UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 187 AND 185

TO THE COMBINED LICENSE NUMBERS NPF-91 AND NPF-92, RESPECTIVELY

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

GEORGIA POWER COMPANY

OGLETHORPE POWER CORPORATION

MEAG POWER SPVJ, LLC

MEAG POWER SPVM, LLC

MEAG POWER SPVP, LLC

CITY OF DALTON, GEORGIA

VOGTLE ELECTRIC GENERATING PLANT, UNITS 3 AND 4

DOCKET NUMBERS 52-025 AND 52-026

1.0 INTRODUCTION

By application dated June 30, 2020 (Reference 1), as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021 (References 2, 3 and 4), Southern Nuclear Operating Company (SNC) submitted changes to revise the SNC standard emergency plan (SEP) for the Vogtle Electric Generating Plant Units 3 and 4 (Vogtle) for Commission review and prior approval pursuant to Section 50.54(q) of Title 10 of the *Code of Federal Regulations* (10 CFR). The proposed changes would change the emergency response organization (ERO) staffing composition and extend staff augmentation times for certain ERO positions.

The supplemental letters dated August 11, 2020, November 20, 2020, and April 27, 2021, provided additional information that clarified the application, but did not expand the scope of the application as originally noticed nor change the U.S. Nuclear Regulatory Commission (NRC or the Commission) staff's original proposed no significant hazards consideration determination as published in the *Federal Register* (FR) on September 22, 2020 (85 FR 59559).

2.0 REGULATORY EVALUATION

The NRC staff considered the following regulatory requirements and guidance during its review of the proposed changes:

2.1 Regulatory Requirements

The planning standards in 10 CFR 50.47(b) establish the requirements that the onsite and offsite emergency response plans must meet for the NRC staff to make a finding that there is reasonable assurance that the licensee can, and will, take adequate protective measures in the event of a radiological emergency. The capabilities of on-shift and augmented ERO staffing are addressed under the following regulations:

10 CFR 50.47(b)(2) states, "On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and the interfaces among various onsite response activities and offsite support and response activities are specified."

Appendix E to 10 CFR Part 50, "Emergency Planning and Preparedness for Production and Utilization Facilities," Section IV, Part A, "Organization," states, in part, "The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization . . . ."

2.2 Guidance

Regulatory Guide (RG) 1.101, Revision 4, "Emergency Planning and Preparedness for Nuclear Power Reactors," July 2003 (Reference 5), provides guidance on methods acceptable to the NRC staff for implementing the planning standards of 10 CFR 50.47(b)(1) and (2), and the requirements of Sections IV.A and IV.D of Appendix E to 10 CFR Part 50. Revision 4 of RG 1.101 endorses Revision 1 to NUREG-0654/FEMA-REP-1 [Federal Emergency Management Agency – Radiological Emergency Preparedness], "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980 (Reference 6), which provides acceptance criteria outlining an acceptable means for complying with the planning standards set forth in 10 CFR 50.47(b). These criteria provide a basis for NRC licensees, and State and local governments, to develop acceptable radiological emergency plans.

In NUREG-0654, Section II, "Planning Standards and Evaluation Criteria," Evaluation Criteria II.B.1 and II.B.5 address planning standard 10 CFR 50.47(b)(2). Evaluation Criterion II.B.1 specifies the onsite emergency organization of plant staff personnel for all shifts, and its relation to the responsibilities and duties of the normal shift complement. In addition, Evaluation Criterion II.B.5, states, in part:

> Each licensee shall specify the positions or title and major tasks to be performed by the persons to be assigned to the functional areas of emergency activity. For emergency situations, specific assignments shall be made for all shifts and for plant staff members, both onsite and away from the site. These assignments shall cover the emergency functions in Table B-1 entitled, "Minimum Staffing Requirements for Nuclear Power Plant Emergencies." The minimum on-shift

> staffing levels shall be as indicated in Table B-1. The licensee must be able to augment on-shift capabilities within a short period after declaration of an emergency. This capability shall be as indicated in Table B-1.

The NRC's Office of Nuclear Security and Incident Response (NSIR), Division of Preparedness and Response (DPR), Interim Staff Guidance (ISG) document NSIR/DPR-ISG-01, "Emergency Planning for Nuclear Power Plants," November 2011 (Reference 7), provides updated guidance to address emergency planning requirements for nuclear power plants. Specifically, NSIR/DPR-ISG-01 was developed to address the assignment of tasks or responsibilities to on-shift ERO personnel that would potentially overburden them and prevent the timely performance of their emergency plan functions. The ISG also endorsed the Nuclear Energy Institute (NEI) document NEI 10-05, Revision 0, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities," June 2011 (Reference 8), which was developed to establish a standard methodology for licensees to conduct analyses of the ability of on-shift staff to perform all required functions and tasks necessary to respond to a declared emergency for an operating power reactor.

Regulatory Issue Summary 2016-10, "License Amendment Requests for Changes to Emergency Response Organization Staffing and Augmentation," dated August 5, 2016 (Reference 9), provides examples of the scope and detail of information that should be provided in license amendment requests (LARs) related to ERO staffing and augmentation to facilitate the NRC staff's review.

By letter dated June 12, 2018 (Reference 10), the staff provided alternative guidance to nuclear power plant licensees for Evaluation Criterion II.B.5 in NUREG-0654, Revision 1, for minimum ERO on-shift and augmentation staffing. The letter stated, in part:

> The NRC has revised Section II.B, Table B-1 of NUREG-0654, based in part on comments received from the public on the draft Revision 2 of NUREG-0654, located at www.regulations.gov under Docket ID FEMA-2012-0026. The revised ERO staffing guidance has been finalized, and the NRC will include it when the entire NUREG-0654, Revision 2, is ready for issuance. Until then, the NRC staff is making available on an interim basis the ERO on-shift and augmentation staffing plan (attached). Regardless of whether a licensee chooses to use the guidance contained in Revision 1 of NUREG-0654, the attached, or an alternative approach, licensees are still required to adhere to 10 CFR 50.54(q) when revising their ERO staffing plans.

