

SAFETY EVALUATION BY THE OFFICE OF NEW REACTORS
RELATED TO EXEMPTION AND AMENDMENT NO. 54
TO THE COMBINED LICENSE NOS. NFP-91 AND NFP-92
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 April 9, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15099A568), Southern Nuclear Operating Company, Inc. (SNC/licensee) requested that the U.S. Nuclear Regulatory Commission (NRC) amend the combined licenses (COL) for Vogtle Electric Generating Station (VEGP) Units 3 and 4, COL Numbers NPF-91 and NPF-92, respectively.

The license amendment request (LAR 15-004) proposed changes to the Class 1E direct current (DC) and Uninterruptible Power Supply System (IDS) by replacing four Spare Termination Boxes with a single Spare Battery Termination Box.

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," to allow a departure from the corresponding portions of the certified information in Tier 1 of the generic Design Control Document (DCD).¹

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.

In order to modify the Updated Final Safety Report (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.

The NRC staff's proposed no significant hazards consideration determination was published in the *Federal Register* on July 21, 2015 (80 FR 43123).

2.0 REGULATORY EVALUATION

10 CFR 50.12, "Specific Exemptions," provides the allowable bases for which an exemption may be granted by the Commission, and the particular special circumstances that must be met.

10 CFR Part 52, Appendix D, Section VIII.B.5.a provides that a licensee who references this appendix 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 the 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 Part 52, Appendix D, Section VIII.A.4 provides that exemptions from Tier 1 information are governed by the requirements in 10 CFR 52.63(b)(1) and 10 CFR 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 otherwise provided by the design.

10 CFR 52.63(b)(1) provides that a licensee who references a design certification rule may request an exemption from one or more elements of the certification information. The Commission may grant such a request only 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 to the factors listed in 10 CFR 52.7, the Commission will consider whether special circumstances that 10 CFR 52.7 requires to be present outweigh the decrease in safety due to reduction in standardization caused by the exemption.

10 CFR 52.98(c)(1) requires changes to or departures from information within the scope of the referenced design certification rule are subject to the applicable change processes in that rule.

10 CFR 52.98(f) requires, in part, that any modification to, addition to, or deletion from the terms and conditions of a COL is a proposed amendment to the license.

General Design Criterion (GDC) 17, "Electric power systems," of Appendix A, "General Design Criteria for Nuclear Power Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," requires, in part, that nuclear power plants have onsite and offsite electric power systems to permit the functioning of structures, systems, and components that are important to safety.

GDC 18, "Inspection and Testing of Electric Power Systems," requires, in part, that electric power systems important to safety shall be designed to permit appropriate periodic inspection and testing of important areas and features, such as wiring, insulation, connections, and switchboards, to assess the continuity of the systems and the condition of their components.

10 CFR 50.49, "Environmental Qualification [EQ] of Electric Equipment Important to Safety for Nuclear Power Plants," requires, in part, licensees to establish programs to qualify electric equipment important to safety.

Regulatory Guide (RG) 1.75, Revision 3, "Criteria for Independence of Electrical Safety Systems," describes a method acceptable to the NRC staff for complying with the NRC's regulations with respect to the physical independence requirements of the circuits and electric equipment that comprise or are associated with safety systems.

RG 1.118, Revision 3, "Periodic Testing of Electric Power and Protection Systems," describes a method acceptable to the NRC staff for complying with the Commission's regulations with respect to the periodic testing of the electric power and protection systems.

3.0 TECHNICAL EVALUATION

3.1 EVALUATION OF EXEMPTION

Section III.B of Appendix D to 10 CFR Part 52 requires a licensee referencing Appendix D to 10 CFR Part 52 to incorporate by reference and comply with the requirements of Appendix D, including Tier 1 information contained in the generic AP1000 DCD. As defined in Section II of Appendix D to 10 CFR Part 52, Tier 1 information includes inspection, test, analysis, and acceptance criteria (ITAAC) and design descriptions, among other things. Therefore, a licensee referencing Appendix D incorporates by reference Tier 1 information contained in the generic DCD. The Tier 1 ITAAC and design descriptions, along with the plant-specific ITAAC, were included in Appendix C of the COL at its issuance.

The licensee requests changes to Tier 1 information by departing from the description of the Class 1E DC and IDS in the plant-specific DCD. An 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 end result of this exemption would be that the licensee can implement modifications to Tier 1 information described and justified in LAR 15-004 if, and only if, the NRC approves LAR 15-004. 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, 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, upon application by a 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, which, in turn, references 10 CFR 50.12, 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, consider 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 granted. 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 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

10 CFR 52.63(b)(1) allows the NRC to grant exemptions from one or more elements of the certification information, in this case the requirements of Section III.B of Appendix D to 10 CFR Part 52, provided that the exemption complies with 10 CFR 52.7, which references the requirements of 10 CFR 50.12. In the context of the amendment request associated with the requested exemption, 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. For these reasons, and as required by 10 CFR 50.12(a)(1), the staff finds that the exemption is authorized by law.

