SAFETY EVALUATION BY THE OFFICE OF NEW REACTORS

RELATED TO AMENDMENT NOS. 98 AND 97

TO THE COMBINED LICENSE NOS. NPF-91 AND NPF-92, RESPECTIVELY

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

GEORGIA POWER COMPANY

OGLETHORPE POWER CORPORATION

MEAG POWER SPVM, LLC

MEAG POWER SPVJ, LLC

MEAG POWER SPVP, LLC

CITY OF DALTON, GEORGIA

VOGTLE ELECTRIC GENERATING PLANT, UNITS 3 AND 4

DOCKET NOS. 52-025 AND 52-026

1.0 INTRODUCTION

By letter dated May 24, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17144A413), as supplemented by letter dated August 31, 2017 (ADAMS Accession No. ML17243A445), Southern Nuclear Operating Company (SNC) requested that the U.S. Nuclear Regulatory Commission (NRC) amend the Combined License (COL) Numbers NPF-91 and NPF-92 for the Vogtle Electric Generating Plant (VEGP), Units 3 and 4, respectively, regarding containment air filtration exhaust rooms west walls removal.

The proposed amendment (LAR 17-017) would revise the Updated Final Safety Analysis Report (UFSAR) in the form of departures from the incorporated plant-specific Design Control Document (DCD) 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 to remove Tier 1 information. Specifically, the proposed LAR would, remove the west walls at the entrance to both containment air filtration exhaust rooms A and B in the annex building to allow for ease of access to equipment to perform maintenance on the carbon filters located within the rooms. Tier 1 Information is defined in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52, Appendix D Section II.D.

Pursuant to 10 CFR 52.63(b)(1), SNC also requested an exemption from the provisions of 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 DCD.[1]

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 to be acceptable. The staff's review of the exemption request, as well as the LAR, is included in this safety evaluation.

On August 8, 2017, the NRC staff published a proposed no significant hazards consideration determination in the *Federal Register* (82 FR 37128) for the proposed amendment. The August 31, 2017, supplement provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination.

2.0 REGULATORY EVALUATION

The NRC staff considered the following regulatory requirements in reviewing the LAR that included the proposed UFSAR changes.

10 CFR Part 52, Appendix D, Section VIII.A.4, states that exemptions from Tier 1 information are governed by 10 CFR 52.63(b)(1) and 52.98(f). It also states that 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 otherwise provided by the design.

10 CFR Part 52, Appendix D, Section VIII.B.5.a allows an applicant or licensee who references this appendix to 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 the Technical Specifications, or requires a license amendment under paragraphs B.5.b or B.5.c of the section.

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, and the special circumstances present 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) requires NRC approval for any modification to, addition to, or deletion from the terms and conditions of a COL.

10 CFR 20.1101, "Radiation Protection Program," requires each licensee to develop, document, and implement a radiation protection program sufficient to ensure compliance with 10 CFR Part

[1] While SNC 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.

20. It also requires that the licensee 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).

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*," provides, in part, that structures, systems, and components (SSCs) important to safety shall be designed, fabricated, erected, and tested to quality standards commensurate with the importance of safety functions to be performed.

GDC 2, *"Design bases for protection against natural phenomena,"* provides, in part, that SSCs important to safety shall be designed to withstand the effects of natural phenomena such as earthquakes, tornadoes, hurricanes, floods, tsunami, and seiches without loss of capability to perform their safety functions.

GDC 4, *"Environmental and dynamic effects design basis,"* provides, in part, that SSCs 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-cooling accidents.

GDC 5, *"Sharing of structures, systems, and components,"* states that SSCs important to safety shall not be shared among nuclear power units unless it can be shown that such sharing will not significantly impair their ability to perform their safety functions, including, in the event of an accident in one unit, an orderly shutdown and cooldown of the remaining units.

GDC 17, *"Electric power systems,"* provides, in part, that an onsite electric power system and an offsite electric power system shall be provided to permit functioning of SSCs important to safety. The safety function for each system (assuming the other system is not functioning) shall be to provide sufficient capacity and capability to assure that (1) specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded as a result of anticipated operational occurrences and (2) the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents.

