

August 19, 1993

Docket No. 50-395

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See next page

Mr. John L. Skolds  
Vice President, Nuclear Operations  
South Carolina Electric & Gas Company  
Virgil C. Summer Nuclear Station  
Post Office Box 88  
Jenkinsville, South Carolina 29065

Dear Mr. Skolds:

SUBJECT: ISSUANCE OF AMENDMENT NO. 114 TO FACILITY OPERATING LICENSE NO. NPF-12 REGARDING - VIRGIL C. SUMMER NUCLEAR STATION, UNIT NO. 1 (TAC NO. M86930)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 114 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 May 25, 1993, and supplemented on June 16, 1993 and June 30, 1993.

The amendment changes the Technical Specifications by reducing the minimum secondary pressure at which surveillance testing of the steam driven emergency feedwater pump is allowed to "...greater than 865 psig."

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

Sincerely,

ORIGINAL SIGNED BY:

George F. Wunder, Project Manager  
Project Directorate II-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 114 to NPF-12
2. Safety Evaluation

cc w/enclosures:  
See next page

*C.R.*

~~\*See previous concurrence~~

OFC	LA:PD21:DRPE	PM:PD21:DRPE	<del>SRXB</del> <i>5PLB</i>	OGC <i>gib</i>	AD:PD21:DRPE*
NAME	<i>PD Anderson</i>	GFWunder:tmw	<del>C. McCracken</del> <del>R. Jones</del>	<i>E. Aoller</i>	SSBajwa <i>TG</i>
DATE	08/16/93	08/05/93	08/9/93	08/13/93	08/29/93

Document Name: SUM86930.AMD

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Mr. John L. Skolds  
South Carolina Electric & Gas Company

Virgil C. Summer Nuclear Station

cc:

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Nuclear Coordinator  
S.C. Public Service Authority  
c/o Virgil C. Summer Nuclear Station  
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AMENDMENT NO.114 TO FACILITY OPERATING LICENSE NO. NPF-12 - SUMMER, UNIT NO. 1

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cc: Summer Service List

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

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. 114  
License No. NPF-12

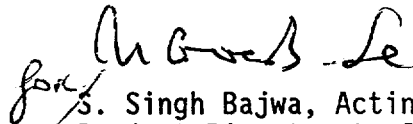
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by South Carolina Electric & Gas Company (the licensee), dated May 25, 1993, as supplemented June 16, 1993 and June 30, 1993, complies with the standards and requirements of the Atomic Energy Act 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 NPF-12 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 114, and the Environmental Protection Plan contained in Apperdix 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



S. Singh Bajwa, Acting Director  
Project Directorate II-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: August 19, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 114

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 indicated by marginal lines.

Remove Pages

3/4 7-4

Insert Pages

3/4 7-4

## PLANT SYSTEMS

### EMERGENCY FEEDWATER SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3 7.1.2 At least three independent steam generator emergency feedwater pumps and flow paths shall be OPERABLE with:

- a. Two motor-driven emergency feedwater pumps, each capable of being powered from separate emergency busses, and
- b. One steam turbine driven emergency feedwater pump capable of being powered from an OPERABLE steam supply system.

APPLICABILITY: MODES 1, 2 and 3.

#### ACTION:

- a. With one emergency feedwater pump inoperable, restore the required emergency feedwater pumps to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With two emergency feedwater pumps inoperable, be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.
- c. With three emergency feedwater pumps inoperable, immediately initiate corrective action to restore at least one emergency feedwater pump to OPERABLE status as soon as possible.

#### SURVEILLANCE REQUIREMENTS

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4.7.1.2 Each emergency feedwater pump shall be demonstrated OPERABLE:

- a. At least once per 31 days by:
  1. Verifying that each motor driven pump develops a discharge pressure of greater than or equal to 1350 psig at greater than or equal to 90 gpm flow.
  2. Verifying that the steam turbine driven pump develops a discharge pressure of greater than or equal to 1330 psig at a flow of greater than or equal to 97 gpm when the secondary steam supply pressure is greater than 865 psig. The provisions of Specification 4.0.4 are not applicable.
  3. Verifying that each non-automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 114 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 May 25, 1993, as supplemented by letter dated June 16, 1993, and June 30, 1993, South Carolina Electric & Gas Company (the licensee), submitted a request for a change to the Virgil C. Summer Nuclear Station, Unit No. 1 (Summer Station) Technical Specifications (TS). The proposed change would modify TS Surveillance Requirement 4.7.1.2 to allow testing of the steam driven emergency feedwater (EFW) pump to be conducted with secondary steam supply pressure greater than 865 psig. The current requirement is that secondary steam supply pressure be greater than 900 psig.

2.0 EVALUATION

Performing Surveillance Requirement 4.7.1.2 at greater than 865 psig will adequately test the design capability of the steam driven EFW pump. A governor valve on the inlet to the turbine that drives the pump will throttle steam pressure down to the maximum steam ring pressure of 750 psig; thus, for any steam pressure greater than 750 psig at the inlet to the governor valve, the turbine will see the same 750 psig inlet pressure. Calculations show that the pressure drop in the steam supply line to the turbine at full steam flow is 112 psig. If this pressure drop is adopted as the maximum pressure loss, then the minimum steam generator pressure at which the design capability of the EFW pump could be tested fully is 862 psig.

The reduction of full power main steam pressure below 900 psig was a foreseen result of the increased tube plugging authorized by Amendment 111. There are no compensatory measures needed to perform the Surveillance Requirement when secondary steam pressure is greater than 865 psig; the pump will be capable of developing its full brake horsepower, its required discharge pressure (1330 psig) and its required flow (97 gpm). The requested change is, therefore, acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations the South Carolina state official was notified of the proposed issuance of the amendment. The state official had no comments.



#### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use 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 the amendment involves no significant hazards consideration and there has been no public comment on such finding (58 FR 37975). Accordingly, the 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 the amendment.

#### 5.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: G. Wunder

Date: August 19, 1993