

SAFETY EVALUATION BY THE OFFICE OF NEW REACTORS

RELATED TO EXEMPTION AND AMENDMENT NO. 53

TO THE COMBINED LICENSE NOS. NPF-93 AND NPF-94

SOUTH CAROLINA ELECTRIC & 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 December 17, 2015, as supplemented by letter dated August 25, 2016, license amendment request (LAR) 15-15, the South Carolina Electric & Gas Company, acting on behalf of itself and the South Carolina Public Service Authority (SCE&G/licensee) requested that the U.S. Nuclear Regulatory Commission (NRC) amend the combined licenses (COL) for V.C. Summer Nuclear Station (VCSNS) Units 2 and 3, COL Numbers NPF-93 and NPF-94, respectively, regarding the Radiologically Controlled Area Ventilation System (VAS) design. LAR 15-15 would revise the Updated Final Safety Analysis Report (UFSAR) in the form of departures from the incorporated plant-specific Design Control Document Tier 2 information. The proposed amendment also involves related changes to plant-specific Tier 1 information, with corresponding changes to the associated COL Appendix C information for certain VAS radiation monitors.

The licensee has also requested an exemption from the provisions of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52, Appendix D, "Design Certification Rule for the AP1000 Design," Section III.B, "Scope and Contents." This exemption request will allow a departure from the corresponding portions of the certified information in Tier 1 of the generic Design Control Document (DCD).¹ In order to modify the (plant-specific DCD) Tier 1 information, the NRC must find the licensee's exemption request included in its submittal for the LAR to be acceptable. The staff's review of the exemption request, as well as the LAR, is included in this safety evaluation.

The NRC staff's proposed no significant hazards consideration determination was published in the *Federal Register* on February 16, 2016, (81 FR 7840).

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.

2.0 REGULATORY EVALUATION

General Design Criteria (GDC 4) requires that structures, systems, and components important to safety shall be designed to accommodate the effects of, and be compatible with the environmental conditions associated with normal operation, maintenance, testing, and postulated accidents, including loss-of-coolant accidents. These structures, systems, and components shall be appropriately protected against dynamic effects, including the effects of missiles, pipe whipping, and discharging fluids, that may result from equipment failures and from events and conditions outside the nuclear power unit. However, dynamic effects associated with postulated pipe ruptures in nuclear power units may be excluded from the design basis when analyses reviewed and approved by the Commission demonstrate that the probability of fluid system piping rupture is extremely low under conditions consistent with the design basis for the piping.

GDC 16 requires that reactor containment and associated systems shall be provided to establish an essentially leak-tight barrier against the uncontrolled release of radioactivity to the environment and to assure that the containment design conditions important to safety are not exceeded for as long as postulated accident conditions require.

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

Appendix D, Section VIII.B.5.a to 10 CFR 52 states that an applicant or licensee who references 10 CFR Part 52, Appendix D may depart from Tier 2 information, without prior NRC approval, unless the proposed departure involves a change to or departure from Tier 1 information, Tier 2* information, or Technical Specifications, or requires a license amendment under paragraphs B.5.b or B.5.c of 10 CFR Part 52, Appendix D, Section VIII.

10 CFR 52.63(b)(1) allows the licensee who references a design certification rule 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 determines that the exemption will comply with the requirements of 10 CFR 52.7, which, in turn, points to the requirements listed in 10 CFR 50.12 for specific exemptions. In addition, the Commission must consider whether special circumstances, as required by 10 CFR 52.7 and 50.12, outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption. Therefore, any exemption from the Tier 1 information certified by Appendix D to 10 CFR Part 52 must meet the requirements of 10 CFR 50.12, 52.7, and 52.63(b)(1).

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 inspections, tests, analyses, or related acceptance criteria contained in the license is a proposed amendment to the license. Appendix C of COLs NPF-91 and NPF-92 contain information that the licensee is proposing to modify. Therefore, the proposed changes require a license amendment.

10 CFR 20.1101, which states that licensees shall use, to the extent practical, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are as low as is reasonably achievable (ALARA). An acceptable approach to ALARA is discussed in Regulatory Guide 8.8, "Information

Relevant to Ensuring That Occupational Radiation Exposures at Nuclear Power Stations Will Be As Low As Is Reasonably Achievable,” Revision 3, and the requirements thereof.