Henceforth, this guidance will be referred to as the "Revised Table B-1, 'Emergency Response Organization (ERO) Staffing and Augmentation Plan'" in this safety evaluation.

The SNC SEP and Annexes (hereafter referred to collectively as "SNC SEP") were revised by letter dated March 20, 2017 (Reference 11), based on Evaluation Criterion II.B.5 in NUREG-0654, Revision 1, for minimum ERO on-shift and augmentation staffing. In its application dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, SNC stated that the proposed ERO staffing plan constitutes an alternative staffing approach to that recommended in the Revised Table B-1. The proposed ERO staffing plan was evaluated by the NRC staff using the functional area analysis of NUREG-0654, Revision 2.

3.0 TECHNICAL EVALUATION

The NRC staff has reviewed the licensee's regulatory and technical analyses in support of the proposed changes to the SNC SEP as described in the LAR dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021. The NRC staff's technical evaluation of the proposed changes is detailed below.

3.1 Major Functional Areas

In its application dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, SNC provided justification for the proposed SNC SEP changes that included a detailed review of each major functional area.

The current SNC SEP describes the ERO as consisting of personnel staffing in the following emergency response facilities:

- Control Room
- Technical Support Center (TSC)
- Operations Support Center (OSC)
- Emergency Operations Facility (EOF)
- Joint Information Center (JIC)

The proposed SNC SEP would maintain the requirement to activate the EOF within 75 minutes of an Alert or higher emergency classification level (ECL) and would revise the time to activate the TSC and OSC from within 75 minutes to within 90 minutes of an Alert or higher ECL. Although no specific augmentation time is provided for the JIC, SNC stated that it would continue to have the capability for the disseminating of media information within 60 minutes of an Alert or higher ECL.

The NRC staff's review of the proposed changes to the SNC SEP, based on each major functional area, is as follows:

3.1.1 Command and Control

The purpose of the ERO command and control function is to: (1) provide overall ERO command and control, until relieved; (2) approve emergency action level (EAL) classifications and/or protective action recommendations (PAR), until relieved; and (3) authorize personnel dose extensions, until relieved. The Shift Manager is the on-shift individual who will initially perform the ERO command and control function. The licensee provided its analysis of the command and control function in Section 3.2, "Emergency Direction and Control," of Enclosure 9 to the June 30, 2020, letter.

The current SNC staffing for command and control is consistent with the Revised Table B-1, with three differences. The first difference is that the Vogtle Units 3 and 4 Annex currently has two on-shift shift managers, only one of these shift managers is responsible for emergency response efforts until relieved by the TSC Emergency Director. The Revised Table B-1 provides for only one shift manager. The second difference is that the TSC Emergency Director would relieve the on-shift shift manager within 75 minutes of Alert or higher ECL while the Revised Table B-1 provides for TSC staffing within 60 minutes of an Alert or higher ECL. The third difference is that augmentation of the EOF Director will be within 75 minutes of the declaration of an Alert or higher ECL, while the revised NUREG-0654 Table B-1 provides for

EOF augmentation within 60 minutes of the declaration of a Site Area Emergency or higher ECL.

In a letter dated June 30, 2020, as supplemented by letters dated August 11 and November 20, 2020, SNC proposed to extend the ERO augmentation time for EOF and TSC, which provide relief and augmentation for the Command and Control function, from within 75 minutes of an Alert or higher ECL to within 90 minutes of an Alert of higher ECL. Additionally, SNC proposed to remove one on-shift shift manager from the SNC SEP. In response to an NRC audit (References 12 and 13), SNC provided a supplemental letter dated April 27, 2021, that would maintain the current NRC-approved requirement to staff the EOF within 75 minutes of declaration of an Alert or higher ECL. Continuing to staff the EOF within 75 minutes of declaration of an Alert or higher ECL would maintain an augmenting Emergency Director that would provide relief and augmentation for the Shift Manager/ED for all ED functions with the exception of emergency classifications. SNC's LAR, as supplemented, would eliminate one on-shift Shift Manager/Emergency Director and extend the ERO augmentation of the TSC from 75 minutes to 90 minutes from declaration of an Alert or higher ECL. Extending the ERO augmentation time for the TSC would extend the time that the on-shift Shift Manager/Emergency Director would be responsible for EAL classifications from 75 minutes to 90 minutes from the declaration of an Alert or higher ECL. Considering that the Shift Manager would continue to assess plant conditions as needed to identify potential EAL classifications after being relieved of EAL classification responsibility, the NRC staff finds that the proposed extension of TSC augmentation would not place an undue burden on the Shift Manager. Because the SNC EOF Emergency Director would provide augmentation and relief for Shift Manager/Emergency Director responsibilities and the responsibility for EAL classifications would not place an undue burden on the on-shift Shift Manager/Emergency Director, the NRC staff finds the proposed changes to the Command and Control function acceptable.

Vogtle Units 3 and 4 include advanced passive safety features that are less dependent on active systems and components. This passive design requires less operator intervention to mitigate accidents, allowing operators more time to perform safety actions. These passive attributes would reasonably reduce the burden on the shift manager and provide additional support for the proposed changes to the SNC SEP for Vogtle Units 3 and 4.

Based on the above, the NRC staff has determined that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A for command and control.

3.1.2 Communications

The purpose of the communications function is to communicate EAL and PAR classifications to offsite response organizations (OROs) and the NRC, until relieved. The licensee provided its analysis of the communications function in Section 3.3, "Notification/Communication Function," of Enclosure 9 to the June 30, 2020, letter.

The current SNC staffing for the communications function is consistent with the Revised Table B-1 with two differences. The first difference is that the current SNC ERO communicator augmentation time is within 75 minutes of the declaration of an Alert or higher ECL, while the Revised Table B-1 provides for TSC staffing of two communicators within 60 minutes of an Alert or higher ECL. The second difference is that SNC currently provides one emergency notification system (ENS) communicator in the TSC within 75 minutes of the declaration of an Alert or higher ECL and one emergency notification network (ENN) communicator and one ENS

communicator in the EOF within 75 minutes of an Alert or higher ECL. SNC currently provides that an on-shift licensed operator, who may be assigned other functions, performs the on-shift communication tasks until relieved.