3.1.2 NO UNDUE RISK TO THE PUBLIC HEALTH AND SAFETY

10 CFR Part 52, Appendix D, Section III.B, requires the licensee to construct and operate the plant in accordance with the approved DCD incorporated by reference into the licensee’s licensing basis. The plant-specific Tier 1 material will continue to reflect the approved licensing basis, and will maintain a consistent level of detail with that which is currently provided elsewhere in Tier 1 of the plant-specific DCD and will continue to provide the detail necessary to support the performance of the associated ITAAC. These proposed License Amendment Request (LAR) changes are evaluated and found to be acceptable in Section 3.2 of this Safety Evaluation. This proposed change will not impact the ability of the structures, systems and components (SSCs) to perform their design functions. Because the changes will not alter the operation of any plant equipment or systems, they do not present any undue risk from existing equipment or systems. The proposed 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 that are 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 fuel cladding failures. Accordingly, these changes do not present an undue risk from any new equipment or systems. For these reasons, and as required by 10 CFR Part 52, Appendix D, Section III.B, the staff finds that the exemption would not present an undue risk to the health and safety of the public.

3.1.3 CONSISTENT WITH COMMON DEFENSE AND SECURITY

The requested exemption from the requirements of 10 CFR 52, Appendix D, Section III.B would allow the licensee to depart from elements of the plant-specific DCD Tier 1 design information. The proposed exemption does not alter the design, function, or operation of any structures or plant equipment that are necessary to maintain a safe and secure status of the plant. The proposed exemption has no impact on plant security or safeguards procedures, systems, or equipment. For these reasons, and as required by 10 CFR 50.12(a)(1), the staff finds that the exemption is consistent with the common defense and security.

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 rule under consideration is 10 CFR Part 52, Appendix D, Section III.B, which requires that a licensee referencing the AP1000 Design Certification Rule (10 CFR Part 52, Appendix D) shall incorporate by reference and comply with the requirements of Appendix D, including Tier 1 information. The VEGP Units 3 & 4 COLs reference the AP1000 Design Certification Rule and incorporate by reference the requirements of 10 CFR Part 52, Appendix D, including Tier 1 information. The underlying purpose of Appendix D, Section III.B is to describe and define the scope and contents of the AP1000 design certification, and to require compliance with the design certification information in Appendix D.

The proposed changes to consolidate the IDS Spare Termination Boxes into a single Spare Battery Termination Box maintains the design function of the IDS Spare Termination Boxes in providing a safety-related connection between a source of safety-related backup DC power and any one of the fused transfer switch boxes. The changes do not impact the ability of any SSCs to perform their functions or negatively impact safety. Additionally, no new design functions are added and no current function is deleted while the more appropriately designed Spare Battery Termination Box is employed for this application.

Accordingly, this exemption from the plant-specific certification information will allow the licensee to safely construct and operate the AP1000 facility consistent with the design certified by the NRC in 10 CFR 52, Appendix D. For these reasons, the staff finds that special circumstances are present, because application of the current Tier 1 certified design information as required by 10 CFR Part 52, Appendix D, Section III.B, in the particular circumstances discussed in this request, is not necessary to achieve the underlying purpose of the rule.

3.1.5 SPECIAL CIRCUMSTANCES OUTWEIGH REDUCED STANDARDIZATION

Based on the nature of the proposed departure from the plant-specific DCD Tier 1 information, it is likely that other AP1000 licensees will request this exemption. However, if this is not the case, the special circumstances continue to outweigh any decrease in safety from the reduction in standardization because the proposed change implements a more appropriate Spare Battery Termination Box design, which maintains the design function of the IDS and the Spare Termination Boxes to provide a safety-related connection point between a source of backup DC power and any one of the fused transfer switch boxes within the IDS. This exemption request and the associated marked-up tables demonstrate that the applicable regulatory requirements will continue to be met. Consequently, the safety impact that may result from any reduction in standardization is minimized, since the proposed design change does not result in a reduction in the level of safety. Based on these considerations, as required by 10 CFR 52.63(b)(1), the staff finds that the special circumstances outweigh the potential decrease in safety due to reduced standardization of the AP1000 design.

