

SAFETY EVALUATION BY THE OFFICE OF NEW REACTORS
RELATED TO EXEMPTION AND AMENDMENT NO. 29
TO THE COMBINED LICENSE NO. NPF-93
AND LICENSE NO. NPF-94
SOUTH CAROLINA ELECTRIC AND GAS COMPANY
SOUTH CAROLINA PUBLIC SERVICE AUTHORITY
VIRGIL C. SUMMER NUCLEAR STATION UNITS 2 AND 3
DOCKET NOS. 52-027 AND 52-028

1.0 INTRODUCTION

By letter dated September 25, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14268A388), South Carolina Electric and Gas Company (SCE&G/licensee) submitted license amendment request (LAR) 14-07 and requested that the U.S. Nuclear Regulatory Commission (NRC/Commission) amend the combined licenses (COLs) for Virgil C. Summer Nuclear Station Units 2 and 3 (VCSNS), COL Numbers NPF-93 and NPF-94, respectively.

The proposed LAR revises the concrete wall thickness tolerances of four containment internal structural wall modules (CA04, CA01, and CB65). The proposed changes to Tier 2 information in the Updated Final Safety Analysis Report (UFSAR), plant-specific Tier 1 information, and corresponding COL Appendix C information would allow an increase of the concrete wall thickness tolerances. The proposed changes would allow:

- (1) a change to Tier 2 information in UFSAR Subsection 3.8.3.6.1, "Fabrication, Erection, and Construction of Structural Modules," to allow an increase in wall thickness tolerance beyond the American Concrete Institute (ACI) 117, "Standard Specifications for Tolerance for Concrete Construction and Material," specified tolerance for some Containment Internal Structure (CIS) walls.
- (2) the addition of Notes 10 and 11 to Tier 1 Table 3.3-1, which provides the wall thickness tolerance deviations.

SCE&G has also requested an exemption from the provisions of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52, Appendix D, Section III.B, "Design Certification Rule for the AP1000 Design, Scope and Contents," to allow a departure from the elements of the certification information in Tier 1 of the generic Design Control Document (DCD).¹

In a letter dated March 13, 2015 (ADAMS Accession No. ML15072A306), the licensee provided additional information related to the staff request for additional information (RAI) 7749, which supplemented the LAR. This information did expand the scope of the application as originally noticed and did change the staff's original proposed "no significant hazards consideration" determination published in the *Federal Register* on November 12, 2014 (79 FR 67204). The revised "no significant hazards consideration" determination was published in the *Federal Register* on April 14, 2015 (80 FR 20020).

In order to modify the UFSAR (the plant-specific DCD) Tier 1 information, the NRC must find the licensee's exemption request included in its submittal for the LAR acceptable. The staff's review of the exemption request as well as the LAR is included in this safety evaluation.

2.0 REGULATORY EVALUATION

In accordance with 10 CFR Part 52, Appendix D, Section VIII.A.4, exemptions from Tier 1 information are governed by the requirements of 10 CFR 52.63(b)(1) and 10 CFR 52.98(f). It also states that the Commission will deny such a request if the design change causes a significant reduction in the level of plant safety otherwise provided by the design.

Regulations in 10 CFR 52.63(b)(1) allow the licensee to request NRC approval for an exemption from one or more elements of the certification information. The Commission may only grant such a request if it complies with the requirements of 10 CFR 52.7, "Specific Exemptions," which in turn points to the requirements listed in 10 CFR 50.12, "Scope of Subpart," for specific exemptions, and if the special circumstances present outweigh the potential decrease in safety due to reduced standardization. Therefore, any exemption from the Tier 1 information certified by Appendix D to 10 CFR Part 52, "Design Certification Rule for the AP1000 Design," must meet the requirements of 10 CFR 50.12, 52.7, and 52.63(b)(1).

Regulations 10 CFR 52.98(f) states that any modification to, addition to, or deletion from the terms and conditions of a COL including any modification to, addition to, or deletion from the ITAAC contained in the license is a proposed amendment to the license. Appendix C of COLs NPF-93 and NPF-94 contain tables and a figure, which the licensee is proposing to modify. Therefore, the proposed change requires a license amendment.

Regulations in 10 CFR Part 52, Appendix D, Section VIII.B.5.a require prior NRC approval for Tier 2 departures that involve changes to Tier 1, Tier 2* information, or the Technical Specifications. The proposed changes affect Tier 1 information and thus require NRC approval.

