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52-026

ND-14-0475  
10 CFR 50.90

U.S. Nuclear Regulatory Commission  
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Southern Nuclear Operating Company  
Vogtle Electric Generating Plant Units 3 and 4  
Response to Request for Additional Information  
Request for License Amendment: Revision to Vogtle 3 and 4 Emergency Plan  
to Comply with Emergency Preparedness Rules (LAR-13-030S)

Ladies and Gentlemen:

On December 20, 2013, via Southern Nuclear Operating Company (SNC) letter ND-13-2450, in accordance with the provisions of 10 CFR 50.90, SNC requested an amendment to the combined licenses (COLs) for Vogtle Electric Generating Plant (VEGP) Units 3 and 4 (License Numbers NPF-91 and NPF-92, respectively). The Nuclear Regulatory Commission (NRC) staff issued Request for Additional Information (RAI) Letter No. 1, also referred to as electronic RAI (eRAI) 7441, associated with this License Amendment Request (LAR), referred to as LAR-13-030, on March 11, 2014 [ADAMS Accession No. ML14070A243]. This letter provides the response to RAI Letter No. 1. The revised information is provided in this letter as Enclosure 5 of the LAR. The revised information includes revisions to Enclosure 4 of the LAR.

The information provided in Enclosure 5 does not change the scope of, nor affect the Technical Evaluation or the conclusions of the Significant Hazards Consideration determination in the amendment request submitted on December 20, 2013. This letter contains no regulatory commitments.

In accordance with 10 CFR 50.91, SNC is notifying the State of Georgia of this LAR supplement by transmitting a copy of this letter and enclosure to the designated State Official.

Should you have any questions, please contact Mr. Wes Sparkman at (205) 992-5061.

Mr. Brian H. Whitley states that: he is the Regulatory Affairs Director of Southern Nuclear Operating Company; he is authorized to execute this oath on behalf of Southern Nuclear Operating Company; and to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY



Brian H. Whitley

BHW/TEA/kms

Sworn to and subscribed before me this 4<sup>th</sup> day of April, 2014

Notary Public: Kristin Marie Seibert

My commission expires: August 16, 2016



Enclosure 5 Vogle Electric Generating Plant (VEGP) Units 3 and 4 – Response to NRC  
Request for Additional Information Letter No. 1 Related to License Amendment  
Request (LAR) 13-030 (LAR-13-030S)

cc:

Southern Nuclear Operating Company/ Georgia Power Company

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**Southern Nuclear Operating Company**

**ND-14-0475**

**Enclosure 5**

**(Note that Enclosures 1, 2, 3, and 4 were provided with LAR-13-030)**

**Vogtle Electric Generating Plant (VEGP) Units 3 and 4**

**Response to NRC Request for Additional Information Letter No. 1**

**Related to**

**License Amendment Request (LAR) 13-030**

**(LAR-13-030S)**

**(This enclosure contains five pages, including this cover page)**

**eRAI Tracking No. 7441**

**Question 1:**

Section IV.E, "Emergency Facilities and Equipment," of Appendix E to 10 CFR Part 50 states in part that adequate provisions shall be made and described for emergency facilities and equipment, including: 8.d, which states that for nuclear power reactor licensees, an alternative facility (or facilities) that would be accessible even if the site is under threat of or experiencing hostile action, to function as a staging area for augmentation of emergency response staff and collectively having the following characteristics: the capability for communication with the emergency operations facility, control room, and plant security; the capability to perform offsite notifications; and the capability for engineering assessment activities, including damage control team planning and preparation, for use when onsite emergency facilities cannot be safely accessed during hostile action. . . . [implementation schedule provided].

