



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

May 14, 1985

Docket No. 50-395

Mr. O. W. Dixon, Jr.
Vice President Nuclear Operations
South Carolina Electric & Gas Company
P.O. Box 764 (Mail Code 167)
Columbia, South Carolina 29218

Dear Mr. Dixon:

Subject: Issuance of Amendment No. 42 to Facility Operating License
NPF-12 Virgil C. Summer Nuclear Station, Unit No. 1

The Nuclear Regulatory Commission has issued Amendment No. 42 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 December 14, 1984.

The amendment modifies Technical Specification 3/4.9.11 "Spent Fuel Pool Ventilation System" to require certain surveillance testing only when the system is being used in an engineered safety features function. The amendment is effective seven days after its date of issuance.

A copy of the related safety evaluation supporting Amendment No. 42 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. 42
2. Safety Evaluation

cc w/enclosure:
See next page

DESIGNEED ORIGINAL

Certified By

A handwritten signature in cursive script that reads "John M. Clark".

SUMMER

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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. 42
License No. NPF-12

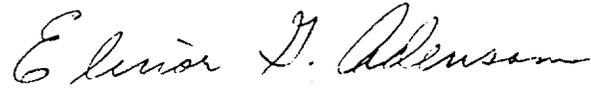
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Virgil C. Summer Nuclear Station, Unit No. 1 (the facility) Facility Operating License No. NPF-12 filed by the South Carolina Electric & Gas Company acting for itself and South Carolina Public Service Authority (the licensees), dated December 14, 1984, 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. 42 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.

3. This license amendment is effective seven days after 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: May 14, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 42

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 page is also provided to maintain document completeness.

<u>Amended</u> <u>Page</u>	<u>Overleaf</u> <u>Page</u>
3/4 9-12	3/4 9-11
3/4 9-13	

REFUELING OPERATIONS

3/4.9.10 WATER LEVEL-SPENT FUEL POOL

LIMITING CONDITION FOR OPERATION

3.9.10 At least 23 feet of water shall be maintained over the top of irradiated fuel assemblies seated in the storage racks.

APPLICABILITY: Whenever irradiated fuel assemblies are in the spent fuel pool.

ACTION:

With the requirements of the above specification not satisfied, suspend all movement of fuel assemblies and crane operations with loads in the fuel storage areas and restore the water level to within its limit within 4 hours.

SURVEILLANCE REQUIREMENTS

4.9.10 The water level in the spent fuel pool shall be determined to be at least its minimum required depth at least once per 7 days when irradiated fuel assemblies are in the spent fuel pool.

REFUELING OPERATIONS

3/4.9.11 SPENT FUEL POOL VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.9.11 Two independent spent fuel pool ventilation sub-systems shall be OPERABLE with at least one sub-system in operation.

APPLICABILITY: Whenever irradiated fuel is being moved in the spent fuel pool and during crane operation with loads over the pool.

ACTION:

- a. With one spent fuel pool ventilation sub-system inoperable, fuel movement within the spent fuel pool or crane operation with loads over the spent fuel pool may proceed provided the OPERABLE spent fuel pool ventilation sub-system is capable of being powered from an OPERABLE emergency power source and is in operation and discharging through at least one train of HEPA filters and charcoal adsorbers.
- b. With no spent fuel pool ventilation sub-system OPERABLE, suspend all operations involving movement of fuel within the spent fuel pool or crane operation with loads over the spent fuel pool.
- c. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.11 The above required spent fuel pool ventilation sub-systems shall be demonstrated OPERABLE:

- a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that each sub-system operates for at least 15 minutes.
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:
 1. Verifying that the cleanup system satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 30,000 cfm \pm 10%.

REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.
 3. Verifying a system flow rate of 30,000 cfm \pm 10% during system operation when tested in accordance with ANSI N510-1975.
- c. Prior to the movement of fuel or crane operation with loads over the pool by verifying that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a. of Regulatory Guide 1.52, Revision 2, March 1978. Subsequent to each initial analysis (which must be completed prior to fuel movement or crane operation with loads over the pool), during the period of time in which there is to be fuel or crane movement with loads over the pool, verify charcoal adsorber operation every 720 hours by obtaining and analyzing a sample as described above. These subsequent analyses are to be completed within thirty-one (31) days of sample removal.
- d. At least once per 18 months by:
1. Verifying that the pressure drop across the combined HEPA and roughing filters and charcoal adsorber banks is less than 6 inches Water Gauge while operating the system at a flow rate of 30,000 cfm \pm 10%.
 2. Verifying that on a loss of offsite power test signal, the system automatically starts.
 3. Verifying that the system maintains the spent fuel pool area at a negative pressure greater than or equal to 1/8 inches Water Gauge relative to the outside atmosphere during system operation.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.95% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 30,000 cfm \pm 10%.
- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.95% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 30,000 cfm \pm 10%.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 42 TO FACILITY OPERATING LICENSE NPF-12
SOUTH CAROLINA ELECTRIC & GAS COMPANY
SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

I. INTRODUCTION

By letter dated December 14, 1984, South Carolina Electric and Gas Company (the licensee) requested a change to Technical Specification 3/4.9.11, "Spent Fuel Pool Ventilation System" to require certain surveillance testing only when the system is being used in an engineered safety features (ESF) function.

II. EVALUATION

The requested change would apply the present ESF applicability and surveillance requirements (i.e., minimum operability and system testing prior to and during use) on the system when spent fuel is being moved or handled, and when the crane is being operated with loads over the pool. At all other times, no accident condition can exist, and the surveillance requirements for the ventilation system can be downgraded from ESF to non-ESF criteria (i.e., not addressed in the Technical Specifications). The non-ESF functions provided by the subject system are to provide ventilation/filtration of the fuel handling building, hot machine shop, and excess liquid radwaste areas during normal operation.

The staff has reviewed the proposed change and finds that prior to and during the handling of spent fuel, the present Technical Specification minimum operational requirements and the required surveillance testing for ESF filters will be taken per Regulatory Guide 1.52, Revision 2, March 1978, "Design, Testing and Maintenance Criteria for Post Accident Engineered-Safety-Feature Atmosphere Cleanup System Air Filtration and Adsorption Units of Light-Water-Cooled Nuclear Power Plants." There will be no degradation to the accident mitigating functions provided by the spent fuel pool exhaust ventilation system.

Therefore, the staff concludes that the proposed change is acceptable.

III. ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the use of a facility component located within the restricted area as defined in 10 CFR Part 20 and a change to surveillance requirements. 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 off-site 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.

IV. CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (50 FR 8006) on February 27, 1985, 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 Contributors: Jon B. Hopkins, Licensing Branch No. 4, DL
Robert Fell, Meteorology & Effluent Treatment
Systems Branch, DSI

Dated: May 14, 1985

DCS 016

May 14, 1985

AMENDMENT NO. 42 TO FACILITY OPERATING LICENSE NO. APF-12 - Virgil C. Summer Unit 1

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