3.1.6 NO SIGNIFICANT REDUCTION IN SAFETY

This exemption would allow the implementation of changes to information related to IDS spare battery termination boxes in Tier 1 of the plant-specific DCD, as proposed in LAR 15-004. The changes do not affect any safety-related equipment or function, and the design function of the IDS continues to be met. Therefore, based on the foregoing reasons and as required by

Section VIII.A.4 of Appendix D to 10 CFR Part 52, 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

3.2.1 Description of the Direct Current Power System

VEGP's DC power system is comprised of independent Class 1E and non-Class 1E DC power systems. Each system consists of ungrounded stationary batteries, DC distribution equipment, and IDS. The Class 1E DC and IDS system provides reliable power for the safety-related equipment required for the plant instrumentation, control, monitoring, and other vital functions needed for shutdown of the plant. In addition, the Class 1E DC and IDS system provides power to the normal and emergency lighting in the main control room and at the remote shutdown workstation. The Class 1E DC and IDS system is capable of providing reliable power for the safe shutdown of the plant without the support of battery chargers during a loss of all AC power sources coincident with a design basis accident. The system is designed so that no single failure will result in a condition that will prevent the safe shutdown of the plant.

Four independent divisions of Class 1E 250 volts DC battery systems are provided for the Class 1E DC and IDS system. Divisions B and C have two battery banks; one battery bank is sized to supply power to safety-related loads for at least 24 hours and the other battery bank is sized to supply power to a second set of safety-related loads for at least 72 hours following a design basis event (including the loss of all alternate current (AC) power). Divisions A and D each have one 24-hour battery bank. Each switchboard connected with a 24-hour battery bank (divisions A, B, C and D) supplies power to an inverter, a 250 VDC distribution panel, and a 250 VDC motor control center. Each switchboard connected with a 72-hour battery bank (divisions B and C) supplies power to an inverter. No load shedding or load management program is needed to maintain power during the required 24-hour safety actuation period.

A single spare battery bank with a spare battery bank charger is provided for the Class 1E DC and IDS system. The spare battery and charger have sufficient capacity and capability to permit continuous plant operation at 100-percent power in case of a failure or unavailability of one 24-hour or 72-hour Class 1E battery bank and the associated battery charger. The spare battery and the battery charger can also be utilized as a substitute when performing offline testing, maintenance, and equalization of an operational battery bank.

3.2.2 Proposed Changes to License Basis Documents

The proposed changes revise VEGP's COL for the Class 1E DC and IDS. The proposed changes replace four Spare Termination Boxes with a single Spare Battery Termination Box and include minor raceway and cable routing changes.

The proposed changes require revisions to UFSAR Tier 2 information, which involves changes to COL Appendix C and departure from plant-specific Tier 1 information:

UFSAR Table 3.11-1 (Sheet 4 of 51), Table 3I.6-2 (Sheet 3 of 29), and Figure 8.3.2-1 (Sheet 2 of 2), are revised.

COL Appendix C Tables 2.6.3-1, 2.6.3-4 and corresponding Plant-Specific Tier 1 Tables are revised.

3.2.3 Evaluation

On page 5 of Enclosure 1 of the LAR, the licensee stated that because of final design activities including vendor selection and procurement, the licensee is proposing that four Spare Termination Boxes (divisions A, B, C and D) be replaced with a single Spare Battery Termination Box, and that minor raceway and cable routing changes be made. The Spare Termination Boxes are used to manually connect the Spare Battery Bank and Spare Battery Bank Charger to supply the loads of one of the four 24-hour Battery Switchboards or one of the two 72-hour Battery Switchboards at a time. The original four Spare Termination Boxes were located in close proximity to each other in the same location as the new Spare Battery Termination Box. Thus, there are no additions or deletions of cabling required and the routing changes are minimal. The routing revision will be from the Spare Fused Transfer Switch Box to the original four Spare Termination Boxes/new Spare Battery Termination Box and to the four 24-hour and two 72-hour Battery Fused Transfer Switch Boxes. The staff has reviewed the routing revision of the cables from the Spare Fused Transfer Switch Box to the original four Spare Termination Boxes/new Spare Battery Termination Box and to the four 24-hour and two 72-hour Battery Fused Transfer Switch Boxes. The staff reviewed the licensee's UFSAR Subsection 8.3.2.4, "Independence of Redundant Systems," and found that the licensee's current cable separation criteria is in accordance with the guidance in RG 1.75. Non-Class 1E circuits are electrically isolated from Class 1E circuits, and Class 1E circuits from different separation groups are electrically isolated by isolation devices, shielding and wiring techniques, physical separation (in accordance with RG 1.75 for circuits in raceways) or an appropriate combination thereof. In the LAR, the licensee stated that the different divisions of cabling are routed to remain in compliance with RG 1.75 separation criteria as described in UFSAR Subsection 8.3.2.4. The staff finds that the routing revision of the cables does not affect the cable separation criteria described in the licensee's UFSAR. Therefore, the staff finds that with the proposed routing revision of the cables, the licensee would continue to remain in compliance with RG 1.75 separation criteria as stated in the LAR and UFSAR.