3.0 TECHNICAL EVALUATION

3.1 EVALUATION OF EXEMPTION

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. Because the licensee has identified changes to plant-specific Tier 1 information, with corresponding changes to the associated COL Appendix C information, resulting in the need for a departure, with an exemption from the certified design information within plant-specific Tier 1 material required under 10 CFR 52.63(b)(1) to implement the LAR. Also, the exemption is needed because Section VIII.A.4 of Appendix D to 10 CFR Part 52 requires a licensee to obtain an exemption to depart from the Tier 1 information of the generic AP1000 DCD. The result of this request would be that the licensee could implement modifications to Tier 1 information described and justified in LAR 15-15 if, and only if, the NRC approves the LAR. This exemption 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, Section VIII.A.4 of Appendix D to 10 CFR Part 52 provides that the Commission will deny a request for an exemption from Tier 1 if it finds that the requested change will result in a significant decrease in the level of safety otherwise provided by the design. Pursuant to 10 CFR 52.63(b)(1), the Commission may grant exemptions from one or more elements of the certification information, so long as the criteria given in 10 CFR 52.7 is met and that the special circumstances, as defined by 10 CFR 50.12(a)(2), 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. As 10 CFR 52.7 further states, 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 the public health and safety, and are consistent with the common defense and security; and (2) special circumstances are present. Specifically, 10 CFR 50.12(a)(2) lists six special circumstances for which an exemption may be considered. It is necessary for one of these special circumstances to be present in order for the 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 subparagraph 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 a revision to plant-specific Tier 1 Tables 3.5-4 and 3.5-7 to change the name of the “Annex Building Exhaust Radiation Monitor

(VAS-RE003)” to be “Auxiliary Building Exhaust Radiation Monitor,” and to add new equipment with a component name “Annex Building Exhaust Radiation Monitor (VAS-RE008)” and component location as “Annex Building.” This exemption is a permanent exemption limited in scope to particular Tier 1 information. Subsequent changes to this changed Tier 1 information or any other Tier 1 information would be subject to the exemption process specified in Section VIII.A.4 of Appendix D to 10 CFR Part 52 and the requirements of 10 CFR 52.63(b)(1). As stated above, 10 CFR Part 52, Appendix D, Section VIII.A.4 allows the NRC to grant exemptions from one or more elements of the Tier 1 information. Based on 10 CFR Part 52, Appendix D, Section VIII.A.4, 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 52 is to ensure that a licensee will construct and operate the plant based on the approved information found in the DCD incorporated by reference into a licensee’s licensing basis. The changes proposed by the licensee do not add or delete systems, equipment or system interfaces as described in Tier 1 of the AP1000 DCD. These changes will not impact the ability of the systems or equipment to perform their design function. Because they will not alter the operation of any plant equipment or systems, these changes do not present an undue risk from existing equipment or systems. The description 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 or operational controls or safeguards intended to mitigate any existing on-site 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 COMMON DEFENSE AND SECURITY

The proposed exemption would allow changes to elements of the VAS, as presented in the in the plant-specific DCD Tier 1, thereby departing from the plant-specific AP1000 certified (Tier 1) design information. This proposed exemption would be a permanent exemption limited in scope to particular information contained in plant-specific Tier 1 Tables 3.5-4 and 3.5-7. Any changes to that, or any other Tier 1 information, would be subject to the exemption process in Section VIII.A.4 of 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 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 changes have 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 purpose of the Tier 1 information is to ensure that a licensee will safely construct and operate a plant based on the certified information found in the AP1000 DCD, which was incorporated by reference into the SCE&G's licensing basis. The proposed changes would reconfigure the VAS, as presented in the UFSAR and Tier 1 tables. These changes will enable the licensee to safely construct and operate the AP1000 facility consistent with the design certified by the NRC.

Special circumstances are present in the particular circumstances discussed in LAR 15-15 because the application of the specified Tier 1 information does not serve the underlying purpose of the rule. The underlying purpose of the Tier 1 information pertaining to VARS is describe this system in the certified design. The proposed exemption would change a VAR monitor location and add an equivalent radiation monitor. The staff concluded that this change does not result in a reduction in the level of safety, and therefore regulation in this particular circumstance is unnecessary to achieve an acceptable level of safety. Therefore, the staff finds that a special circumstance, as required by 10 CFR 50.12(a)(2)(ii) for granting an exemption, exists.