GDC 60, *"Control of releases of radioactive materials to the environment,"* states that the nuclear power unit design shall include means to control suitably the release of radioactive materials in gaseous and liquid effluents and to handle radioactive solid wastes produced during normal reactor operation, including anticipated operational occurrences. Sufficient holdup capacity shall be provided for retention of gaseous and liquid effluents containing radioactive materials, particularly where unfavorable site environmental conditions can be expected to impose unusual operational limitations upon the release of such effluents to the environment.

GDC 61, "*Fuel storage and handling and radioactivity control*," states that the fuel storage and handling, radioactive waste, and other systems which may contain radioactivity shall be designed to assure adequate safety under normal and postulated accident conditions. These systems shall be designed (1) with a capability to permit appropriate periodic inspection and testing of components important to safety, (2) with suitable shielding for radiation protection, (3) with appropriate containment, confinement, and filtering systems, (4) with a residual heat removal capability having reliability and testability that reflects the importance to safety of decay heat and other residual heat removal, and (5) to prevent significant reduction in fuel storage coolant inventory under accident conditions.

10 CFR 52.47(a)(5) requires applicants to identify the kinds and quantities of radioactive materials expected to be produced in the operation and the means for controlling and limiting radiation exposures.

3.0 TECHNICAL EVALUATION

3.1 EVALUATION OF EXEMPTION

The Tier 1 information for which a plant-specific departure and exemption was requested includes corresponding changes to COL Appendix C information. The result of this exemption would be that SNC could implement modifications to Tier 1 information described and justified in LAR 17-017 if, and only if, the NRC approves LAR 17-017. 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, which, in turn, references 10 CFR 50.12, is met and that the special circumstances, which are 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. SNC 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 SNC to implement a revision to Tier 1 information to remove the west walls of containment air filtration exhaust rooms A and B. This exemption is a permanent exemption limited in scope to particular Tier 1 information. Subsequent changes to this plant-specific Tier 1 information, and corresponding changes to Appendix C, 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 SNC's proposed exemption will not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, pursuant to 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 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 continue to reflect the approved licensing basis for VEGP Units 3 and 4, and will maintain a consistent level of detail with that which is currently provided elsewhere in Tier 1 of the DCD. The changes proposed by SNC to remove the west walls of containment air filtration exhaust rooms A and B does not represent any adverse impact to the design function of the annex building or the SSCs contained in the rooms and will continue to protect the health and safety of the public in the same manner. The deletion of the walls facilitates access to the room, reducing stay time, which ensures that radiation exposure of personnel is maintained ALARA. 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. These changes do not add any new equipment or system interfaces to the current plant design. 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 plant-specific DCD Tier 1, thereby departing from the AP1000 certified (Tier 1) design information. This proposed exemption would be a permanent exemption limited in scope to particular Tier 1 information and corresponding changes to Appendix C. Subsequent changes to this plant-specific Tier 1 information and corresponding changes to Appendix C 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 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 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 VEGP Units 3 and 4 licensing basis. The proposed change would revise plant-specific Tier 1 information by removing the west walls of containment air filtration exhaust rooms A and B. These changes will maintain the required design functions of the annex building and keep radiation exposure to workers ALARA by improving accessibility to the room and reducing stay time.

Special circumstances are present in the particular circumstances discussed in LAR 17-017 because the application of the specified Tier 1 information is not necessary to achieve the underlying purpose of the rule. The proposed changes do not affect any function or feature used for the prevention and mitigation of accidents or their safety analyses, and no safety-related SSC or function is involved. This exemption request and associated revisions to the Tier 1 information and corresponding changes to Appendix C demonstrate that the applicable regulatory requirements will continue to be met. Therefore, 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 Tier 1 information in the plant-specific DCD and corresponding changes to Appendix C that are being proposed in the LAR. The justification provided in LAR 17-017, the exemption request, and the associated licensing basis mark-ups demonstrate that there is a limited change from the standard information provided in the generic AP1000 DCD, and that information is unnecessary to achieve the underlying purpose of the rule. The design functions of the system associated with this request will continue to be maintained because the associated revisions to the Tier 1 information support the design function of the annex building. Consequently, the safety impact that may result from any reduction in standardization is minimized, because the proposed design change does not result in a reduction in the level of safety. Based on the foregoing reasons, as required by 10 CFR Part 52.63(b)(1), the staff finds that the special circumstances outweigh any decrease in safety that may result from the reduction of standardization of the AP1000 design.

