

SOUTH CAROLINA ELECTRIC & GAS COMPANY

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O. W. DIXON, JR.
VICE PRESIDENT
NUCLEAR OPERATIONS

November 29, 1984

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Virgil C. Summer Nuclear Station
Docket No. 50/395
Operating License No. NPF-12
Purge and Exhaust Isolation

Dear Mr. Denton:

South Carolina Electric and Gas Company (SCE&G) hereby requests an amendment to Table 3.3-3, "Engineered Safety Feature Actuation System Instrumentation" of the Virgil C. Summer Nuclear Station Technical Specifications. This change, as shown on the attached marked-up Technical Specification page, indicates that only one (1) channel of the Containment Radioactivity-High isolation signal is required to be operable in Modes 1 through 4 when the purge supply is in use and the purge exhaust is closed. This amendment is requested to allow for the temporary isolation of one of the radiation monitors used to monitor containment radioactivity during certain plant operations.

As detailed in Section 6.2.4 of Revision 1 of the Standard Review Plan (SRP), 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 upon a high radioactivity 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 Virgil C. Summer Nuclear Station Safety Evaluation Report, the SCE&G 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 needed at times to increase containment pressure to comply with Technical Specification limits. This pressurization is accomplished (see Final Safety Analysis Report Figure 6.2-58) by keeping closed the valves in the mini-purge exhaust line and pumping air into 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.)

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Mr. Harold R. Denton, Director
Purge and Exhaust Isolation
November 29, 1984
Page #2

While in this pressurization mode, no open exhaust line leads out of containment to the outside environment. Because all exhaust lines are closed, one of the radiation monitors used to sample containment radiation is isolated.

In accordance with the SRP, the radiation monitor in question provides one of the two (2) isolation signals to the mini-purge lines upon detection of high containment radioactivity. In the plant configuration described above, the valves in the exhaust line are closed. If during this pressurizing, leakage occurs through the closed valves, the radiation monitor could detect radioactivity and provide an additional isolation signal.

The change to the Technical Specification is requested such that the radiation monitor in question can be temporarily isolated during containment pressurization. As required by the SRP, diversity in the parameters sensed for containment isolation continues to exist, including high containment pressure and the various other parameters sensed for safety injection system actuation.

SCE&G has determined that a finding of no significant hazards is appropriate because of the following:

The amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated because the monitoring of open flow paths out of containment remains a requirement and the design basis continues to be met;

The amendment does not create the possibility of a new or different kind of accident because the physical plant design is not being changed. The amendment still allows for purge and exhaust isolation on high containment radioactivity in Modes 1 through 4;

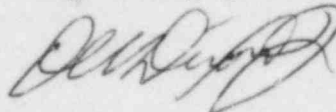
The amendment does not involve a significant reduction in a margin of safety because of the minimal time required for containment pressurization during which the exhaust lines are closed and an alternate channel sensing high radiation inside containment exists to provide a purge exhaust isolation signal.

Mr. Harold R. Denton, Director
Purge and Exhaust Isolation
November 29, 1984
Page #3

The revision has been reviewed and approved by both the Plant Safety Review Committee and the Nuclear Safety Review Committee. Please find enclosed the application fee of one hundred fifty dollars (\$150.00) required by Title 10 of the Code of Federal Regulations, Part 170.

If you have any questions, please advise.

Very truly yours,



O. W. Dixon, Jr.

AMM/OWD/gj
Attachment:

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