In a letter dated June 30, 2020, as supplemented by letters dated August 11, 2020 and November 20, 2020, SNC proposed to extend the TSC and EOF response time from the current 75 minutes to 90 minutes from an Alert or higher ECL. This would result in extending the augmentation response time for the TSC ENS communicator and the EOF ENN communicator an additional 15 minutes. In response to an NRC audit, SNC provided a supplemental letter dated April 27, 2021, which stated that SNC would maintain the requirement to staff the EOF within 75 minutes of an Alert or higher ECL. Continuing to staff the EOF within 75 minutes of an Alert or higher ECL would maintain the current 75-minute augmentation time for an ENS and an ENN communicator that would provide relief and augmentation for the on-shift communicator at an equivalent capability as currently provided by the SNC SEP. Because the SNC EOF ENS and ENN communicators would continue to provide augmentation and relief communication capability within 75 minutes of an Alert or higher ECL, the NRC staff finds the proposed change to extend the augmentation response time of the TSC ENS communicator for an additional 15 minutes acceptable.

Based on the above, the NRC staff has determined that the proposed SNC SEP will continue to the meet planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A for communications.

3.1.3 Radiation Protection (RP)

The purpose of the RP function is to: (1) provide qualified RP coverage for responders accessing potentially unknown radiological environments during emergency conditions; (2) provide in-plant surveys; and (3) control dosimetry and radiologically controlled area access. SNC provided its analysis of the RP Function in Section 3.4, “Radiation Protection and Dose Assessment/Projections,” of Enclosure 9 to the June 30, 2020, letter.

The current SNC staffing for the RP function is consistent with the Revised Table B-1 with two differences. The first difference is that the current SNC ERO RP augmentation is within 75 minutes of the declaration of an Alert or higher ECL, while the Revised Table B-1 provides for three RP technicians within 60 minutes of an Alert or higher ECL and an additional three RP technicians within 90 minutes of an Alert or higher ECL. The second difference is that SNC currently provides alternate on-shift and ERO augmentation staffing for the RP function. The current SNC on-shift RP staffing provides three on-shift RP technicians, one of which is designated to perform out-of-plant surveys, while the Revised Table B-1 requires two on-shift RP technicians. The current SNC SEP has four RP technicians respond within 75 minutes of the declaration of an Alert or higher ECL, while the Revised Table B-1 requires three RP technicians respond within 60 minutes of an Alert or higher ECL and an additional three RP technicians respond within 90 minutes of an Alert or higher ECL.

In a letter dated June 30, 2020, as supplemented by a letter dated August 11, 2020, SNC proposed to reduce the number of on-shift RP Technicians from three to two and extend the augmentation response time for the ERO RP technicians from within 75 minutes to 90 minutes of an Alert or higher ECL. In response to NRC staff’s request for additional information (RAI) and an NRC audit, SNC provided supplemental letters dated November 20, 2020, and April 27, 2021, stating that SNC instead proposes to provide five RP technicians who would

respond within 90 minutes and one RP technician who would respond within 60 minutes of an Alert or higher ECL.

Vogtle Units 3 and 4 feature a design that uses advanced passive safety features that are less dependent on active systems such as pumps and valves. In addition to reducing the scope of potential maintenance issues, the Vogtle Units 3 and 4 passive features allow the operators more time to perform safety actions. Because Vogtle Units 3 and 4 have less reliance on active components such as pumps and valves, there is a reduced need for system repair of failed components or for system realignments to compensate for failed active components. This reduced reliance on system repair and realignment would reduce the need for radiation protection coverage during initial event response.

Based on the above, the NRC staff has determined that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A for radiation protection.

3.1.4 Supervision of Radiation Protection Staff and Site Radiation Protection

The purpose of the supervision of RP staff and site RP function is to: (1) evaluate and assess plant and offsite radiological data in the development of onsite protective actions and offsite PARs, until relieved; (2) recommend onsite protective actions and offsite PARs to the applicable decision-maker, until relieved; (3) direct all RP activities, including radiological field assessment team direction, until relieved; and (4) provide relevant information to applicable communicators who are communicating offsite PARs to OROs, until relieved. SNC provided its analysis of the supervision of RP function in Section 3.4, “Radiation Protection and Dose Assessment/Projections,” of Enclosure 9 to the June 30, 2020, letter.

The current SNC staffing for the RP function, which includes RP supervision, is consistent with the Revised Table B-1 with two differences. The first difference is that SNC currently has an RP/Chemistry Group Lead respond to the OSC within 75 minutes of the declaration of an Alert or higher ECL, while the Revised Table B-1 provides for one RP Coordinator within 60 minutes of an Alert or higher ECL and an additional RP Manager respond to the EOF within 90 minutes of a Site Area Emergency higher ECL. The second difference is that the SNC SEP currently indicates that RP/Chemistry Group Lead will be responsible for the Access Control Major Task.

In a letter dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, SNC proposed to extend the augmentation ERO response time for a TSC RP Supervisor and an OSC EP/Chemistry Group Lead from 75 minutes to within 90 minutes of an Alert or higher ECL. As noted in Section 3.1.3, “Radiation Protection,” of this safety evaluation, the proposed SNC SEP would take credit for the passive safety features of Vogtle Units 3 and 4. Section 3.1.3 further indicates that the Vogtle Units 3 and 4 passive safety features would reduce the RP burden for initial event response. This reduced RP burden would also reduce the need for RP supervision during initial event response. Because the Vogtle Units 3 and 4 passive safety features require fewer RP resources, including RP supervision, the NRC staff finds the proposed changes to the radiation protection actions and supervision function acceptable.

Based on the above, the NRC staff has determined that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A for supervision of radiation protection.

3.1.5 Dose Assessments/Projections

The purpose of the dose assessments/projections function is to perform dose assessments and projections and to provide input to the applicable PAR decision-maker, until relieved. SNC provided its analysis of the dose assessments/projections function in Section 3.4, "Radiation Protection and Dose Assessment/Projections," of Enclosure 9 to the June 30, 2020, letter.