3.1.6 NO SIGNIFICANT REDUCTION IN SAFETY

This exemption would allow the implementation of changes to Tier 1 information in the plant-specific DCD and corresponding changes to Appendix C that are being proposed in the LAR. The exemption request proposes to depart from the certified design by removing the west walls of containment air filtration exhaust rooms A and B. The removal of the walls improve accessibility to the rooms in order to keep personnel exposure ALARA in accordance with the design features of the facility. Because these functions continue to be implemented as designed, there is no reduction in the level of safety. 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 NRC staff evaluated the proposed changes including assessing their implications for radiation protection and for the structural design of the annex building.

The proposed changes consist of removing the west walls at the entrance to both containment air filtration exhaust rooms A and B in the annex building to allow for ease of access to equipment to perform maintenance on the carbon filters located within the rooms. The portion of the annex building adjacent to the nuclear island (NI) is a structural steel and reinforced concrete seismic Category II structure and houses the control support area, non-1E electrical equipment and the hot machine shop.

3.2.1 EVALUATION OF RADIATION PROTECTION CHANGES

The staff reviewed the proposed changes in the LAR. The changes consisted of removing the west walls to containment air filtration exhaust rooms A and B on Elevations 135'-3" and 158'-0" of the annex building, from the plant design. This includes removing the walls from UFSAR Tier 1 Table 3.3-1 and Tier 1 Figure 3.3-13. The changes also consisted of removing the walls from UFSAR Tier 2, Figures 1.2-20, 9A-3, 12.3-1, 12.3-2, 12.3-3. The west walls of containment air filtration exhaust room A provided a labyrinth entranceway to containment air filtration exhaust room A (Room 40551) from the staging and storage area room (Room 40550) at the 135'-3" elevation of the annex building. Similarly, the west wall of containment air filtration exhaust room B (Room 40552), located directly above containment air filtration exhaust room A, provided partial shielding of the radiation streaming path to Room 40550. These walls were all 1 foot thick and would provide shielding during normal operation from the radiation Zone 3 (less than 15 mrem/hour) filtration rooms to the Zone 2 (less than 2.5 mrem/hour) Room 40550. These walls have no impact on vital area actions required during postulated design basis accidents and therefore would have no impact on the vital area mission dose accident analysis.

SNC indicated that they completed a radiation dose rate evaluation with the walls removed and determined that the dose rate to Room 40550 and all other surrounding areas would remain unchanged. Furthermore, SNC indicated that if the walls remained there would be a significant cost to design specialized equipment to fit through the entrance ways to the rooms. If the specialized equipment was not used, equipment would have to be disassembled to bring into and out of the room, which would result in additional occupational exposure because of the increased time spent inside of the room.

However, Regulatory Guide (RG) 8.8, “Information Relevant to Ensuring that Occupational Radiation Exposures at Nuclear Power Stations Will Be as Low as Is Reasonably Achievable” specifies that shielding, that can be quickly removed and reinstalled, can be used as part of the effort to maintain occupational radiation exposures ALARA. Therefore, the staff requested that SNC provide additional information regarding if removable or temporary shielding is being considered in place of the permanent shielding walls that are requested to be removed in order to meet the requirements in 10 CFR 20.1101(b) and GDC 61.

In Supplement 1 to LAR 17-017 (ADAMS Accession No. ML17243A445), SNC indicated that the activity of removing and installing the shielding could contribute to more exposure by increasing the stay time near the radiation field. However, SNC indicated that if during the course of operating the plant, should temporary or removable shielding be deemed prudent per the radiation protection program to reduce dose ALARA, temporary or removable shielding would be used, as necessary.