On LAR 13-030 Enclosure 1, page 4 of 5, the second paragraph under Topic 9 states: "The license amendment request provided in Enclosure 2 of this letter proposes a change to the VEGP 3 and 4 Emergency Plan which describes facility capabilities and locations where ERO augmentation personnel can assemble and commence mitigation activities while the site is not accessible" (emphasis added). On Enclosure 4, page 3 of 8, the proposed changes (mark-ups) to Section B.2 of the Emergency Plan state in part that, "Alternative facilities have been identified to ensure rapid access to the site by augmented staff" (emphasis added). Section B.2 does not identify the specific alternative facilities, including their locations, or address what their capabilities are to satisfy the requirements in Appendix E, Section IV.E.8.d. For example, do the alternative facilities ensure rapid access to the site because of location? What are the characteristics of the facilities, and how do they satisfy the criteria in Section IV.E.8.d relating to communications, offsite notifications, and engineering assessment activities? Please clarify and describe the alternative facilities, and revise the proposed changes to the VEGP Units 3 and 4 Emergency Plan, if appropriate. If no revisions are needed, explain why.

**SNC Response:**

The VEGP 3 and 4 designated location of the alternative facility is the lower level of the VEGP 1 and 2 training center, which is located within the owner controlled area, but outside the protected area. The space within the training center designated as the alternative facility previously served as the Emergency Offsite Facility for VEGP 1 and 2. However, for business reasons the alternative facility will be relocated to a designated area in the Vogtle Joint Information Center (JIC) in Waynesboro, Georgia. The JIC is referred to as the Emergency News Center (ENC) in the VEGP 3 and 4 Emergency Plan. Although located in the same building as the JIC, the alternative facility is independent of the JIC. The alternative facility will have sufficient space and be equipped to meet the requirements of 10 CFR 50, Appendix E, Section IV.E.8.d.

The following changes are proposed to clarify the location of the alternative facility:

Enclosure 4, page 3 of 8, B.2 Emergency Response Organization:

The seventh paragraph is revised from:

However, these events will warrant timely ERO augmentation. Alternative facilities have been identified to ensure rapid access to the site by augmented staff. These facilities have been established to minimize delays in overall site response by permitting ERO assembly without exposing responders to the danger of hostile action. These facilities function as staging areas for augmented ERO staff until the site is secured.

To read:

However, these events will warrant timely ERO augmentation. An alternative facility has been identified to ensure rapid access to the site by augmented staff due to its close proximity. The alternative facility is located in a designated area in the Joint Information Center (JIC) in Waynesboro, Georgia. This facility has been established to minimize delays in overall site response by permitting ERO assembly without exposing responders to the danger of hostile action. This facility functions as a staging area for augmented ERO staff until the site is secured.

**Question 2:**

For LAR-13-030, Topic 2, entitled "Evacuation Time Estimate Updating," SNC proposes changes to the VEGP Units 3 and 4 Emergency Plan Section J.2.3, "Evacuation and Sheltering," and Appendix 6, "Evacuation Time Estimates for the Vogtle Electric Generating Plant Plume Exposure Pathway Emergency Planning Zone," and removal of Table J-4, "Evacuation Time Estimates," to address the new emergency preparedness requirements in Section IV.4, IV.5, and IV.6 of Appendix E to 10 CFR Part 50.

In LAR-13-030 Enclosure 1, page 2 of 5, the first sentence under Topic 2 references various SNC letters, which address an ETE Update for VEGP Units 1 and 2. SNC's referenced November 26, 2013, letter (NL-13-2340) includes a revised ETE Update for VEGP Units 1 and 2 (in Enclosure 3), which is also applicable to VEGP Units 3 and 4. The staff reviewed the revised ETE Update for VEGP Units 1 and 2 against the proposed revision in LAR-13-030 Enclosure 4, Appendix 6, and have the following questions.

a. LAR-13-030 Appendix 6 states that the total year 2012 permanent resident population within the 10-mile emergency planning zone (EPZ) for VEGP is estimated to be 3,080. In contrast, Table 4, "2012 Permanent Resident Population Distributions by Sector and Ring," indicates that the Cumulative Population for Population Mile 9-10 is 3,248. In addition, Appendix 6 states that the total peak transient population within the 10-mile EPZ is estimated to be 2,915. In contrast, Table 6, "2012 Transient Population Distributions by Sector and Ring," indicates that the Cumulative Population for Population Miles 9-10 is 2,907. Please clarify the inconsistencies, and correct the proposed description in Appendix 6, if appropriate, or explain why such a revision(s) is not appropriate.

