

**NUCLEAR REGULATORY COMMISSION**

**[Docket Nos. 52-027 and 52-028; NRC-2008-0441]**

**Virgil C. Summer Nuclear Station, Units 2 and 3;**

**South Carolina Electric & Gas Company**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Exemption and combined license amendment; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is granting an exemption to allow a departure from the certification information of Tier 1 of the generic design control document (DCD) and issuing License Amendment No. 24 to Combined Licenses (COL), NPF-93 and NPF-94. The COLs were issued to South Carolina Electric & Gas Company (SCE&G), and South Carolina Public Service Authority (the licensee), for construction and operation of the Virgil C. Summer Nuclear Station (VCSNS), Units 2 and 3 located in Fairfield County, South Carolina.

The granting of the exemption allows the changes to Tier 1 information requested in the amendment. Because the acceptability of the exemption was determined in part by the acceptability of the amendment, the exemption and amendment are being issued concurrently.

**ADDRESSES:** Please refer to Docket ID **NRC-2008-0441** when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2008-0441**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "ADAMS Public Documents" and then select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that a document is referenced. The request for the amendment and exemption was submitted by the letter dated July 17, 2014 (ADAMS Accession No. ML14202A088). The licensee supplemented this request by letters dated September 25, 2014, and January 5, 2015 (ADAMS Accession Nos. ML14268A554 and ML15006A290).

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

**FOR FURTHER INFORMATION CONTACT:** Denise McGovern, Office of New Reactors, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-0681; e-mail: [Denise.McGovern@nrc.gov](mailto:Denise.McGovern@nrc.gov).

## **SUPPLEMENTARY INFORMATION:**

### **I. Introduction.**

The NRC is granting an exemption from Tier 1 information in the certified Design Control Document (DCD) incorporated by reference in Title 10 of *the Code of Federal Regulations* (10 CFR) part 52, appendix D, "Design Certification Rule for the AP1000 Design," and issuing License Amendment No. 24 to COLs, NPF-93 and NPF-94, to the licensee. The exemption is required by Paragraph A.4 of Section VIII, "Processes for Changes and Departures," appendix D to 10 CFR part 52 to allow the licensee to depart from Tier 1 information. With the requested amendment, the licensee sought proposed changes related to the design details of the containment internal structural wall modules (CA01, CA02, and CA05). The proposed changes to Tier 2 information in the VCSNS Units 2 and 3 UFSAR, and the involved plant-specific Tier 1 and corresponding combined license Appendix C information would allow the use of thicker than normal faceplates to accommodate local demand or connection loads in certain areas without the use of overlay plates or additional backup structures. Additional proposed changes to Tier 2 information and involved Tier 2\* information would allow:

(1) a means of connecting the structural wall modules to the base concrete through use of structural shapes, reinforcement bars, and shear studs extending horizontally from the structural module faceplates and embedded during concrete placement as an alternative to the use of embedment plates and vertically oriented reinforcement bars;

(2) a variance in structural module wall thicknesses from the thicknesses identified in the VCSNS Units 2 and 3 UFSAR Figure 3.8.3-8, "Structural Modules—Typical Design Details," for some walls that separate equipment spaces from personnel access areas;

(3) the use of steel plates, structural shapes, reinforcement bars, or tie bars between the module faceplates, as needed to support localized loads and ensure compliance with applicable codes;

(4) revision to containment internal structure (CIS) evaluations, and

(5) clarification to the definition of in-containment “structural wall modules,” clarifying that the west wall of the In-containment Refueling Water Storage Tank (IRWST) is not considered a “structural wall module,” that the CIS critical sections identified in VCSNS Units 2 and 3 UFSAR Subsection 3.8.3.5.8.1 present design summaries for areas of “large” demand in lieu of areas of “largest” demand, and revising the VCSNS Units 2 and 3 UFSAR in several places to provide consistency in terminology used to identify the structural wall modules

Part of the justification for granting the exemption was provided by the review of the amendment. Because the exemption is necessary in order to issue the requested license amendment, the NRC granted the exemption and issued the amendment concurrently, rather than in sequence. This included issuing a combined safety evaluation containing the NRC staff’s review of both the exemption request and the license amendment. The exemption met all applicable regulatory criteria set forth in 10 CFR 50.12, 10 CFR 52.7, and 10 CFR 52.63(b)(1). The license amendment was found to be acceptable as well. The combined safety evaluation is available in ADAMS under Accession No. ML15061A205.