Furthermore, in Supplement 1, SNC also stated that the areas outside these rooms are not likely to be used as significant personnel thoroughfares and that personnel are not typically stationed in this area outside of the filter rooms.

Based on the staff’s review, the staff agrees that the overall dose impacts of removing shielding between the Zone 3 filter rooms to the Zone 2 room 40550 would be small because the dose rates in these areas are relatively low regardless of shielding and the areas from which the shielding is being removed are not expected to be areas where workers spend a significant amount of time. Furthermore, SNC specifies that the distance between the filtration equipment and Room 40550 is sufficient because Room 40550 remains Zone 2 and the radiation zoning

for no other areas are impacted. In addition, if the walls are not removed, there could be additional cost and/or dose to workers due to the need for specialized equipment or additional maintenance time in the area. Finally, the radiation protection program will ensure that doses remain ALARA and if during actual operation removable or temporary shielding was deemed prudent, it could be installed, if necessary.

Based on this, the staff found the changes proposed in the LAR acceptable because the design continues to meet the requirements of 10 CFR 20.1101(b) and GDC 61.

3.2.2 EVALUATION OF STRUCTURAL DESIGN CHANGES

The staff also evaluated the impact of removing the walls on the structural analysis and design of the annex building. In performing their evaluation, the staff considered SNC's design criteria described in UFSAR Subsection 3.7.2, "Seismic Analysis", for the annex building where the portion annex building adjacent to the NI is classified as a seismic Category II building. Seismic Category II building structures are designed for the safe shutdown earthquake using the same methodology and design criteria as are used for seismic category I structures. Therefore, the concrete walls are designed to the criteria of American Concrete Institute (ACI) 349-01, "Code Requirements for Nuclear Safety Related Concrete Structures" and American Institute of Steel Construction (AISC) N690. Also, the staff considered Standard Review Plan (SRP) Section 3.8.4, which provides an acceptable method for meeting the requirements of GDC 1, 2, and 4, for guidance on the acceptance of the wall design.

During the LAR review, the staff noted that Enclosure 1 to LAR 17-017, Page 8 of 13 states: "Structural design and layout are not adversely impacted as the removed walls were not previously considered in structural design calculations". The staff issued a Request for Additional Information (RAI) on August 2, 2017 (ADAMS Accession No. ML17214A867) asking SNC to qualify the statement.

In response to the RAI Question number 2, SNC stated that the labyrinth walls removed do not provide support to the adjacent East-West walls because the labyrinth walls were not serving as structural walls and therefore were not considered as load transferring components in the structural design. The existing design supports the action taken under Westinghouse Electric Company corrective action program to submit LAR 17-017 to align the licensing bases with the design. Further, SNC stated that the structural members supporting the containment air filtration exhaust rooms were designed for the applicable loads and meet demand requirements by the design bases codes listed in the UFSAR Section 3.7.2.

The NRC staff has reviewed the LAR. Based on the staff's review of SNC's responses in Supplement 1 to LAR 17-017, dated August 31, 2017, the staff found that the removed walls were not considered as load transferring structural components in the original design bases. The annex building walls meet the demand vs. capacity code requirements in ACI 349-01 and AISC N690 without taking consideration of any contribution from the removed walls.

For the reasons specified above, the NRC staff finds that the proposed amendment meets relevant code provisions. Based on these findings and because the LAR meets the guidance in SRP Section 3.8.4, the NRC staff concludes that there is reasonable assurance that the requirements of GDC 1, GDC 2, and GDC 4 of Appendix A to 10 CFR Part 50 will continue to be met. Therefore, the staff finds the proposed change to be acceptable.

