

November 5, 2004

Mr. Jeffery B. Archie  
Vice President, Nuclear Plant Operations  
South Carolina Electric & Gas Company  
Virgil C. Summer Nuclear Station  
Post Office Box 88  
Jenkinsville, South Carolina 29065

SUBJECT: VIRGIL C. SUMMER NUCLEAR STATION - REQUEST FOR ADDITIONAL  
INFORMATION: EXEMPTION FOR CLADDING MATERIAL SPECIFIED IN  
10 CFR 50.44, 10 CFR 50.46 AND 10 CFR 50 APPENDIX K (TAC NO. MC4462)

By letter dated September 3, 2004, South Carolina Electric & Gas Company, the licensee for Virgil C. Summer Nuclear Station, submitted an exemption request to allow use of a different fuel cladding material as an alternative to that specified in the *Code of Federal Regulations*. The affected regulations are:

- 10 CFR 50.44, "Standards for Combustible Gas Control in Light-Water-Cooled Power Reactors"
- 10 CFR 50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light-Water Nuclear Power Reactors"
- 10 CFR 50 APPENDIX K, "ECCS [Emergency Core Cooling Systems] Evaluation Models"

The U.S. Nuclear Regulatory Commission staff has reviewed the exemption request and determined that it did not provide sufficient information to approve the use of a different fuel cladding material as an alternative to that specified in the *Code of Federal Regulations*. The enclosed request for additional information (RAI) contains a specific question related to these

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issues. I have discussed this RAI with Mr. Robert Sweet, Licensing Supervisor, Virgil C. Summer Nuclear Station, and he agreed to respond to this request by November 12, 2004. Please contact me if you have any questions.

Sincerely,

**/RA/**

Karen R. Cotton, Project Manager, Section 1  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-395

Enclosure: RAI

cc w/encl: See next page

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Karen R. Cotton, Project Manager, Section 1  
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Division of Licensing Project Management  
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cc w/encl: See next page

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Mr. Jeffrey B. Archie  
South Carolina Electric & Gas Company

VIRGIL C. SUMMER NUCLEAR STATION

cc:

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Jenkinsville, South Carolina 29065

REQUEST FOR ADDITIONAL INFORMATION

VIRGIL C. SUMMER NUCLEAR STATION

EXEMPTION REQUEST

By letter dated September 3, 2004, South Carolina Electric & Gas Company, the licensee for V.C. Summer Nuclear Station (Summer), submitted an exemption request to allow use of a different fuel cladding material as an alternative to that specified in the *Code of Federal Regulations*.

The U.S. Nuclear Regulatory Commission staff requests that the licensee respond to the following question to permit the staff to complete its review of the exemption request

Discuss how data collected from the post-irradiation examinations of the Summer lead test assemblies (LTAs), as well as ongoing LTA and irradiation programs within the Westinghouse fleet, will be used to ensure that the fuel performance models remain conservative for these developmental cladding alloys, especially in subsequent cycles.

ENCLOSURE