Identical exemption documents (except for referenced unit numbers and license numbers) were issued to the licensee for VCSNS Units 2 and 3 (COLs NPF-93 and NPF-94). These documents can be found in ADAMS under Accession Nos. ML15061A179 and ML15061A186, respectively. The exemption is reproduced (with the exception of abbreviated titles and additional citations) in Section II of this document. The amendment documents for COLs NPF-93 and NPF-94 are available in ADAMS under Accession Nos. ML15061A169 and

ML15061A176, respectively. A summary of the amendment documents is provided in Section III of this document.

## **II. Exemption.**

Reproduced below is the exemption document issued to VCSNS, Units 2 and 3. It makes reference to the combined safety evaluation that provides the reasoning for the findings made by the NRC (and listed under Item 1) in order to grant the exemption:

1. In a letter dated July 17, 2014 and supplemented by the letters dated September 25, 2014, and January 5, 2015, South Carolina Electric & Gas Company (licensee) requested from the NRC an exemption to allow departures from Tier 1 information in the certified Design Control Document (DCD) incorporated by reference in Title 10 of the Code of Federal Regulations (10 CFR) part 52, appendix D, "Design Certification Rule for the AP1000 Design," as part of license amendment request (LAR) 14-05, "Containment Internal Structural Wall Module Design Details."

For the reasons set forth in Section 3.1 of the NRC staff's Safety Evaluation, which can be found at (ADAMS Accession Number ML15061A205), the Commission finds that:

- A. the exemption is authorized by law;
- B. the exemption presents no undue risk to public health and safety;
- C. the exemption is consistent with the common defense and security;
- D. special circumstances are present in that the application of the rule in this circumstance would not serve the underlying purpose of the rule;
- E. the special circumstances outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption, and

F. the exemption will not result in a significant decrease in the level of safety otherwise provided by the design.

2. Accordingly, the licensee is granted an exemption from the certified DCD Tier 1 Tables: 3.3-1 and 3.3-7, as described in the licensee's request dated July 17, 2014, and supplemented by letters dated September 25, 2014, and January 5, 2015. This exemption is related to and necessary for the granting of License Amendment No. 24, which is being issued concurrently with this exemption.

3. As explained in Section 5 of the NRC staff Safety Evaluation (ADAMS Accession Number ML15061A205), this exemption meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment needs to be prepared in connection with the issuance of the exemption.

4. This exemption is effective as of the date of its issuance.

### **III. License Amendment Request.**

The request for the amendment and exemption was submitted by the letter dated July 17, 2014. The licensee supplemented this request by the letters dated September 25, 2014, and January 5, 2015. The proposed amendment is described in Section I, above.

The Commission has determined for these amendments that the application complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings

as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment.

A notice of consideration of issuance of amendment to facility operating license or combined license, as applicable, proposed no significant hazards consideration determination, and opportunity for a hearing in connection with these actions, was published in the *Federal Register* on February 3, 2015 (80 FR 5798). No comments were received during the 30-day comment period.

The NRC staff has found that the amendment involves no significant hazards consideration. The Commission has determined that these amendments satisfy the criteria for categorical exclusion in accordance with 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared for these amendments.

#### **IV. Conclusion**

Using the reasons set forth in the combined safety evaluation, the staff granted the exemption and issued the amendment that the licensee requested on July 17, 2014, and supplemented by the letters dated September 25, 2014, and January 5, 2015. The exemption and amendment were issued on March 12, 2015, as part of a combined package to the licensee (ADAMS Accession No. ML15061A159).

Dated at Rockville, Maryland, this 3rd day of June 2015.

For the Nuclear Regulatory Commission.

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