¹ While the licensee describes the requested exemption as being from Section III.B of 10 CFR Part 52, Appendix D, the entirety of the exemption pertains to proposed departures from Tier 1 information in the generic DCD. In the remainder of this evaluation, the NRC will refer to the exemption as an exemption from Tier 1 information to match the language of Section VIII.A.4 of 10 CFR Part 52, Appendix D, which specifically governs the granting of exemptions from Tier 1 information.

Regulations 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," Appendix A, "General Design Criteria for Nuclear Power Plants," General Design Criterion (GDC) 1, "Quality Standards and Records," require that structures, systems, and components important to safety shall be designed, fabricated, erected, and tested to quality standards commensurate with the importance of the safety functions to be performed.

Regulations in 10 CFR Part 50, Appendix A, GDC 2, "Design Bases for Protection against Natural Phenomena," require that structures, systems, and components important to safety shall be designed to withstand the effects of natural phenomena such as earthquakes, tornadoes, hurricanes, floods, tsunamis, and seiches without loss of capability to perform their safety functions.

Regulations in 10 CFR Part 50, Appendix A, GDC 4, "Environmental and Dynamic Effects Design Bases," require that structures, systems, and components important to safety shall be designed to accommodate the effects of and to be compatible with the environmental conditions associated with normal operation, maintenance, testing and postulated accidents, including loss-of-coolant accidents.

3.0 TECHNICAL EVALUATION

3.1 EVALUATION OF EXEMPTION

INTRODUCTION

The regulations in Section III.B of Appendix D to 10 CFR Part 52 require a holder of a COL referencing Appendix D to 10 CFR Part 52 to incorporate by reference and comply with the requirements of Appendix D, including certified information in Tier 1 of the generic AP1000 DCD.

As defined in Section II of Appendix D to 10 CFR Part 52, Tier 1 information includes ITAAC. Therefore, a licensee referencing Appendix D incorporates by reference all the ITAAC contained in the generic DCD. These ITAAC, along with the plant-specific ITACC, were enumerated in Appendix C of the COL at its issuance. The proposed changes would depart from the plant-specific DCD by revising Note 2 of Table 3.3-1, "Definition of Wall Thickness for Nuclear Island Buildings, Turbine Building, and Annex Building." Specifically, the note is revised to add Notes 10 and 11, which depicted those walls as having a tolerance of plus or minus of one and a quarter of an inch ($\pm 1-1/4"$) and plus or minus one and five eighths on an inch ($\pm 1-5/8"$), respectively. The proposed change will also correct inconsistencies between Tier 1 and UFSAR Tier 2. An exemption is needed because Section III.B of Appendix D to 10 CFR Part 52 requires a licensee to comply with the Tier 1 information of the generic AP1000 DCD.

In summary, the end result of this exemption would be that the licensee can implement modifications to Tier 1 information described and justified in LAR 14-07 if and only if the NRC approves LAR 14-07. This is a permanent exemption limited in scope to the particular Tier 1 information specified.

As stated in Section VIII.A.4 of Appendix D to 10 CFR Part 52, an exemption from Tier 1 information is governed by the requirements of 10 CFR 52.63(b)(1) and 52.98(f). Additionally, the Commission will deny a request for an exemption from Tier 1 if it finds that the design change will result in a significant decrease in the level of safety. Pursuant to 10 CFR 52.63(b)(1), the Commission may, upon application by an applicant or licensee

referencing a certified design, grant exemptions from one or more elements of the certification information, so long as the criteria given in 10 CFR 52.7 are met, and that the special circumstances as defined by 10 CFR 50.12 outweigh any potential decrease in safety due to reduced standardization.

Pursuant to 10 CFR 52.7, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 52. Regulations in 10 CFR 52.7 further states that the Commission's consideration will be governed by 10 CFR 50.12, "Specific exemptions," which states that an exemption may be granted when: (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) special circumstances are present. Regulations in 10 CFR 50.12(a)(2) list six special circumstances for which an exemption may be granted. It is necessary for one of these special circumstances to be present in order for NRC to consider granting an exemption request. The licensee stated that the requested exemption meets the special circumstances of 10 CFR 50.12(a)(2)(ii). That subsection defines special circumstances as when "[a]pplication of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule." The staff's analysis of each of these findings is presented below.