3.2.3 EVALUATION OF CONTAINMENT AND VENTILATION CHANGES

SNC has proposed to remove walls at the west end of the containment air filtration exhaust room A and at the west end of the containment air filtration exhaust room B. These annex building interior walls are proposed to be removed to facilitate more efficient installation, access, and maintenance of filtration equipment. There are some containment air filtration system (VFS) SSCs located in these two rooms. Therefore, the performance of VFS may be affected.

The VFS provides the safety-related functions of containment isolation and containment vacuum relief. As described in UFSAR Subsection 9.4.7, the VFS provides intermittent flow of outdoor air to purge the containment atmosphere of airborne radioactivity during normal plant operation. The system also conditions and filters outside air supplied to the containment for compatibility with personnel access during maintenance and refueling operations.

The staff finds that the proposed changes to remove the west walls at the entrance to both containment air filtration rooms A and B in the annex building will not affect VFS safety-related function, design function, radioactive material barrier, and safety analysis.

The staff found that the design met GDC 2, 4, 5, 17, 60, and 61 when reviewing the AP1000 DCD, Revision 19, and the proposed changes do not affect the conclusion on any of the above GDCs.

3.3 SUMMARY

Based on the technical evaluations above, the staff finds that the proposed changes to remove the west walls of containment air filtration exhaust rooms A and B in the annex building to be acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations in 10 CFR 50.91(b)(2), on October 30, 2017, the Georgia 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 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. Also, 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 (*Federal Register*, 82 FR 37128, dated August 8, 2017). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Under 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 this LAR, and because the exemption does not authorize any activities other than those proposed in this LAR, 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), the NRC staff finds that no environmental impact statement nor environmental assessment needs to be prepared in connection with the issuance of the exemption.

6.0 CONCLUSION

The NRC staff has determined that pursuant to Section VIII.A.4 of Appendix D to 10 CFR Part 52, the exemption proposed in this LAR (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) the special circumstances outweigh the potential decrease in safety due to reduced standardization; and (6) does not result in a significant decrease in the level of safety otherwise provided by the design. Therefore, the NRC staff grants the exemption from the Tier 1 information requested by SNC.

The staff has also concluded, based on the technical evaluation presented in Section 3.2 above that the changes to remove the west walls at the entrance to both containment air filtration exhaust rooms A and B in the annex building to allow for ease of access to equipment to perform maintenance on the carbon filters located within the rooms do not change any analysis methodology, assumptions, or the design itself, and that there is reasonable assurance that: (1) the health and safety of the public will not be endangered by construction and 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 NRC staff finds the changes proposed in this LAR acceptable.

7.0 REFERENCES

1. Request for License Amendment and Exemption – Containment Air Filtration Exhaust Rooms West Walls Removal (LAR-17-017) letter from Southern Nuclear Operating Company dated May 24, 2017 (ADAMS Accession No. ML17144A413).

2. Request for Additional Information (RAI) Transmittal for VEGP Units 3 and 4 LAR 17-017, Containment Air Filtration Exhaust Rooms West Walls Removal (ADAMS Accession No. ML17214A867).

3. Supplement to Request for License Amendment and Exemption – Containment Air Filtration Exhaust Rooms West Walls Removal (LAR-17-017S1) letter from Southern Nuclear Operating Company dated August 31, 2017 (ADAMS Accession No. ML17243A445).

4. Vogtle Electric Generating Plant, Units 3 and 4 Updated Final Safety Analysis Report, Revision 6 and Tier 1, Revision 5 dated June 15, 2017 (ADAMS Accession No. ML17172A218).

5. AP1000 Design Control Document, Revision 19, dated June 13, 2011 (ADAMS Accession No. ML11171A500).

6. RG 8.8, "Information Relevant to Ensuring that Occupational Radiation Exposures at Nuclear Power Stations Will Be as Low as Is Reasonably Achievable" (ADAMS Accession No. ML003739549).

7. ACI 349-01, “Code Requirements for Nuclear Safety Related Concrete Structures.”

8. AISC N690, “Specification for Safety-Related Steel Structures for Nuclear Facilities.”

9. SRP Section 3.8.4, “Other Seismic Category I Structures” (ADAMS Accession No. ML100630323).