

June 6, 1988

Docket No. 50-395

DISTRIBUTION
See attached sheet

Mr. D. A. Nauman
Vice President, Nuclear Operations
South Carolina Electric & Gas Company
Virgil C. Summer Nuclear Station
P.O. Box 88 (Mail Code 601)
Jenkinsville, South Carolina 29065

Dear Mr. Nauman:

SUBJECT: ISSUANCE OF AMENDMENT NO. 71 TO FACILITY OPERATING LICENSE
NO. NPF-12 - VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1,
REGARDING SERVICE WATER PUMP/SCREEN ROOM TEMPERATURE
(TAC NO. 67077)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 71 to Facility Operating License No. NPF-12 for the Virgil C. Summer Nuclear Station, Unit No. 1. The amendment consists of changes to the Technical Specifications in response to your application dated December 22, 1987.

The amendment changes the Technical Specifications to raise the temperature limit of the service water pump/screen room from 102°F to 118°F.

A copy of the related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's Bi-weekly Federal Register notice.

Sincerely,



John J. Hayes, Jr., Project Manager
Project Directorate II-1
Division of Reactor Projects I/II

Enclosures:

- 1. Amendment No. 71 to NPF-12
- 2. Safety Evaluation

cc w/enclosures:
See next page

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OFC	:LA:PD21:DRPR:PM:PD21:DRPR:D:PD21:DRPR	:	:	:	:
NAME	:PAnderson:ch:JHayes:EAEdensam	:	:	:	:
DATE	: 5/9/88 : 5/9/88 : 6/6/88	:	:	:	:

Mr. D. A. Nauman
South Carolina Electric & Gas Company

Virgil C. Summer Nuclear Station

cc:

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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. 71
License No. NPF-12

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by South Carolina Electric & Gas Company and South Carolina Public Service Authority (the licensees), dated December 22, 1987, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and 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;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this 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 amended by changes to the Technical Specifications, as indicated in the attachment to this license amendment; and paragraph 2.C.(2) of Facility Operating License No. NPF-12 is hereby amended to read as follows:

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(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 71, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. South Carolina Electric & Gas Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This amendment is effective as of its date of issuance, and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Elinor G. Adensam
for

Elinor G. Adensam, Director
Project Directorate II-1
Division of Reactor Projects I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 6, 1988

revised revision

OFC	:LA:PD21:DRPR:PM:PD21:DRPR:	OGC	:SPSB:DEST	:D:PD21:DRPR	:ADRII:DRPR
NAME	:PAnderson:ch: JHayes	: MYoung	: JCraig	: EAdensam	: GCLinas
DATE	: 5/5/88	: 5/5/88	: 5/13/88	: 5/11/88	: 5/25/88

ATTACHMENT TO LICENSE

AMENDMENT NO. 71 TO 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. Corresponding overleaf pages are also provided to maintain document completeness.

Remove Pages

3/4 7-37

3/4 7-38

Insert Pages

3/4 7-37 (overleaf)

3/4 7-38

PLANT SYSTEMS

3/4.7.11 AREA TEMPERATURE MONITORING

LIMITING CONDITION FOR OPERATION

3.7.11 The temperature of each area shown in Table 3.7-7 shall be maintained below the limits indicated in Table 3.7-7.

APPLICABILITY: Whenever the equipment in an affected area is required to be OPERABLE.

ACTION:

With one or more areas exceeding the temperature limit(s) shown in Table 3.7-7:

- a. For more than eight hours, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days providing a record of the amount by which and the cumulative time the temperature in the affected area exceeded its limit and an analysis to demonstrate the continued OPERABILITY of the affected equipment.
- b. By more than 30°F, in addition to the Special Report required above, within 4 hours either restore the area to below its temperature limit or declare the equipment in the affected area inoperable.

SURVEILLANCE REQUIREMENTS

4.7.11 The temperature in each of the areas of Table 3.7-7 shall be determined to be within its limit at least once per 12 hours.