3.1.1 Authorized by Law

This exemption would allow the licensee to implement approved changes to Tier 1 Table 3.3-1. This is a permanent exemption limited in scope to particular Tier 1 information, and subsequent changes to Tier 1 Table 3.3-1 or any other Tier 1 information, would be subject to full compliance by the licensee as specified in Section III.B of Appendix D to 10 CFR Part 52. As stated above, 10 CFR 52.63.b(1) allows the NRC to grant exemptions from one or more elements of the Tier 1 information. The NRC staff has determined that granting of the licensee's proposed exemption will not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, as required by 10 CFR 50.12(a)(1), the exemption is authorized by law.

3.1.2 No Undue Risk to Public Health and Safety

The underlying purpose of Appendix D to 10 CFR Part 52 is to ensure that the licensee will construct and operate the plant based on the approved information found in the DCD incorporated by reference into the licensee's licensing basis. The changes to the design details for the structural wall modules do not have an adverse impact on the response of the nuclear island structures to safe shutdown earthquake ground motions, loads due to anticipated transients, or postulated accident conditions, nor do they change the seismic Category I classification. These changes will not impact the ability of the structures to perform their design function. Because the changes will not alter the operation of any plant equipment or systems, these changes do not present an undue risk from existing equipment or systems. These changes do not add any new equipment or system interfaces to the current plant design. The changes do not introduce any new industrial, chemical, or radiological hazards that would represent a public health or safety risk, nor do they modify or remove any design, operational controls, or safeguards intended to mitigate any existing onsite hazards. Furthermore, the proposed changes would not allow for a new fission product release path, result in a new fission product barrier failure mode, or create a new sequence of events that would result in significant fuel cladding failures. Accordingly, these changes do not present an undue risk from any new

equipment or systems. Therefore, as required by 10 CFR 50.12(a)(1), the staff finds that there is no undue risk to public health and safety.

3.1.3 Consistent with the Common Defense and Security

This exemption would allow the licensee to implement approved changes to Tier 1 Table 3.3-1. This is a permanent exemption limited in scope to particular Tier 1 information. Subsequent changes to Table 3.3-1 or any other Tier 1 information would be subject to Appendix D to 10 CFR Part 52. The change does not alter or impede the design, function, or operation of any plant structures, systems, or components (SSCs) associated with the facility's physical or cyber security, and therefore does not affect any plant equipment that is necessary to maintain a safe and secure plant status. In addition, the change has no impact on plant security or safeguards. Therefore, as required by 10 CFR 50.12(a)(1), the staff finds that the common defense and security is not impacted by this exemption.

3.1.4 Special Circumstances

Special circumstances, in accordance with 10 CFR 50.12(a)(2)(ii), are present whenever application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule. The underlying purposes of the Tier 1 information is to ensure that the licensee will safely construct and operate the plant based on the certified information found in the AP1000 DCD that was incorporated by reference into the licensee's licensing basis. The changes to the design details for the structural wall modules maintain the design margins of the internal containment structures. These changes are necessary to enhance the ability of the licensee to construct the plant based on the information in the certified design, by clarifying the information found in Table 3.3-1. If this exemption is not granted and the proposed changes in the LAR are not allowed to be implemented, then the Tier 1 ITAAC would not conform to the UFSAR Tier 2 design descriptions, and the performance of the Tier 1 ITAAC would not accurately verify construction of the proposed design. Therefore, because the application of Section III.B of Appendix D to 10 CFR Part 52 in this circumstance does not serve the underlying purpose of the rule, the staff finds that the special circumstances required by 10 CFR 50.12(a)(2)(ii) for the granting of an exemption from the Tier 1 information exist.

3.1.5 Special Circumstances Outweigh Reduced Standardization

This exemption would allow the implementation of changes to Table 3.3-1 proposed in the LAR. Based on the nature of the proposed changes to the generic Tier 1 information and the understanding that these changes were identified during the design finalization process for the AP1000, this exemption may be requested by other AP1000 licensees and applicants. However, a review of the reduction in standardization resulting from the departure from the standard DCD determined that even if other AP1000 licensees and applicants do not request this same departure, the special circumstances will continue to outweigh any decrease in safety from the reduction in standardization because the key design functions of the containment internal structural wall modules associated with this request will continue to be maintained. While the text in the Table 3.3-1 may be changed, the changes have no effect on any SSCs meeting their design function. Therefore, as required by 10 CFR Part 52.63(b)(1), the staff finds that the special circumstances outweigh the effects the departure has on the standardization of the AP1000 design.