3.1.5 SPECIAL CIRCUMSTANCES OUTWEIGH REDUCED STANDARDIZATION

This exemption would allow the implementation of changes to Tier 1, Tables 3.5-4 and 3.5-7 in the DCD proposed in the LAR. The design functions of the system associated with this request will continue to be maintained because the associated revisions to Tables 3.5-4 and 3.5-7 demonstrate that the applicable regulatory requirements will continue to be met. Consequently, the staff finds that the proposed changes have no safety impact because the proposed design change does not result in a reduction in the level of safety. In addition, the licensee stated that the current design has inadequate space in the room to locate the equipment. The proposed change enables the system to be redesigned and built. Based on the foregoing reasons, 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 Tier 1, Tables 3.5-4 and 3.5-7 in the DCD proposed in the LAR. The exemption request proposes to depart from the certified design by changing a VAS radiation monitor location and adding an equivalent radiation monitor. The changes for consistency will not impact the functional capabilities of this system. The proposed changes will not adversely affect the ability of the VAS to perform its design functions, and the level of safety provided by the current systems and equipment therein is unchanged. Therefore, based on the foregoing reasons and 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 TECHNICAL EVALUATION OF PROPOSED CHANGES

The staff evaluated the proposed LAR on VAS design changes. These changes include 1) renaming the annex building exhaust radiation detector VAS-JE-RE003 as the auxiliary building exhaust radiation detector VAS-JE-RE003 and relocating this monitor from its current location which services both annex building and auxiliary building radiologically controlled areas into an upstream duct servicing auxiliary building radiologically controlled areas only, 2) adding annex building exhaust radiation detector VAS-JE-RE008 to provide radiation monitoring of the annex building exhaust that

auxiliary building exhaust radiation detector VAS-JE-RE003 is not able to provide in its new location, and 3) updating the UFSAR to specify the areas monitored by each of the three exhaust radiation detectors (VAS-JE-RE003, VAS-JE-RE008, and VAS-JE-RE002).

The staff reviewed these changes against the guidance contained in Regulatory Guide 8.8 and the requirements of 10 CFR 20.1101, which state that licensees shall use, to the extent practical, procedures and engineering controls based upon sound radiation protection principles, in order to achieve occupational doses and doses to members of the public that are ALARA. The staff also reviewed this LAR to verify that the licensee addressed the criteria contained in Section I.1.4 of Section 12.3-12.4 (“Radiation Protection Design Features”) of the Standard Review Plan (NUREG-0800) with respect to the placement of airborne radioactivity monitoring instrumentation and the description of procedures used for locating suspected high-activity areas.

The licensee provided the following revised UFSAR figure in this LAR: UFSAR Figure 9.4.3-1 (Sheet 2 of 3) Radiologically Controlled Area Ventilation System Piping and Instrumentation Diagram (REF) VAS 003 & 010. This revised figure depicts the annex building zone and the two different auxiliary building zones and the rooms and corridors which are included in each of these zones. This figure also depicts the ventilation flow paths for each of these zones as well as the three exhaust radiation detectors (VAS-JE-RE003, VAS-JE-RE008, and VAS-JE-RE002) that provide airborne radiation monitoring for these zones. UFSAR Figure 9.4.3-1 (Sheet 2 of 3) also depicts the filtered exhaust ducting flow paths used to divert the exhaust air from the different zones to the containment air filtration system when high airborne radioactivity is detected in the exhaust air ducts.

As discussed above, the licensee proposes to add an additional exhaust radiation detector, VAS-JE-RE008, to monitor the exhaust air from the annex building. This new exhaust radiation detector meets the same equipment specification as the original annex exhaust radiation detector, VAS-JE-RE003, and the radiation monitoring functions of the annex building exhaust radiation detector are retained by monitoring the same parameters with the same sensitivity and range as the original exhaust radiation detector, VAS-JE-RE003. In addition, the functions of the new exhaust radiation detector, VAS-JE-RE008, remain the same as the functions provided by exhaust radiation detector VAS-JE-RE003, to alarm in the control room, to isolate the associated zone, and to start the containment filtration system when high airborne radioactivity is detected in the exhaust air duct. Since the specifications and functions of the new annex building exhaust radiation detector, VAS-JE-RE008, are identical to those of the original annex building exhaust radiation detector VAS-JE-RE003, the staff finds the addition of this exhaust radiation detector to be acceptable.