The current SNC staffing for the dose assessment function is consistent with the Revised Table B-1 with two differences. The first difference is that the current SNC ERO dose assessment augmentation is within 75 minutes of the declaration of an Alert or higher ECL while the Revised Table B-1 provides one Dose Assessment/Projection Staff individual within 60 minutes of an Alert or higher ECL and an additional Dose Assessment/Projection Staff individual within 90 minutes of an Alert or higher ECL. The second difference is that SNC currently provides a dedicated on-shift dose assessor, while the Revised Table B-1 states that on-shift dose assessment can be provided by an individual assigned collateral duties provided those duties would not be beyond the capability of the individual at any given time. SNC currently transfers dose assessment directly from on-shift to the EOF within 75 minutes of the declaration of an Alert or greater ECL. SNC currently staffs one Dose Assessment Supervisor and a Dose Analyst at the EOF within 75 minutes of the declaration of an Alert or higher ECL.

In a letter dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, SNC proposed to extend the ERO augmentation response time for TSC dose assessment from 75 minutes to within 90 minutes of declaration of an Alert or higher ECL. In response to an NRC audit, SNC provided a supplemental letter dated April 27, 2021, that SNC would maintain the current NRC-approved requirement for the staffing of the EOF within 75 minutes of declaration of an Alert or higher ECL. As proposed, the SNC SEP would continue to provide on-shift dose assessment and transfer dose assessment responsibility from the control room to the EOF within 75 minutes of the declaration of an Alert or higher ECL. Because the proposed SNC SEP would continue to provide an on-shift dose assessor who would be augmented by an EOF dose assessment supervisor and dose assessment analyst within 75 minutes of an Alert or higher ECL, there is no change to the SNC dose assessment capability regarding timing or ERO staffing.

Based on the above, the NRC staff has determined that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A for dose assessments and projections.

3.1.6 Emergency Classifications

The purpose of the emergency classifications function is to evaluate plant conditions and recommend emergency classifications, until relieved. SNC provided its analysis of the emergency classifications function in Section 3.2, "Emergency Direction and Control (Command and Control, Emergency Classification)," of Enclosure 9 to the June 30, 2020, letter.

The Revised Table B-1 recommends an emergency classification advisor to perform this function on-shift and clarifies that: "Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time." Additionally, the Revised Table B-1 recommends that the on-shift emergency classification advisor be augmented by a second emergency classification advisor in the TSC within 60 minutes of the declaration of an Alert or higher ECL.

Neither the current nor proposed SNC SEP includes a designated individual to perform the emergency classifications function. As proposed, the SNC SEP would continue to have the Shift Manager/Emergency Director perform the emergency classifications function until relieved by the TSC Emergency Director. Considering that emergency classifications advisors are responsible to monitor plant conditions and are not specifically responsible for event declarations, they perform an advisory function that may not be required for all sites. Because SNC will continue to have the same individuals perform emergency classifications as in the current SNC SEP, which ensures that these responsible individuals have the capability to make timely and accurate declarations, there is no change in the capability to perform emergency classifications.

Because SNC is not proposing a change to their currently approved emergency classification capability, the NRC staff has determined that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A for emergency classifications.

3.1.7 Engineering

The purpose of the engineering function is to provide engineering coverage related to core/thermal-hydraulics, electrical/instrumentation and control (I&C), and mechanical systems and equipment until relieved. SNC provided its analysis of the engineering function in Section 3.5, “Plant System Engineering, Repair and Corrective Actions Function (Engineering, Repair Team Activities),” of Enclosure 9 to the June 30, 2020, letter.

The Revised Table B-1 recommends one electrical/instrumentation and control engineer, one mechanical engineer, and one core/thermal-hydraulics engineer provide augmentation within 60 minutes of an Alert or higher ECL to evaluate reactor conditions for the on-shift engineering function and clarifies that: “Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time.” SNC does have an individual with shift technical advisor (STA) expertise that can satisfy the on-shift responsibilities for evaluating reactor conditions until augmented by a core/thermal hydraulics engineer.

The current SNC staffing for the engineering function is consistent with the Revised Table B-1 with two differences. The first difference is that the current SNC ERO augmentation for the engineering function is within 75 minutes of the declaration of an Alert or higher ECL, while the Revised Table B-1 provides for Engineering function augmentation within 60 minutes of an Alert or higher ECL. The second difference is that SNC currently provides a Reactor Engineer and two engineering support responders to the TSC with a Technical Supervisor responding to the EOF, while the Revised Table B-1 specifically identifies a Core/Thermal Hydraulics, Electrical, and a Mechanical engineer as augmenting responders to the TSC.

In a letter dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, SNC proposed to extend the augmentation response time of the TSC, including the TSC engineering staff, from the current 75 minutes to within 90 minutes of declaration of an Alert or higher ECL. Additionally, the proposed SNC SEP would retain the current EOF augmentation response time of within 75 minutes of declaration of an Alert or higher ECL. The EOF staffing would include an Engineering Technical Supervisor with the training and capability to provide engineering support until the TSC is augmented within 90 minutes. Specifically, the Engineering Technical Supervisor would be capable of assessing core damage for dose assessment and providing engineering assistance in support to the

on-shift staff. The proposed SNC SEP would take credit for Vogtle Units 3 and 4 passive safety features. The Vogtle Units 3 and 4 passive safety features are less reliant on active components which, in the event of component failure, may require engineering support. Because Vogtle Units 3 and 4 use passive safety features that are less dependent on active systems and components and because the SNC SEP will continue to provide engineering support with the capability to perform core damage assessment and provide engineering assistance to the on-shift staff within 75 minutes of an Alert or higher ECL, the NRC staff finds the SNC proposed changes to the engineering function acceptable.

Based on the above, the NRC staff has determined that the proposed SNC SEP will continue to meet planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A for engineering.

3.1.8 Security

Site-specific security plans provide on-shift security staffing that support emergency response until augmented by an individual that would coordinate security-related activities and information with the Emergency Coordinator [Emergency Director]. SNC provided its analysis of the emergency classifications function in Section 3.9, “Site Access Control and Personnel Accountability Function,” of Enclosure 9 to the June 30, 2020, letter.