3.1.6 No Significant Reduction in Safety

This exemption would allow the implementation of changes to Table 3.3-1 proposed in the LAR. The proposed changes to the design details for the structural wall modules maintain the design margins of the internal containment structures. The proposed changes to Table 3.3-1 will not adversely affect the ability of the SSCs to perform their design functions and the level of safety provided by the SSCs is unchanged. Therefore, as required by 10 CFR Part 52, Appendix D, Section VIII.A.4, the staff finds that granting the exemption would not result in a significant decrease in the level of safety otherwise provided by the design.

3.2 Evaluation of Proposed Changes

To perform the technical evaluation, the NRC staff considered UFSAR Tier 1 Section 3.3, "Buildings," and Tier 2 Section 3.8, "Design of Category I Structures." The staff also examined the portions of NUREG-1793, Supplement 2, "Final Safety Evaluation Report Related to Certification of the AP1000 Standard Plant Design" (ADAMS Accession No. ML112061231) and portions of NUREG-2153, Volume 1, "Final Safety Evaluation Report for Combined Licenses for Virgil C. Summer Nuclear Station, Units 2 and 3," (ADAMS Accession No. ML13275A125) documenting the staff's technical evaluation of those aspects of the AP1000 DCD and Summer COL applications, respectively. The NRC staff reviewed the licensee's proposed UFSAR changes to wall thickness tolerances to confirm that the safety of the affected CIS walls is not compromised by the proposed increase in tolerance.

UFSAR Subsection 3.8.3.1 states that the AP1000 CIS walls are designed using reinforced concrete and structural steel. The AP1000 CIS walls are a mix of steel-concrete (SC) composite modules and reinforced concrete walls.

The SC wall modules consist of steel faceplates connected by trusses. Shear studs are welded to the interiors of the module faceplates. Steel faceplate connections are complete joint penetration welds such that the full capacity of the steel plates is developed across the joint. Concrete is poured between the steel faceplates, which serve as forms. Once the concrete in the wall modules cures, the concrete, trusses, faceplates, and the shear studs act as a lateral force resisting system, behaving as a shear wall, to resist design basis loads. Examples of SC walls are those that form the CA01 module.

Some reinforced concrete walls are attached to permanent steel plate formwork, which lines the perimeter of compartments or cavities. Examples of cavities are the reactor vessel cavity (RVC) and the reactor coolant drain tank (RCDT). The RVC is formed by the CA04 module, and the RCDT is formed by the CB65 module. The formwork steel plates in CA04 and CB65 have welded steel angles and "T" sections embedded in the concrete to anchor the steel plates once concrete is poured.

In some locations, CIS walls hold reinforced concrete between SC wall modules and formwork steel plates. These sections (steel plate formwork – concrete – SC wall module) are to be treated as a single wall. An example is the CA04/CA01 wall. Steel plates on both sides of the wall shall be anchored to the concrete, and the section should behave as a reinforced concrete wall. In other locations, CIS walls hold reinforced concrete between formwork steel plates. These sections (steel plate formwork – concrete – steel plate formwork) are also to be treated as a single wall. An example is the CA04/CB65 wall.

The shear studs and trusses are designed in accordance with the provisions of the American Institute of Steel Construction (AISC) Standard Specification, AISC N690-1994, "Specification

for the Design, Fabrication, and Erection of Steel Safety Related Structures for Nuclear Facilities.” The SC wall modules and composite sections are designed in accordance with the provisions of the American Concrete Institute (ACI) Code, ACI 349-01, “Building Code Requirements for Nuclear Safety Related Structures.”

Under this LAR the licensee proposed to depart from Tier 1 material in UFSAR Table 3.3-1, “Definition of Wall Thicknesses for Nuclear Island Buildings, Turbine Building, and Annex Building.” The proposed changes add footnotes to Tier 1 Table 3.3-1 indicating increased thickness tolerances for walls around the RVC. The changes apply to specific walls between elevations 71’-6” and 98’-0”. These structural walls are formed by modules CA04 and CB65 as well as modules CA04 and CA01. The original wall thickness tolerance for CIS walls (as approved for the AP1000 DCD) is ± 1 ”. The LAR proposes a revised thickness tolerance of $\pm 1\frac{1}{4}$ ” for the wall formed by modules CA04 and CB65. The 3’-0” thick CA04/CB65 wall is located between the RVC and the RCDT. The LAR also proposes a revised thickness tolerance of $\pm 1\frac{5}{8}$ ” for the walls formed by modules CA04 and CA01. The 7’-6” and 9’-0” thick CA04/CA01 walls are located around the West, North, and East directions of the RVC. Both new tolerances exceed the approved wall thickness tolerance of ± 1 ”.