b. LAR-13-030 Appendix 6 lists five bullets that identify the five categories of population that are identified in the report (i.e., in the revised ETE Update). The paragraph after the bullets addresses estimated population numbers for the five categories, except for the fourth bullet, entitled "Special facility residents." Section 3.4, "Special Facility and School Populations," of the revised ETE Update states, in part, that no special facilities, as defined in NUREG/CR-7002, were found within the EPZ. In order to address what appears to be missing information in Appendix 6 related to the fourth bullet listing of 'Special facility residents,' please revise Appendix 6 to clarify that there are no special facility residents within the 10-mile EPZ for VEGP, if appropriate, or explain why such a revision is not appropriate.

**SNC Response to Question 2a:**

The 2012 permanent resident population identified in LAR-13-030, Appendix 6, is derived by summing the values in the revised ETE Table 5, "2012 Permanent Resident Population by Zones," which yields the value of 3,080.

Because the 10-mile emergency planning zone (EPZ) for VEGP is based on geopolitical zones and the boundaries of these zones differ somewhat from the boundaries established by the ring and sector boundaries used to establish the estimated populations in Table 4, and because population estimates are made using an area ratio method as described in Section 3.1, "Permanent Resident," of the ETE, numbers between Table 4 and Table 5 are expected to differ. However, the numbers derived from Table 5 are the numbers that are used in performing evacuation time estimates.



Similarly, the 2012 total peak transient population identified in LAR-13-030, Appendix 6, is derived by summing the values in the revised ETE Table 7, "2012 Transient Population Distributions by Zones," which yields the value of 2,915.

For the same reasons as described for the permanent population estimates, the numbers derived from Table 7 are the numbers that are used in performing the evacuation time estimates. Based on the above discussion, the populations estimates listed in LAR-13-030, Appendix 6, are correct and no revision to the proposed Appendix 6 is warranted.

**SNC Response to Question 2b:**

The following changes are proposed to clarify that no special facility residents are located within the 10-mile EPZ.

**Enclosure 4, page 6 of 8, Appendix 6, Evacuation Time Estimates for the Vogtle Electric Generating Plant Plume Exposure Pathway Emergency Planning Zone:**

The fourth paragraph is revised from:

The permanent resident population is made up of individuals residing in the 10-mile EPZ. The total year 2012 permanent resident populations within the 10-mile EPZ for VEGP are estimated to be 3,080. The transient population consists of workers employed within the area, recreational sportsmen, and visitors. The total peak transient population within the 10-mile EPZ is estimated to be 2,915. Only one school, Lord's House of Praise Christian School, was identified in the VEGP EPZ. IEM contacted the school to collect current enrollment, staff figures, and the evacuation plan. The total peak population for the school in the EPZ is estimated to be 70. Transit dependent permanent residents in the EPZ are estimated to be 29. This study also considered the voluntary evacuees, who are also known as shadow evacuees that reside within 10 to 15 miles from VEGP.

To read:

The permanent resident population is made up of individuals residing in the 10-mile EPZ. The total year 2012 permanent resident populations within the 10-mile EPZ for VEGP are estimated to be 3,080. The transient population consists of workers employed within the area, recreational sportsmen, and visitors. The total peak transient population within the 10-mile EPZ is estimated to be 2,915. Only one school, Lord's House of Praise Christian School, was identified in the VEGP EPZ. IEM contacted the school to collect current enrollment, staff figures, and the evacuation plan. The total peak population for the school in the EPZ is estimated to be 70. Transit dependent permanent residents in the EPZ are estimated to be 29. No special facility residents are located within the 10-mile EPZ. This study also considered the voluntary evacuees, who are also known as shadow evacuees that reside within 10 to 15 miles from VEGP.