

November 18, 2010

MEMORANDUM TO: Edwin M. Hackett, Executive Director  
Advisory Committee on Reactor Safeguards

FROM: David B. Matthews, Director **/RA Frank Akstulewicz for/**  
Division of New Reactor Licensing  
Office of New Reactors

SUBJECT: VIRGIL C. SUMMER NUCLEAR STATION UNITS 2 AND 3  
COMBINED LICENSE APPLICATION - ADVANCED SAFETY  
EVALUATION WITHOUT OPEN ITEMS FOR CHAPTER 5,  
"REACTOR COOLANT SYSTEM AND CONNECTED SYSTEMS"

By letter dated March 27, 2008, South Carolina Electric & Gas (SCE&G) submitted an application to the U.S. Nuclear Regulatory Commission (NRC) for a combined license (COL) application for Virgil C. Summer Nuclear Station (VCSNS), Units 2 and 3.

Based on our review of the application, the staff is providing the Advisory Committee on Reactor Safeguards (ACRS) its Advanced Safety Evaluation (ASE), without open items for Chapter 5, "Reactor Coolant System and Connected Systems" (ML100670055). Unless otherwise stated in the ASE, the staff's review was based on Revision 2 of the application. The ASE is being provided to support a meeting of the subcommittee of the ACRS scheduled for December 2010. The ACRS Full Committee meeting will be held after the subcommittee meeting.

For Chapter 5, the staff plans on focusing their presentation on the following specific categories of interest:

- Section 5.4, "Component and Subsystem Design," includes a discussion of an exemption related to the maximum safety wet bulb (noncoincident) air temperature. The maximum safety wet bulb (noncoincident) air temperature in AP1000 DCD Tier 1, Table 5.0-1 is 86.1 °F while the VCSNS site value is 87.3 °F. The staff's evaluation in ASE Section 5.4 concludes that the exemption is justified. The staff's evaluation of this exemption is also contained in ASE sections 2.0, 2.3.1, 6.2, 6.4, 9.1.3, 9.2.2, and 9.2.7.

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E. Hackett

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The staff concludes that the enclosed ASE does not contain any information exempt from public disclosure. However, the NRC will withhold the ASE from public disclosure for ten business days to allow SCE&G the opportunity to verify the staff's conclusion that the ASE contains no such exempt information. Therefore, the staff requests that the ACRS withhold the ASE from public disclosure until it has been released publicly in the Agencywide Documents Access and Management System (ADAMS).

The staff will inform the ACRS immediately if SCE&G request that any of the information in the ASE be withheld from public disclosure.

Docket Nos. 52-027  
52-028

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Docket Nos. 52-027  
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