The Revised Table B-1 recommends the on-shift security function to be provided by security staffing per the site-specific security plan. For the on-shift security function, the SNC SEP currently includes the major functional area of “Site Access Control and Personnel Accountability” with on-shift staff provided by the security plan.

The Revised Table B-1 recommends that the on-shift security staffing be augmented by a security liaison in the TSC within 60 minutes of the declaration of an Alert or higher ECL to coordinate security-related activities and information with the Emergency Coordinator. The currently NRC approved SNC SEP includes a TSC Security Supervisor, which will be filled by the on-shift Security Supervisor, and an augmenting EOF Security Coordinator responding within 75 minutes of an Alert or higher ECL.

In a letter dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, SNC proposed to maintain an on-shift TSC Security Supervisor and an EOF Security Coordinator who would continue to respond within 75 minutes of an Alert or higher ECL. The SNC LAR would remove the site access control and personnel accountability major functional area from the proposed SNC SEP. Because the site access control and personnel accountability major functional area referenced the site-specific security plans to provide on-shift security staffing and SNC would continue to provide on-shift security staffing as required by site-specific security plans, the proposed change will not change the on-shift security staffing for SNC. Additionally, SNC is not proposing a change to Security Supervisor/Coordinator ERO augmentation.

SNC did not propose changes that would alter the on-shift or augmented minimum staff related to the security function. As such, the NRC staff has determined that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A for security.

3.1.9 Repair Team Activities

The intent of the repair team activities function is to provide support for emergency core cooling system (ECCS), event mitigation, and equipment repair. SNC provided its analysis of repair team activities in Section 3.5, "Plant System Engineering, Repair and Corrective Actions Function (Engineering, Repair Team Activities)," of Enclosure 9 to the June 30, 2020, letter.

The Revised Table B-1 does not include on-shift staffing and recommends that the following augmenting maintenance personnel should respond to the OSC to support repair team activities:

- One electrician and one mechanic within 60 minutes of the declaration of an Alert or higher ECL to provide support for ECCS equipment, event mitigation, and equipment repair

- One I&C technician within 90 minutes of the declaration of an Alert or higher ECL to assist with logic manipulation, support event mitigation and equipment repair, and support digital I&C, if applicable

The current SNC SEP identifies one mechanical technician, one electrical technician, and one I&C technician as on-shift positions. Because the current SNC SEP requires on-shift maintenance technicians, the current SNC SEP does not include augmenting maintenance technicians. In a letter dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, SNC proposed to remove the on-shift maintenance positions and would have one mechanical technician, one electrical technician, and one I&C technician respond to the OSC within 90 minutes of declaration of an Alert or higher ECL.

The proposed SNC SEP would take credit for Vogtle Units 3 and 4 passive safety features. The Vogtle Units 3 and 4 passive safety features are less reliant on active components which, in the event of component failure, may require maintenance support. Because Vogtle Units 3 and 4 use passive safety features that are less dependent on active systems there is a reduced need for maintenance support for immediate event response. Additionally, SNC has performed a detailed analysis of plant emergency response procedures to determine key maintenance tasks that must be performed in response to various emergencies. This analysis identified certain SNC emergency response procedure steps that require maintenance support. SNC stated that on-shift operators will be trained, as appropriate, prior to implementation of the proposed staffing changes. Because the Vogtle Units 3 and 4 passive safety features are less reliant on active components and SNC will provide appropriate training for on-shift personnel, the NRC finds the proposed changes to the ERO Repair and Corrective Actions function acceptable.

The proposed SNC SEP would include an on-shift repair team activities functional area that would be staffed by operations personnel. Although operations personnel are not qualified as maintenance technicians or system engineers, they are capable of taking actions for failed components as directed by emergency response procedures. Because the inclusion of on-shift operations personnel in the site-specific SNC SEPs does not change the capability or timing to perform repair team activities, the NRC staff finds the inclusion of on-shift activities acceptable.

Based on the above, the NRC staff has determined that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A for repair team activities.

3.1.10 Supervision of Repair Team Activities

SNC provided its analysis of supervision of repair team activities in Section 3.5, “Plant System Engineering, Repair and Corrective Actions Function (Engineering, Repair Team Activities),” of Enclosure 9 to the June 30, 2020, letter.

The Revised Table B-1 recommends a lead OSC supervisor to staff the OSC within 60 minutes with a mechanical supervisor, RP supervisor, electrical supervisor, and I&C supervisor (who may be combined with the electrical supervisor) to staff the OSC within 90 minutes from the declaration of an Alert or higher ECL.

The current SNC SEP identifies one on-shift Maintenance Supervisor with augmentation provided at 75 minutes by one OSC Manager, one Mechanical Group Lead, one Electrical Group Lead, one I&C Group Lead, and one RP/Chemistry Group Lead. In a letter dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, SNC proposed to extend the augmentation time for the OSC Manager, Mechanical Group Lead, Electrical Group Lead, I&C Group Lead, and the RP/Chemistry Group Lead from 75 minutes to 90 minutes after declaration of an Alert or higher ECL.

As discussed in Section 3.1.9, above, the Vogtle Units 3 and 4 passive safety features have less reliance on active components which reduces the need for maintenance support. Because maintenance technicians would not be required to respond until 90 minutes after declaration of an Alert or higher ECL, supervision of maintenance activities would likewise not be required until 90 minutes after an Alert or higher ECL.

Based on the above evaluation, the NRC staff has determined that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A for supervision of repair team activities.

3.1.11 Field Monitoring Teams

SNC provided its analysis of off-site surveys in Section 3.4, “Radiation Protection and Dose Assessment/Projections,” of Enclosure 9 to the June 30, 2020, letter.

The Revised Table B-1 recommends one onsite Field Monitoring Team (FMT) and two offsite FMTs as minimum staff. Each FMT would consist of one driver and one qualified individual (i.e., a field monitor) to assess the area for radiation and contamination. The field monitors for the offsite FMTs would also provide radioactive plume tracking. The onsite FMT and one offsite FMT are recommended to be staffed within 60 minutes and the second offsite FMT is recommended to be staffed within 90 minutes from the declaration of an Alert or higher ECL.