On page 6 of Enclosure 1 of the LAR, the licensee stated that in the existing design, the Spare Termination Boxes use plug-in locking type disconnects to permit connection of the Spare Battery Bank and Spare Battery Bank Charger to one of the 24-hour or 72-hour Battery Switchboards at a time, so that the independence of each IDS division is maintained. Furthermore, on page 7 of Enclosure 1 of the LAR, the licensee stated that the new Spare Battery Termination Box is a dry-type, metal-enclosed, low-voltage power circuit breaker switchgear that contains six draw out-type circuit breaker cubicles with power output connected by normally de-energized cabling to each of the six respective Fused Transfer Switch Boxes. A single breaker is supplied in the proposed design such that only one compartment contains a breaker at a time. The staff notes that the proposed design maintains electrical independence of the different divisions of this cabling, by ensuring that with only one breaker, only one Battery Switchboard can be connected to the Spare Battery Bank and Spare Battery Bank Charger at a time. In the licensee's design description from COL Appendix C, the licensee lists electrical independence between the Class 1E divisions as one of the safety-related functions of the IDS system. The IDS design ensures that a fault in one of the divisions will not propagate to another division through the proposed Spare Battery Termination Box. The staff finds that with the proposed Spare Battery Termination Box, the licensee would continue to maintain electrical independence of the different cable divisions and that this revision does not adversely affect the electrical independence safety-related design function described in COL Appendix C.

The staff has reviewed the operation of the Spare Termination Boxes in the existing design and the proposed operation of the new Spare Battery Termination Box. In the existing IDS design,

in case of a failure or unavailability of the normal battery bank and the battery charger, plug-in locking type disconnects located at the Spare Termination Boxes along with kirk-key interlock switches located in the associated Fused Transfer Switch Box allow the spare battery bank to be manually connected to the affected bus. In the proposed IDS design, in case of a failure or unavailability of the normal battery bank and the battery bank charger, a single circuit breaker located at the Spare Battery Termination Box along with the aforementioned kirk-key interlock switches allow for the manual connection to be made. The staff reviewed the LAR and the UFSAR Subsection 8.3.2.1.1.1, "Class 1E DC Distribution," and finds that, with the proposed IDS configuration, the licensee will be able to manually connect backup power to a single 24-hour Battery Switchboard or 72-hour Battery Switchboard without any additional steps to the current design. The licensee stated that the new IDS configuration does not affect the system's testability and that it is consistent with the existing inspection, testing requirements and procedures. To ensure that the proposed periodic onsite testing capabilities of the safety-related DC power system satisfy the requirements of GDC 18 and the positions of RG 1.118, the staff reviewed the descriptive information and schematics in the UFSAR. The staff finds that components of the 250 VDC systems undergo periodic maintenance tests to determine the condition of the system. Batteries, battery chargers, inverters, voltage regulating transformers, circuit breakers, switches, and fuse/fuse holders are part of the surveillance testing required by the Technical Specifications part of the licensee's COL. In particular, all circuit breakers in the Class 1E DC system that are credited for an isolation function are tested through the use of breaker test equipment. This is to confirm the ability of the circuit to perform the designated coordination and corresponding isolation function between Class 1E and non-Class 1E components. The staff finds that the proposed IDS system continues to permit integral periodic testing of safety-related DC systems and that the licensee continues to meet the requirements of GDC 18, and continues to remain in compliance with RG 1.118.

