR A61-Fu46	BACKUP	XCA2B	≥ 6 Milliohms	N/A
64) MECHANISM 3 -				
XCA2B-CR A61-Fu43	PRIMARY	XCA2B	≥ 6 Milliohms	N/A
XCA2B-CR A60-Fu39	BACKUP	XCA2B	≥ 6 Milliohms	N/A
XCA2B-CR A56-Fu1	PRIMARY	XCA2B	≥ 1.4 Milliohms	N/A
XCA2B-CR A58-Fu1	BACKUP	XCA2B	≥ 1.4 Milliohms	N/A
XCA2B-CR A61-Fu51	PRIMARY	XCA2B	≥ 6 Milliohms	N/A
XCA2B-CR A61-Fu47	BACKUP	XCA2B	≥ 6 Milliohms	N/A
65) MECHANISM 4 -				
XCA2B-CR A61-Fu44	PRIMARY	XCA2B	≥ 6 Milliohms	N/A
XCA2B-CR A60-Fu40	BACKUP	XCA2B	≥ 6 Milliohms	N/A
XCA2B-CR A56-Fu2	PRIMARY	XCA2B	≥ 1.4 Milliohms	N/A
XCA2B-CR A58-Fu2	BACKUP	XCA2B	≥ 1.4 Milliohms	N/A
XCA2B-CR A61-Fu48	PRIMARY	XCA2B	≥ 6 Milliohms	N/A
XCA2B-CR A61-Fu48	BACKUP	XCA2B	≥ 6 Milliohms	N/A

TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
66) 125 VDC DPN8007C-ED Emergency LTG. PNL. 7	PRIMARY	DPN1HX/14	120 Amps	≤100 Sec.
	BACKUP	XPN5262 (FUSE)	≥1.4 Milliohms	N/A
67) 120 VAC MISC. XBJ0002-IC/INCORE THERMOCOUPLE REF. JUNCT. BOX 2	PRIMARY	APN1FX1/25	45 Amps	≤100 Sec.
	BACKUP	XPN5261 (FUSE)	≥4 Milliohms	N/A
68) XBJ0001-IC/INCORE THERMOCOUPLE REF. JUNCT. BOX 1	PRIMARY	APN1FX1/24	45 Amps	≤100 Sec.
	BACKUP	XPN5261 (FUSE)	≥4 Milliohms	N/A
69) XPN7060-CR/ROD POSITION INDICATION PNL. 1	PRIMARY	APN1FC1/2	120 Amps	≤100 Sec.
	BACKUP	XPN5272 (FUSE)	≥1.4 Milliohms	N/A
70) XPN7061-CR/ROD POSITION INDICATION PNL. 2	PRIMARY	APN1FC1/4	120 Amps	≤100 Sec.
	BACKUP	XPN5272 (FUSE)	≥1.4 Milliohms	N/A
71) APN5915-EV/TRANSMITTER PWR. SUPPLY CAB. NO. 3	PRIMARY	APN5906/25	60 Amps	≤100 Sec.
	BACKUP	APN5914 (FUSE)	≥4 Milliohms	N/A

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Amendment No. 30

TABLE 3.8-1 (Continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
167) XPN0105-AH-EDDY CURRENT BRAKE ON R.B. CLNG. UNIT NORMAL MOTOR MFN0096A/FAN XFN64A	PRIMARY	XMC1B3X/3ABL	45 Amps	≤100 sec.
	BACKUP	XPN5494 FU1, FU2	≥.532 Milliohms	N/A
168) XPN0106-AH-EDDY CURRENT BRAKE ON R.B. CLNG. UNIT NORMAL MOTOR MFN0096B/FAN XFN64B	PRIMARY	XMC1B3X/3ABR	45 Amps	≤100 sec.
	BACKUP	XPN5495 FU1, FU2	≥.532 Milliohms	N/A
169) XPN0107-AH-EDDY CURRENT BRAKE ON R.B. CLNG. UNIT NORMAL MOTOR MFN0096C/FAN XFN65A	PRIMARY	XMC1B3X/3ABL	45 Amps	≤100 sec.
	BACKUP	XPN5494 FU3, FU4	≥.532 Milliohms	N/A
170) XPN0108-EDDY CURRENT BRAKE ON R.B. CLNG. UNIT NORMAL MOTOR MFN0096D/FAN XFN65B	PRIMARY	XMC1B3X/3ABR	45 Amps	≤100 sec.
	BACKUP	XPN5495 FU3, FU4	≥.532 Milliohms	N/A

SUMMER - UNIT 1

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Amendment No. 30



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 30 TO FACILITY OPERATING LICENSE NPF-12

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

VIRGIL C. SUMMER NUCLEAR STATION, UNIT 1

I. INTRODUCTION

By letter dated November 16, 1983, South Carolina Electric and Gas Company (SCE&G) requested a change to Technical Specification Table 3.8-1, "Containment Penetration Conductor Overcurrent Protective Device Test Setpoint Criteria." The amendment would add additional protective devices and make two administrative corrections.

II. EVALUATION

The protective devices to be added are for eddy current brakes which are being added to the non-safety reactor building cooling unit fan motors. The response time of ≤ 100 sec. for the primary protective devices is commensurate with a test setpoint of 45 amps. There is no response time required for the backup protective devices since they are fuses. The staff finds that these protection devices are acceptable. The staff has reviewed the two administrative corrections and finds them acceptable. Therefore, the staff concludes that the requested amendment is acceptable.

III. ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Sec 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

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IV. CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (49 FR 3354) on January 26, 1984, and consulted with the state of South Carolina. No public comments were received, and the state of South Carolina did not have any comments.

We have concluded, based on the considerations discussed above, that:
(1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and
(2) 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.

Principal Contributor: Jon B. Hopkins, Licensing Branch No. 4, DL
O. P. Chopra, Power Systems Branch, DSI

Dated: October 24, 1984

October 24, 1984

AMENDMENT NO. 30 TO FACILITY OPERATING LICENSE NO. NPF-12 - Virgil C. Summer Unit 1

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