Currently, SNC has one dedicated on-site RP technician, or other trained personnel, available to perform offsite and onsite (out-of-plant) surveys. SNC currently has two FMT leads and two FMT assistants who will respond within 75 minutes of declaration of an Alert or higher ECL. In a letter dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, SNC proposed to extend onsite and offsite field monitoring to within 90 minutes of an Alert or higher ECL.

The proposed SNC SEP would have the current on-site RP technician respond within 60 minutes of declaration of an Alert or higher ECL. Additionally, SNC would have two offsite FMTs respond within 90 minutes of an Alert or higher ECL. Because the proposed SNC SEP

would provide the capability to perform field monitoring within 60 minutes with augmentation by two FMTs within 90 minutes of declaration of an Alert or higher ECL, the NRC finds the proposed changes to the field monitoring acceptable.

The proposed SNC SEP would add a definition that provides clarification of the onsite (out-of-plant) survey area. Because this definition provides clarification that does not impact the timing or capability to perform surveys, the NRC staff finds the proposed change acceptable.

Based on the above, the NRC staff has determined that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A for field monitoring.

3.1.12 Media Information

The purpose of the media information function is to manage and coordinate media information related to the event.

The Revised Table B-1 recommends that JIC staff address media inquiries within 60 minutes of the declaration of an Alert or higher ECL but notes that this function does not need to be performed at the TSC or OSC. The Revised Table B-1 further recommends additional staff to perform JIC-related tasks within 60 minutes of the declaration of a Site Area Emergency or higher ECL. For the JIC, the Revised Table B-1 notes: "Emergency response facility activation timing is not the concern; it is whether the facility staff is performing the stated function(s) within the time specified." The Revised Table B-1 does not specify an on-shift capability and does not identify specific staff positions for the minimum staff.

The current SNC SEP has a News Writer to respond to the EOF within 75 minutes of declaration of an Alert or higher ECL. SNC states that a joint information system approach is currently used at SNC. The Public Information Director (PID) would be available and be capable of disseminating information to the media within 60 minutes of declaration of an Alert or higher ECL.

Currently, the SNC SEP identifies the following minimum staffing positions that report to the JIC following the decision to staff the JIC:

- PID
- JIC Manager
- Public Response Coordinator
- Facility Coordinator
- Media Relations Representative

The following positions reporting to the JIC are not identified as minimum staffing positions

- Nuclear Spokesperson
- Technical Assistant
- JIC Assistant
- Public Response Staff
- Clerical Staff
- Security

No specific response time is currently designated for these JIC positions.

In a letter dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, SNC proposed to extend the augmentation time of the News Writer to within 90 minutes of declaration of an Alert or higher ECL, eliminate the identification of JIC minimum staffing positions, remove JIC minimum positions in Table 1 [ERO Augmented Responder Table] of the SNC SEP and remove clerical staff from the JIC organization. An NRC staff assessment of these changes is as follows:

- SNC will continue to have a PID be available who is capable of disseminating information to the media within 60 minutes of declaration of an Alert or higher ECL. The licensee is not proposing a change to this capability.
- SNC would remove the media response functional area from Table 4, "JIC Staff," of the SNC SEP. Because Table 4 stated that the JIC staff does not have a 75 minute augmentation time and the proposed SNC SEP will continue to identify the JIC organization on Figure B.3.2.A, "Joint Information Center Organization," this change is administrative and does not impact the timing or capability to provide media information.
- The proposed SNC SEP would remove designations for certain Table B.3.2.A, "Joint Information Center Organization," positions as minimum staff. Because the proposed SNC SEP would clearly identify the JIC organization and SNC stated that the PID would continue to be available to disseminate information to the media with 60 minutes of declaration of an Alert or higher ECL, this change is administrative and does not impact the timing or capability to provide the media information.
- SNC SEP ERO staffing changes include removing administrative support staff who do not perform emergency plan functions. For the JIC organization, Table B.3.2.A identifies these administrative staff positions as clerical staff. Because clerical staff/administrative support positions do not perform emergency plan functions, this change does not impact the timing or capability to provide the media information.
- Because SNC is not proposing a change to their existing capability to provide a PID who is capable of disseminating information to the media within 60 minutes of declaration of an Alert or higher ECL, extending the augmentation time of the News Writer to within 90 minutes of declaration of an Alert or higher ECL does not impact the timing or capability to provide the media information and continue to have the capability to provide the media information within 60 minutes. As such, the NRC staff finds the proposed change to the News Writer augmentation time acceptable.

Based on the above, the NRC staff has determined that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A for media information.

3.1.13 Information Technology

The purpose of the information technology (IT) function is to provide support for computer-based equipment if relied upon to perform emergency plan functions.

The Revised Table B-1 indicates that "IT staff is only required to be described in the emergency plan if critical digital assets (CDAs) are identified per 10 CFR 73.54, ['Protection of digital computer and communication systems and networks']." The Revised Table B-1 recommends an IT lead staff the TSC within 90 minutes of the declaration of an Alert or ECL and that another IT lead staff the EOF/JIC within 60 minutes of the declaration of a Site Area Emergency or higher ECL. Consistent with the Revised Table B-1, there are no on-shift staff assigned to the IT function. SNC's IT support personnel have an on-call support staff that responds to critical IT needs company-wide.

The current SNC SEP does not include IT personnel. SNC currently relies on CDAs related to EP. SNC currently uses on call IT personnel to provide IT support as needed and does not specifically include IT personnel in the current SNC SEP.

In response to an NRC staff RAI, SNC stated that CDAs related to EP will be declassified as CDAs prior to implementation of this LAR. Because SNC will declassify CDAs related to emergency preparedness prior to implementation of this LAR, IT staff is not required to be described or included in the proposed SNC SEP.

Based on the above, the NRC staff concludes that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A for information technology.

