



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 39 TO FACILITY OPERATING LICENSE NPF-12

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

I. INTRODUCTION

By letter dated November 29, 1984, South Carolina Electric and Gas Company (the licensee) proposed a change to Table 3.3-3, "Engineered Safety Feature Actuation System Instrumentation," of the Technical Specifications for the Virgil C. Summer Nuclear Station (Summer). The change indicates that only one (1) channel of the Containment Radioactivity-High isolation signal will be required to be operable in Modes 1 through 4 when the purge supply is in use and the purge exhaust is closed. The change is requested to allow for the temporary isolation of one of the radiation monitors used to monitor containment radioactivity during certain plant operations.

II. EVALUATION

As detailed in Section 6.2.4 of the Standard Review Plan (SRP) (NUREG-0800), system lines which provide an open path from the containment to the outside environment should be equipped with radiation monitors that are capable of isolating these paths on a high radiation signal. In addition to this requirement, other diverse parameters should be sensed for the initiation of containment isolation. As stated in Section 6.2.3 of the Summer Safety Evaluation Report (SER) (NUREG-0717), the containment isolation system design conforms to these criteria.

When the plant is operating in Modes 1 through 4, the six-inch mini-purge system is occasionally needed to increase containment pressure to comply with certain limits in the Technical Specifications. This pressurization is accomplished by keeping closed the valves in the mini-purge exhaust line and pumping air into the containment through the mini-purge supply line. (Technical Specifications limit the total amount of time the isolation valves in the mini-purge system may be opened to less than 1000 hours per 365 days). With the exhaust line closed, the radiation monitor downstream of the isolation valves is isolated from the containment atmosphere. Nevertheless, the supply line radiation monitor will remain functional.

The licensee proposes a change to the Technical Specifications so that the radiation monitor in the mini-purge exhaust line may be temporarily isolated during the containment pressurization mode. As required by the SRP, there will still be diversity in the parameters sensed for containment isolation, including high containment pressure and the various other parameters sensed for safety injection system actuation.

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The proposed change does not involve a reduction in the margin of safety because there remains another instrumentation channel capable of sensing radioactivity inside containment, which provides a high radiation signal to the mini-purge system isolation valves. Therefore, the staff finds the proposed change to T.S. Table 3.3-3 to be 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. 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.

### 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.

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Dated: April 1, 1985

April 1, 1985

AMENDMENT NO. 39 TO FACILITY OPERATING LICENSE NO. NPF-12 - Virgil C. Summer Unit 1

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