TABLE 3.7-7

AREA TEMPERATURE MONITORING

<u>AREA</u>	<u>TEMPERATURE LIMIT (°F)</u>
1. Charging-SI Pump Room #1	102
2. Charging-SI Pump Room #2 (swing)	102
3. Charging-SI Pump Room #3	102
4. RHR-Spray Pump Room #1	102
5. RHR-Spray Pump Room #2	102
6. MCC 1DA2Y Room	102
7. Switchgear 1DB1 and MCC 1DB2Y Room	102
8. Switchgear 1DA Room	102
9. Switchgear 1DB Room	102
10. Battery 1A Room	88
11. Battery 1B Room	88
12. Charger 1A Room	102
13. Charger 1B Room	102
14. Charger 1A/1B Room	102
15. Relay Room	83
16. Component Cooling pump "A" Speed Switch Room	102
17. Component Cooling pump "B" Speed Switch Room	102
18. Component Cooling Pump "C" Speed Switch Room	102
19. Evacuation Panel "A" Room	83
20. Evacuation Panel "B" Room	83
21. Service Water Booster Pumps Area	102
22. Emergency Feedwater Pumps Area	102
23. Diesel Generator 1A Room	120
24. Diesel Generator 1B Room	120
25. Service Water Pump/Screen Room	118
26. Service Water Switchgear Room "A"	102
27. Service Water Switchgear Room "B"	102
28. Service Water Switchgear Room "C"	102
29. Diesel Generator Exciter Cabinet Room "A"	102
30. Diesel Generator Exciter Cabinet Room "B"	102



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 71 TO FACILITY OPERATING LICENSE NO. NPF-12

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-395

1.0 INTRODUCTION

By letter dated December 22, 1987, South Carolina Electric & Gas Company, the licensee, requested a change to the Technical Specification (TS) Section 3/4.7.11, "Area Temperature Monitoring" of the Virgil C. Summer Nuclear Station. The purpose of the proposed change is to modify Item 25, "Service Water Pump/Screen Room," in Table 3.7-7 of Section 3/4.7.11. Specifically, the amendment allows the licensee to raise the temperature limit from 102°F to 118°F in the service water/pump room.

2.0 EVALUATION

The NRC staff has reviewed the licensee's proposal to raise the temperature limit from 102°F to 118°F in Item 25 of Table 3.7-7 in Section 3/4.7.11. The licensee's submittal indicated that the original value of 102°F for Item 25 was based upon the temperature of the most limiting equipment located in the Service Water Switchgear Rooms. The service water pumps are not located in the Service Water Switchgear Rooms but are located in their own room. Actual qualification reports for the service water pump motors have a measured temperature rise above ambient of 37.2°C (67°F). The motors are rated 115°C above ambient. If the ambient temperature was assumed to be 39°C (102°F), then the allowable temperature for the motor would be 154°C (115°C + 39°C). Therefore, the motor has an approximate margin of 77°C temperature rise above ambient (115°C - 37.2°C ≈ 77°C). Increasing the allowable ambient temperature limit for the room to approximately 48°C (118°F) from approximately 39°C (102°F) has negligible impact on the service life of the motors. The licensee indicated that when the service life versus temperature curve found in the qualification report for the pump motors is extrapolated, the service life is still significantly greater than 40 years even at an ambient room temperature of 50°C.

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The traveling screen drive motors are also located in the Service Water Pump Room. The licensee's submittal indicated that the maximum temperature for these motors is 130°C according to the qualification program reports. The licensee indicated that these programs were based upon an ambient area temperature range of -29°C to 49°C (-20°F to 120°F) to support the qualification number and that increasing the TS limit to 48°C (118°F) would still support the qualification reports and also allow for instrument inaccuracies.

The staff has concluded that raising the ambient temperature limit of Item 25, Service Water Pump/Screen Room, of Table 3.7-7 to 188°F would not result in a decrease in the life of the service water pump motors and the traveling screen drive motors to below the anticipated 40 year life of the Station. Therefore, the proposed change is acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change of a requirement with regard to installation or use of a facility component located within the restricted area 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 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.

4.0 CONCLUSION

The Commission made a proposed determination that this amendment involves no significant hazards consideration, which was published in the Federal Register on February 24, 1988 (53 FR 5497) 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 safety of the public.

Principal Contributor: John J. Hayes, Jr.

Dated: June 6, 1988

AMENDMENT NO. 71 TO FACILITY OPERATING LICENSE NO. NPF-12 - VIRGIL C. SUMMER

Docket File

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