As discussed above, this LAR includes revised UFSAR Figure 9.4.3-1 (Sheet 2 of 3) which shows the radiologically controlled areas in both the auxiliary and annex buildings, in addition to the ventilation ducting flow paths and radiation detectors associated with these areas. This figure shows that there is a filtered exhaust ducting flow path located on the exhaust flow path from the annex building, upstream of the exhaust radiation detector VAS-JE-RE008. Since UFSAR Figure 9.4.3-1 does not show a filtered exhaust ducting flow path located on the exhaust flow path from the portion of the auxiliary building that exhausts into the same ductwork, the staff issued a request for additional information (RAI) requesting additional details about the redirection and filtration of air

from this portion of the auxiliary building when high airborne radioactivity is detected in the exhaust air duct. In a supplement to LAR 15-15, dated September 6, 2016 (ADAMS Accession No. ML16250A721) the licensee responded to this RAI. In the licensee's response to Part 1.a of this RAI, the licensee stated that, in the event that high airborne radioactivity is detected from this portion of the auxiliary building by exhaust radiation detector VAS-JE-RE003, an alarm will be sounded in the control room, the supply and isolation dampers will automatically close to isolate the auxiliary and annex buildings, and the containment air filtration system will automatically be started. The same automatic actions will occur if high airborne radioactivity is detected from the annex building by exhaust radiation detector VAS-JE-RE008. In both situations, the exhaust air will be routed to the containment air filtration system (VFS) which will ensure that this exhaust air is filtered before being released through the plant vent. A single filtered exhaust ducting flow path, located off the exhaust ducting from the annex building and upstream of exhaust radiation detector VAS-JE-RE008, would be used to filter the exhaust air from both the annex building and the portion of the auxiliary building connected to this exhaust ducting. Since the exhaust air from both the annex building and the portion of the auxiliary building connected to this exhaust ducting will be filtered through the VFS filtered exhaust, the staff finds the licensee's response to Part 1.a of the staff's RAI to be acceptable.

UFSAR Figure 9.4.3-1 (Sheet 2 of 3) shows that the VFS filtered exhaust flow path line for the annex building and portion of the auxiliary building ties into the exhaust ducting from the annex building upstream of exhaust radiation detector VAS-JE-RE008. If high airborne radioactivity from the annex building is detected in the exhaust duct from this zone by exhaust radiation detector VAS-JE-RE008, this detector will close the supply and exhaust duct isolation dampers for the annex and auxiliary (upper portion shown on this figure) buildings and reroute this air through the VFS filtered exhaust flowpath shown. In this situation, the exhaust air coming from the portion of the auxiliary building monitored by exhaust radiation detector VAS-JE-RE003 will flow past exhaust radiation detector VAS-JE-RE003 and then past exhaust radiation detector VAS-JE-RE008, before being routed through the VFS filtered exhaust flowpath line to the containment air filtration exhaust units. If the exhaust air coming from the auxiliary building does not contain high airborne radioactivity, the passage of this clean air past exhaust radiation detector VAS-JE-RE008 could result in the radiation readings from this detector decreasing. Since the readings from exhaust radiation detector VAS-JE-RE008 are monitored by operators in the control room, this decrease in the radiation levels measured by this detector could result in some uncertainty by the control room operators regarding the actual radiation levels of the air being exhausted from the annex building. Part 1.b of the staff's RAI requested that the licensee address what effects these potential changing radiation readings measured by exhaust radiation detector VAS-JE-RE008 would have on the actions of the control room operators in this scenario. In the licensee's September 6, 2016, response, the licensee stated that, in the above described scenario, if there is a high airborne radioactivity signal recorded in the control room from either exhaust radiation detector VAS-JE-RE003 or VAS-JE-RE008, abnormal operating procedures developed in accordance with UFSAR Subsection 13.5.2.1 require the operators to notify health physics to perform surveys of the areas monitored by the radiation detector that alarms to determine the source of the high airborne radioactivity that triggered the alarm and that provided for automatic isolation and VFS filtered exhaust for the affected zone. The licensee stated that a high airborne radioactivity signal from any of the exhaust radiation detectors VAS-JE-RE003, VAS-JE-RE008, or VAS-JE-RE002, would automatically stop the VAS supply and exhaust fans

for that zone. As postulated in the scenario described in staff RAI part 1.b, even if the airborne radioactivity levels detected by exhaust radiation detector VAS-JE-RE008 were to decrease and the high airborne radioactivity signal were to clear, the supply and exhaust fans for the affected zone would not restart automatically. Plant operators are trained to follow procedures which require the high airborne radioactivity signal from exhaust radiation detector VAS-JE-RE008 and the situation in the annex building to be investigated prior to restoring normal operation of the VAS.