The licensee also proposed a change to Tier 2 material in UFSAR Subsection 3.8.3.6.1. The proposed change modifies the text to allow an increase in wall thickness tolerance beyond ACI 117 specified tolerances for certain CIS walls.

The staff’s evaluation of these design changes are summarized below.

3.2.1 Increase of wall thickness tolerance

In the LAR, the licensee stated that UFSAR Subsection 3.8.3.6.1 requires structural module tolerances to conform to ACI 117, American Welding Society (AWS) D1.1, “Structural Welding Code – Steel,” and AISC N690 and that UFSAR Subsection 3.8.4.4.1, “Seismic Category I Structures,” requires design and analysis procedures to conform with ACI 349. The licensee stated that the proposed new thickness tolerance is conservative relative to the requirements of industry codes ACI 117, AWS D1.1, and AISC N690 but not to ACI 349-01. To address the tolerance deviation from that allowed by ACI 349, the licensee evaluated the reinforcement requirements for the worst case tolerance in all directions. The licensee found that the reinforcement used in the wall design was adequate and that the potential decrease in area of the surrounding concrete was insignificant to current structural analyses and qualifications.

The NRC staff reviewed the LAR and observed that the new proposed thickness tolerance exceeds the specified tolerance of both ACI 117 and ACI 349. The staff noticed a difference between the tolerances in ACI 117 and the tolerances proposed in the LAR. ACI 117, Section 4.5, “Deviation from Cross-Sectional Dimensions,” states that the thickness of elements, except slabs, where specified cross-sectional dimension is more than 36 inches (3 feet), the tolerance is plus 1 (+1) and minus $\frac{3}{4}$ ($-\frac{3}{4}$) of an inch. These values are different than those proposed in the LAR. The licensee addressed the tolerance exceedance of ACI 349 by performing an analysis using the worst case tolerances and stated compliance with tolerances provided by other codes including ACI 117. By letter dated January 13, 2015 (ADAMS Accession No. ML15013A399), the staff issued RAI 7749, Questions 03.08.03-01 and 03.08.03-02, requesting that the applicant modify the LAR by conveying the difference between the standard and the LAR proposed wall thickness tolerance and to provide assurance of safety margin for the proposed thickness tolerances that exceed ACI 117 and ACI 349 requirements, respectively.

By letter dated March 13, 2015 (ADAMS Accession No. ML15072A306), the licensee responded to RAI 7749, Questions 03.08.03-01 and 03.08.03-02. The licensee stated that an assessment was performed to evaluate the impact and the margin on the affected walls. The licensee committed to update UFSAR Subsection 3.8.3.6.1 to identify that thickness tolerances may exceed ACI 117 specifications for some walls around the RVC. In the response to RAI 7749, Question 03.08.03-02, the licensee evaluated the safety margin for the CA04/CB65 wall and found that the minimum margin for the vertical reinforcement is 48.4%, horizontal reinforcement is 55.3%, and shear is 61.3%. In addition, the licensee stated that the shear reinforcement spacing is sufficient for the increased tolerances. For the thicker CA01/CA04 walls, the licensee stated that the decrease in concrete area is insignificant.

The staff reviewed the licensee's responses to RAI 7749; and based on the information presented by the licensee, the staff concluded that the licensee adequately addressed the tolerance exceedance of ACI 117. Additionally, the margin provided by the reinforcement provides reasonable assurance that the tolerance changes to wall thicknesses will not compromise the intended safety functions of the CA04/CB65 and CA01/CA04 walls and, therefore, is acceptable. Accordingly, RAI 7749, Questions 03.08.03-01 and 03.08.03-02, is resolved.

3.2.2 Licensing Basis Changes

In Enclosure 7 of the LAR, the licensee proposed the licensing basis change descriptions to the affected subsections of the UFSAR to be consistent with the proposed wall thickness tolerances for the CA04/CB65 and CA01/CA04 walls. The licensee proposed to revise Subsection 3.8.3.6.1 of the UFSAR for consistency as a result of the proposed changes to the tolerances of the CA04/CB65 and CA01/CA04 walls.

The staff reviewed the proposed changes along with the referenced enclosures and the additional information in Subsection 3.8.3.6.1 of the UFSAR and found the proposed changes to be acceptable.