3.1.14 Plant Operations and Assessment of Operational Aspects

The Revised Table B-1 does not include a plant operations and assessment of operational aspects function. Note viii to the Revised Table B-1 further states, "The number of staff from operations, security force staff, or fire brigade staff on-shift is controlled by the site-specific Technical Specifications or other licensing documents."

In a letter dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, SNC proposed to remove the plant operations and assessment of operational aspects function from the SNC SEP. SNC stated in Section 3.1, "Plant Operations and Assessment of Operational Aspects," of Enclosure 9 to the June 30, 2020, letter that the proposed change removes the reference to the plant operations and assessment of operational aspects function in Table 2.2.A, "Vogtle 3-4 On-Shift Staffing," of the SNC SEP. Because operations staffing is controlled by site-specific Technical Specifications and other licensing documents, the NRC staff has determined that the proposed change is acceptable.

Based on the above, the NRC staff concludes that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A.

3.1.15 Firefighting Function

The Revised Table B-1 does not include a plant operations and assessment of operational aspects function. Note viii to the Revised Table B-1 further states, "The number of staff from operations, security force staff, or fire brigade staff on-shift is controlled by the site-specific Technical Specifications or other licensing documents."

In a letter dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, SNC proposed to remove the firefighting function from the SNC SEP. SNC stated in Section 3.7, "Firefighting Function," of Enclosure 9 to the June 30, 2020, letter, that the proposed change removes reference to the firefighting function in Table 2.2.A of the SNC SEP as this function may be more appropriately addressed in other licensing documents. The NRC staff has determined that the proposed change is acceptable because the firefighting function is not identified as a functional area in the Revised Table B-1 and is controlled by the other licensing documents.

Based on the above, the NRC staff concludes that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A.

3.1.16 Rescue Operations and First Aid Function

The Revised Table B-1 does not include a plant operations and assessment of operational aspects function. Note viii to the Revised Table B-1 further states, "The number of staff from operations, security force staff, or fire brigade staff on-shift is controlled by the site-specific Technical Specifications or other licensing documents."

In a letter dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, SNC proposed to remove the rescue operations and first aid function from the SNC SEP. SNC stated in Section 3.8, "Rescue Operations and First Aid," of Enclosure 9 to the June 30, 2020, letter, that the proposed change removes the reference to the rescue and first aid function in Table 2.2.A of the SNC SEP because the activities may be more appropriately addressed in other licensing documents. The NRC staff has determined that the proposed change is acceptable because rescue operations and first aid capabilities are not included in the Revised Table B-1 as emergency preparedness functions.

Based on the above, the NRC staff concludes that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A.

3.2. Full Augmentation Staffing

Full-augmentation positions are not described in the Revised Table B-1. The Revised Table B-1 only addresses the required minimum staffing to perform the designated major functional areas, as compared to other staff not critical to the effective implementation of the emergency plan. Note iii to the Revised Table B-1, as stated below, describes the distinction between ERO minimum staffing and ERO members, who serve in a supporting capacity.

> The minimum ERO staffing plan is that which is required to effectively implement the site-specific emergency plan (i.e., the emergency plan cannot be effectively implemented without this staff). The emergency plan should only describe the minimum ERO staffing plan, while supporting implementing procedures can describe any additional staff response desired by the licensee, as this additional staff is not critical to effective emergency plan implementation. The augmentation times listed are intended to provide a model for applicants and licensees to consider in the development of their site-specific emergency plan.

In a letter dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, SNC proposed to remove individuals that are not required as minimum staff responders from the applicable SNC SEP tables. SNC stated in Section 1.0, "Detailed Description," of Enclosure 9 to the June 30, 2020, letter, that the applicable SNC SEP tables for the TSC, OSC, EOF, and JIC would be removed and replaced with tables that remove individuals that are not required as minimum ERO staff.

In a November 20, 2020, letter that responded to NRC staff RAIs, SNC provided additional information regarding removal of certain positions from the SNC SEP tables for the TSC, OSC, and EOF. This additional information supported the proposed changes to the applicable SNC SEP tables that were not previously discussed as follows:

- The on-shift Chemistry Technician will perform dose assessment until relieved by the EOF dose assessment staff. Once relieved of the dose assessment function, the on-shift Chemistry Technician will be available to provide chemistry support. Because the on-shift Chemistry Technician does not perform an EP function, the NRC staff finds the removal of chemistry related positions from the applicable SNC SEP ERO augmentation tables acceptable.
- The TSC and EOF Support Coordinators are not currently required 75-minute ERO responders. Because the TSC and EOF Coordinators are non-required positions, the NRC staff finds that removing the TSC and EOF Support Coordinators from the proposed SNC SEP tables acceptable.
- The EOF Administrative Support Staff does not perform required ERO tasks. Because these support positions are not required as minimum staff positions, the NRC staff finds the removal of the EOF Administrative Support Staff from the proposed SNC SEP tables acceptable.

Additionally, SNC's November 20, 2020, RAI response provided additional information regarding removal of minimum ERO staff designations for certain augmenting ERO positions. These positions would be retained in the proposed SNC SEP, but not as ERO positions required for activation. The specific positions are as follows:

- The TSC and EOF Managers provide support to the TSC and EOF Emergency Directors. The SNC SEP will maintain the TSC and EOF Managers as required ERO responders, but not identify them as necessary for facility activation. Because the TSC and EOF Managers are not required for facility activation and are still required to respond to an Alert or higher ECL, the NRC staff finds the removal of the minimum staff designation on the proposed SNC SEP tables acceptable.
- The TSC, OSC, and EOF Emergency Response Facility (ERF) Communicators maintain communications with their ERF counterparts. The SNC SEP will maintain the TSC, OSC, and EOF ERF Communicators as required ERO responders, but not identify them as necessary for facility activation. Because the TSC, OSC, and EOF ERF Communicators are not required for facility activation and are still required to respond to an Alert or higher ECL, the NRC staff finds the removal of the minimum staff designation on the proposed SNC SEP tables acceptable.
- The OSC RP/Chemistry Group Lead is not a position that is required to be staffed prior to OSC activation. The proposed SNC SEP will maintain the OSC RP/Chemistry Group Lead as a required augmentation position. Because the

OSC RP/Chemistry Group Lead is not required for OSC activation and would still be required to respond to an Alert or higher ECL, the NRC staff finds the removal of the minimum staff designation on the proposed SNC SEP tables acceptable.