As described above, the proposed design uses a single circuit breaker, instead of the current plug-in, locking type disconnects, to connect the Spare Battery Bank and Spare Battery Bank Charger to one of the Battery Switchboards. The circuit breaker is a horizontal draw out, stored-energy, and air-break type, three-pole, single-throw, mechanically actuated, without trip devices. The staff reviewed the LAR and finds that both the current plug-in locking type disconnects and the proposed circuit breaker are only provided to permit connection of the Spare Battery Bank and Spare Battery Bank Charger to one of the Battery Switchboards. Furthermore the staff reviewed the licensee's UFSAR Section 8.3.2.1.1.1, and found that for circuit continuity and protection, the Class 1E DC switchboards employ fusible disconnect switches and have adequate short circuit and continuous-current ratings. Fused transfer switch boxes, equipped with double pole double throw transfer switches, are provided to facilitate battery testing and maintenance. The staff verified that the IDS system continues to be protected from faults upstream of the proposed Spare Termination Box by having the Spare Fused Transfer Switch Box between the Spare Battery Bank/Spare Battery Bank Charger and the proposed Spare Termination Box. Also, the staff verified that the IDS system continues to be protected from faults downstream of the proposed Spare Termination Box by having each division's Fused Transfer Switch Box between the proposed Spare Termination Box and the 24-hour or 72-hour Battery Switchboards. The staff finds that the proposed Spare Termination Box and circuit breaker, do not adversely affect the protection of the IDS system and of the safety related equipment needed to shut down the plant. The staff notes that the IDS configuration, with the new Spare Termination Box and circuit breaker, continues to support the onsite electric power systems by allowing for the desired Battery Switchboard to provide 250 VDC to the safety-related equipment required for the plant instrumentation, control, monitoring, and other vital functions needed for shutdown of the plant. Therefore, the staff finds

that the IDS continues to perform its safety function, continues to meet the requirements of GDC 17 and continues to follow the COL Appendix C design criteria.

On page 5 of Enclosure 1 of the LAR, the licensee stated that UFSAR Table 3.11-1, Table 3I.6-2, and Figure 8.3.2-1, are revised to replace the four Spare Termination Boxes with a single Spare Battery Termination Box. The staff has reviewed the revised UFSAR Table 3.11-1 and verified that the listings for the four Spare Termination Boxes have been replaced with a single Spare Battery Termination Box and that the new Termination Box is in the same environmental zone, has the same operating time requirement, and maintains the same qualification program as the previous termination boxes. The staff has reviewed the revised UFSAR Table 3I.6-2 and verified that the listings for the four Spare Termination Boxes have been replaced with a single Spare Battery Termination Box in the list of potential high frequency sensitive AP1000 safety-related electrical and electro-mechanical equipment. The staff has reviewed the revised Figure 8.3.2-1, and verified that the Class 1E DC System One Line Diagram accurately depicts the new Spare Battery Termination Box instead of the four separate Spare Termination Boxes. Therefore the staff finds that the IDS with the proposed changes will continue to meet the same equipment qualification (EQ) requirements, regulatory acceptance criteria, electrical codes, and industry standards specified in the UFSAR and that it would continue to meet the requirements of 10 CFR 50.49.

On page 5 of Enclosure 1 of the LAR, the licensee stated that COL Appendix C Tables 2.6.3-1 and 2.6.3-4 are revised to replace the four Spare Termination Boxes with a single Spare Battery Termination Box. The staff has reviewed the revised COL Appendix C Table 2.6.3-1 and verified that the listings for the four Spare Termination Boxes have been replaced with a single Spare Battery Termination Box and that the new termination box is listed in the same seismic category as the previous termination boxes and is listed as Class 1E. The staff has reviewed the revised COL Appendix C Table 2.6.3-4 and verified that the listings for the four Spare Termination Boxes have been replaced with a single Spare Battery Termination Box and that the new termination box is listed in the same location as the previous termination boxes. The staff reviewed the design commitments related to the IDS in the existing COL Appendix C Table 2.6.3-3, ITAAC, and verified that those commitments do not require any changes in order to confirm that the SSCs related to the IDS are constructed in accordance with the design certification. The staff finds the proposed changes to information provided in the COL Appendix C Tables are at a level of detail that is consistent with the other information currently presented in these tables and that they provide the detail necessary to implement the corresponding ITAAC that address these tables.

3.2.4 Conclusion

Based on the above evaluation, the staff concludes the proposed change to VEGP's Class 1E DC and IDS system provide reasonable assurance of the continued availability of the required power to shut down and maintain the reactor in a safe condition after an anticipated operational occurrence or a postulated design-basis accident. Furthermore, the staff concludes that with the proposed changes, the licensee would continue to meet the requirements of GDCs 17 and 18. Therefore, the staff finds the proposed changes acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations in 10 CFR 50.91(b)(2), 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 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 (80 FR 43123; published on July 21, 2015). 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 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, 10 CFR 52.7, 50.12 and 52.63(b)(1), 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) has special circumstances that outweigh the potential decrease in safety due to reduced standardization, and (5) does not significantly reduce the level of safety at the licensee's facility.

The staff has concluded, based on the considerations discussed above, 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) 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 the health and safety of the public. Therefore, the staff finds the changes proposed in this license amendment acceptable.