CONCLUSION

The staff reviewed the licensee's proposed changes provided in the LAR. Based on the staff's technical evaluation, the staff finds that:

- (1) The proposed change to include Notes 10 and 11 in Tier 1 Table 3.3-1 provides wall thickness tolerance deviations which do not affect the structural integrity of the affected CIS walls, and the safety margin is adequate for the range of potential wall thicknesses. The proposed changes to provide additional thickness tolerances to the CA01/CB65 and CA01/CA04 walls are acceptable because the licensee performed an analysis of the walls and determined that sufficient safety margin exists for the proposed thickness tolerances.
- (2) The proposed change to identify a departure from ACI 117 code requirements for some CIS wall thickness tolerances is acceptable because the increased tolerance on the RVC walls does not impair the ability of the walls to perform their safety function.

For the reasons specified above, the staff finds that the proposed UFSAR amendments to Tier 1 Table 3.3-1 and Tier 2 Subsection 3.8.3.6.1 of the UFSAR are acceptable. Furthermore, the

supporting analysis provided in the LAR does not alter the relevant conclusions made for the AP1000 standard design.

Based on these findings, the NRC staff concludes that there is reasonable assurance that the requirements of General Design Criterion (GDC) 1, GDC 2, and GDC 4 of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," Appendix A ("General Design Criteria for Nuclear Power Plants"), and Appendix D ("Design Certification Rule for the AP1000 Design") to 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants," will continue to be met. Therefore, the staff finds the proposed changes to be acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations in 10 CFR 50.91(b) (2), the South Carolina State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20, "Standards for Protection Against Radiation." The NRC 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 the amendment involves no significant hazards consideration, and there has been no public comment on such finding (April 14, 2015 (80 FR 20020)) set forth in 10 CFR 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 the amendment.

Because the exemption is necessary to allow the changes proposed in the license amendment and because the exemption does not authorize any activities other than those proposed in the license amendment, the environmental consideration for the exemption is identical to that of the license amendment. Accordingly, the exemption meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 51.22(b), no environmental impact statement or environmental assessment needs to be prepared in connection with the issuance of the exemption.

6.0 CONCLUSION

The staff has determined that pursuant to Section VIII.A.4 of Appendix D to 10 CFR Part 52, the exemption (1) is authorized by law, (2) presents no undue risk to the public health and safety, (3) is consistent with the common defense and security, (4) is a special circumstance, (5) that outweighs the reduction in standardization, and (6) does not significantly reduce the level of safety at the licensee's facility. Therefore, the staff grants the licensee an exemption from the Tier 1 information specified by the licensee.

The staff has concluded, based on the considerations discussed in Section 3.2 and confirming that these changes do not change an analysis methodology, assumptions, or the design itself that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public. Therefore, the staff finds the changes proposed in this license amendment acceptable.

7.0 REFERENCES

1. Request for License Amendment and Exemption 14-07: CA04 Structural Module ITAAC Dimension Change, letter from South Carolina Electric & Gas (SCE&G), dated September 25, 2014 (ADAMS Accession No. ML14268A388)
2. Request for License Amendment and Exemption 14-07 S1: CA04 Structural Module ITAAC Dimension Change, letter from South Carolina Electric & Gas (SCE&G), dated March 13, 2015 (ADAMS Accession No. ML15072A306)
3. Request for Additional Information: LAR 14-07 for the Virgil C. Summer Nuclear Station Units 2 and 3: CA04 Structural Module ITAAC Dimension Change, letter from Denise McGovern (NRC), dated January 13, 2015 (ADAMS Accession No. ML15013A399)
4. Request for License Amendment and Exemption 14-05: Containment Internal Structural Wall Module Design Details, letters from South Carolina Electric & Gas (SCE&G), dated July 17, 2014 (ADAMS Accession No. ML14202A088)
5. AP1000 Design Control Document, Revision 19, dated June 13, 2012 (ADAMS Accession No. ML11171A500).
6. Final Safety Evaluation Report Related to Certification of the AP1000 Standard Plant Design, NUREG-1793, Supplement 2, dated August 5, 2011 (ADAMS Accession No. ML112061231).
7. U.S. Nuclear Regulatory Commission, "Final Safety Evaluation Report for Combined Licenses for Virgil C. Summer Nuclear Station, Units 2 and 3," Volume 1, NUREG 2153, September 2013 (ADAMS Accession No. ML13275A125).
8. American Concrete Institute (ACI), ACI-349-01, "Building Code Requirements for Nuclear Safety Related Structures."

9. American Institute of Steel Construction (AISC), AISC-N690-1994, "Specification for the Design, Fabrication, and Erection of Steel Safety Related Structures for Nuclear Facilities."
10. American Concrete Institute (ACI), ACI-117, "Specification for Tolerances for Concrete Construction and Materials and Commentary."