Part 1.b of the staff's RAI also requested justification why the licensee had not located exhaust radiation detector VAS-JE-RE008 such that it is upstream of the branch exhaust duct to avoid potential fluctuations of the radiation readings of this detector (following a high airborne radioactivity signal) due to this detector being exposed to clean exhaust air from the auxiliary building. The licensee response stated that if the radiation readings from exhaust radiation detector VAS-JE-RE008 were to decrease following a high airborne radioactivity signal, procedures are in place that require the operators to notify health physics to perform surveys of the areas monitored by the radiation detector to determine and correct the source of the high airborne radioactivity. Health Physics personnel would perform these actions before the supply and exhaust fans for the affected zone could be restarted. Therefore, because the licensee has these procedures in place to locate and correct the source of the high airborne radioactivity before the supply and exhaust fans for the affected zone could be restarted, the staff's concern in this area is resolved and the staff finds the licensee's response to Part 1.b of this RAI to be acceptable.

The LAR states that, when a predetermined setpoint is exceeded, indicating abnormal airborne radiation, each associated zone exhaust radiation monitor provides a signal to alarm in the main control room, to initiate closure of the zone supply and exhaust air isolation dampers, to open the zone exhaust air isolation damper to the containment air filtration exhaust units, and to start a containment air filtration exhaust unit. In order to determine if the isolation of these areas upon high airborne radioactivity is an automatic function or is performed manually, the staff asked RAI part 1.c. The staff also requested that the licensee provide the criteria for resuming normal ventilation flow to these areas. In the licensee's September 6, 2016, response, the licensee stated that, upon detection of high airborne radioactivity, these areas would be isolated automatically. The operators only restore normal zone supply and exhaust operation after determining and correcting the source of abnormal airborne radioactivity in the affected zone. The licensee addressed staff concerns by stating that the system functions automatically and the criteria for restoration of normal function is based on the detection of normal airborne activity. On the basis of this information, the staff finds the licensee response to Part 1.c of this RAI to be acceptable.

Technical Evaluation Conclusion

On the basis of the staff's review of this LAR and on the licensee's response to the above described staff RAIs, the staff finds the proposed radiologically controlled VAS design changes of relocating one airborne radiation monitor and adding one airborne radiation monitor to be acceptable.

4.0 STATE CONSULTATION

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

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. 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 81 FR 7840 (February 16, 2016). Accordingly, the amendment meets the eligibility criteria for categorical exclusion 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 10 CFR 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 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 there is reasonable assurance that: (1) 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.

The staff has determined that pursuant to Section VIII.A.4 of Appendix D to 10 CFR Part 52, as addressed in sections 3.1-3.1.6, above, 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) presents special circumstances, (5) involves special circumstances that outweigh the potential decrease in safety due to reduced standardization, and (6) does not reduce the level of safety at the licensee's facility. Therefore, the staff grants the licensee an exemption from the Tier 1 information requirements as requested by the licensee.

7.0 REFERENCES

1. South Carolina Electric & Gas Company, "Request for License Amendment and Exemption: Radiologically Controlled Area Ventilation System (VAS) Design Changes (LAR-15-15)," dated December 17, 2015 (ADAMS Accession No. ML15351A165)
2. South Carolina Electric & Gas Company, "Supplement to Request for License Amendment and Exemption: Radiologically Controlled Area Ventilation System (VAS) Design Changes (LAR-15-15S1)," dated September 6, 2016 (ADAMS Accession No. ML16250A721)
3. V. C. Summer Nuclear Station (VCSNS) Updated Final Safety Analysis Report (UFSAR) Revision 4, dated July 1, 2016 (ADAMS Accession No. ML16193A229)
4. 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, dated September 2013 (ADAMS Accession No. ML13275A125).
5. AP1000 Design Control Document, Revision 19, dated June 13, 2011 (ADAMS Accession No. ML11171A500).
6. Combined License NPF-93 for V.C. Summer Nuclear Station, Unit 2, South Carolina Electric & Gas Company (ADAMS Accession No. ML113190371).
7. Combined License NPF-94 for V.C. Summer Nuclear Station, Unit 3, South Carolina Electric & Gas Company (ADAMS Accession No. ML113190715).
8. Standard Review Plan (NUREG-0800), Section I.1.4 of Section 12.3-12.4, "Radiation Protection Design Features"