The licensee proposed to add a definition for "facility activation" to align with the command and control functions in the TSC, OSC, and EOF. Additionally, the licensee proposed to replace "activated" for the JIC with "staffed" as there are no command and control functions associated with the JIC. Because the proposed change would clarify when the ERF is ready to assume the assigned functions of the facility, the NRC staff finds the proposed change acceptable.

As discussed above, the revised SNC SEP plan will continue to include those positions necessary for effective implementation of the emergency plan. Based on the above, the NRC staff concludes that the proposed SNC SEP will continue to meet the planning standard of 10 CFR 50.47(b)(2) and the requirements of Appendix E to 10 CFR Part 50, Section IV.A.

3.3 Summary

The NRC staff performed a technical and regulatory review of the proposed changes to the SNC SEP. Based on this review, the NRC staff finds that the SNC SEP, as changed, continues to meet the planning standards of 10 CFR 50.47(b) and the requirements in Appendix E to 10 CFR Part 50 and provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. Therefore, the NRC staff concludes that the proposed SNC SEP changes to certain ERO staffing and augmentation times, as described in the application dated June 30, 2020, as supplemented by letters dated August 11, 2020, November 20, 2020, and April 27, 2021, are acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the State of Georgia officials were notified of the proposed issuance of the amendments on August 5, 2021. The State officials had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change the site emergency plan. The amendments relate, in part, to changes in recordkeeping, reporting, or administrative procedures or requirements. The amendments also relate, in part, to changing requirements with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve 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 amendments involve no significant hazards consideration, and there has been no public comment on such finding published in the *Federal Register* on September 22, 2020 (85 FR 59559). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

7.0 REFERENCES

1. Southern Nuclear Operating Company letter to U.S. Nuclear Regulatory Commission, "Southern Nuclear Operating Co., Inc. - License Amendment Request to Revise the Emergency Plan to Change Staffing and Extend Staff Augmentation Times for Emergency Response Organization Positions," dated June 30, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20192A140).

2. Southern Nuclear Operating Company letter to U.S. Nuclear Regulatory Commission, "Southern Nuclear Operating Co, Inc - Supplement to License Amendment Request to Revise the Emergency Plan to Change Staffing and Extend Staff Augmentation Times for Emergency Response Organization Positions," dated August 11, 2020 (ADAMS Accession No. ML20224A464).

3. Southern Nuclear Operating Company letter to U.S. Nuclear Regulatory Commission, "Joseph M. Farley, Units 1 & 2, Edwin I. Hatch, Units 1 & 2, Vogtle, Units 1, 2, 3, and 4, Response to NRC Requests for Information License Amendment Request to Revise the Emergency Plan to Change Staffing and Extend Staff Augmentation Times for Emergency Response Organization Positions," dated November 20, 2020 (ADAMS Accession No. ML20325A219).

4. Southern Nuclear Operating Company letter to U.S. Nuclear Regulatory Commission, "Southern Nuclear Operating Company - Supplement to License Amendment Request to Revise the Emergency Plan to Change Staffing and Extend Staff Augmentation Times for Emergency Response Organization Positions," dated April 27, 2021 (ADAMS Accession No. ML21117A351).

5. Regulatory Guide 1.101, Revision 4, "Emergency Planning and Preparedness for Nuclear Power Reactors," dated July 2003 (ADAMS Accession No. ML032020276).

6. NUREG-0654/FEMA-REP-1, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," dated November 1980 (ADAMS Accession No. ML040420012).

7. U.S. Nuclear Regulatory Commission, NSIR/DPR-ISG-01, "Interim Staff Guidance-Emergency Planning for Nuclear Power Plants," dated November 20, 2011 (ADAMS Accession No. ML113010523).

8. Nuclear Energy Institute (NEI) 10-05, Revision 0, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities," dated June 2011 (ADAMS Accession No. ML111751698).

9. Regulatory Issue Summary 2016-10, “License Amendment Requests for Changes to Emergency Response Organization Staffing and Augmentation,” dated August 5, 2016 (ADAMS Accession No. ML16124A002).

10. Kahler, R., U.S. Nuclear Regulatory Commission, letter to Susan Perkins-Grew, Nuclear Energy Institute, “Alternative Guidance for Licensee Emergency Response Organizations,” dated June 12, 2018 (ADAMS Accession No. ML18022A352).

11. U.S. Nuclear Regulatory Commission letter to Southern Nuclear Company, “Joseph M. Farley Nuclear Plant, Units 1 and 2; Edwin I. Hatch Nuclear Plant, Units 1 and 2; and Vogtle Electric Generating Plant, Units 1, 2, 3, and 4 - Issuance of Amendments Related to Southern Nuclear Company Standard Emergency Plan,” dated March 20, 2017 (ADAMS Accession No. ML16141A090).

12. Southern Nuclear Operating Company letter, “Joseph M. Farley Nuclear Plant, Units 1 and 2; Edwin I. Hatch Nuclear Plant, Units 1 and 2; and Vogtle Electric Generating Plant, Units 1, 2, 3, and 4 - Audit Plan for Revision to Emergency Plan to Change Staffing and Extend Staff Augmentation Times for Emergency Response Organization Positions (EPID L-2020-LLA-0150 and EPID L-2020-LLA-0151),” dated February 24, 2021 (ADAMS Accession No. ML20342A018).

13. Southern Nuclear Operating Company letter, “Joseph M. Farley Nuclear Plant, Units 1 and 2; Edwin I. Hatch Nuclear Plant, Units 1 and 2; and Vogtle Electric Generating Plant, Units 1, 2, 3, and 4 - Audit Summary Report for Revision to Emergency Plan to Change Staffing and Extend Staff Augmentation Times for Emergency Response Organization Positions (EPID L-2020-LLA-0150 and EPID L-2020-LLA-0151),” dated May 19, 2021 (ADAMS Accession No. ML21060B432).

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