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Docket No.: 52-025

ND-16-0703
10 CFR 50.90

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 3
Preliminary Amendment Request (PAR):
Column Line N ITAAC Dimension Change (PAR-16-003)

Ladies and Gentlemen:

The U.S. Nuclear Regulatory Commission (NRC) issued the Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4 combined licenses (COLs) (License Nos. NPF-91 and NPF-92) to Southern Nuclear Operating Company (SNC) on February 10, 2012.

By SNC letter ND-16-0650, dated May 17, 2016, SNC submitted a License Amendment Request (LAR), LAR-16-003, to revise VEGP Units 3 and 4 plant-specific Tier 1 information (and associated COL Appendix C) and the Updated Final Safety Analysis Report (UFSAR) to revise the concrete wall thickness tolerance of the column line N wall from column lines 2 to 4 from elevation 100'-0" to 135'-3".

SNC is submitting a Preliminary Amendment Request (PAR), PAR-16-003, to minimize further construction delays for Unit 3 during the NRC's evaluation of the related LAR. The determination of whether the NRC has any objection to SNC proceeding with construction based on the proposed plant licensing basis changes identified in the LAR is requested on or before June 10, 2016. Concrete placement for the column line N wall up to elevation 100'-0" in the VEGP 3 auxiliary building is subject to the changes proposed in LAR-16-003 and is currently on hold. Delayed determination regarding this PAR will result in continued delay in the construction completion of VEGP Unit 3 structures.

A description of the proposed change and the reason for the change are contained in Enclosure 1 to this letter. This PAR has been developed in accordance with guidance provided in the most recent revision to the Interim Staff Guidance on Changes during Construction Under 10 CFR Part 52, COL-ISG-25 [ML15058A377], and corresponds accurately and technically with the above-mentioned LAR-16-003. The technical scope of this PAR is consistent with the technical scope of the submitted LAR. Section 7 of Enclosure 1 identifies the scope of the "no objection" sought in this PAR.

This letter does not contain any NRC commitments. Should you have any questions, please contact Ms. Paige Ridgway at (205) 992-7516.

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

B. H. Whitley

Brian H. Whitley



BHW/PTR/ljs

Sworn to and subscribed before me this 17th day of May 2016

Notary Public: *Lisa Myrick Spears*

My commission expires: June 18th, 2019

Enclosure: 1) Vogtle Electric Generating Plant (VEGP) Unit 3 – Preliminary Amendment Request Regarding Column Line N Wall ITAAC Dimension Change (PAR-16-003)

cc:

Southern Nuclear Operating Company / Georgia Power Company

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Southern Nuclear Operating Company

ND-16-0703

Enclosure 1

Vogtle Electric Generating Plant (VEGP) Unit 3

Preliminary Amendment Request

Regarding

Column Line N Wall ITAAC Dimension Change (PAR-16-003)

(This Enclosure consists of four pages, including this cover page.)

Pursuant to 10 CFR 52.98(c) and in accordance with 10 CFR 50.90, Southern Nuclear Operating Company (SNC) submitted a license amendment request (LAR) to change the Vogtle Electric Generating Plant (VEGP), Units 3 and 4, licensing basis documents associated with Combined License Nos. NPF-91 and NPF-92, respectively. Accordingly, SNC requests the determination of whether the NRC has any objection to proceeding with concrete placement for the column line N wall up to elevation 100'-0" in the VEGP 3 auxiliary building, as identified in the Preliminary Amendment Request (PAR) provided below, be provided by the date shown below.

PAR Request Number: <u>SNC PAR-16-003</u>	Station Name: VEGP	Unit Number(s): <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	PAR Request Date: <u>May 17, 2016</u>
1. NRC PAR Notification Requested Date (see Block 7 for basis): <u>June 10, 2016</u>			
2. License Amendment Request References (as applicable): <input checked="" type="checkbox"/> LAR submittal date and SNC Correspondence Number: <u>May 17, 2016 / ND-16-0650</u> <input type="checkbox"/> Expected LAR submittal date: _____			
3. Brief Description of Proposed Change: <p>The proposed change would revise the licensing basis, particularly the plant-specific Tier 1 (and COL Appendix C) and the Combined Licenses' Updated Final Safety Analysis Report (UFSAR) description of the concrete wall thickness tolerance for the column line N wall from column lines 2 to 4 from the 100'-0" to 135'-3" elevation. The concrete wall thickness for the column line N wall between column lines 2 to 4 from elevation 100'-0" to 135'-3" is increased from $\pm 1"$ to $-1"$, $+4"$ to accommodate fabrication issues of the CA20 module. The tolerance is being changed above grade (100'-0" elevation) so as not to conflict with Note 2 of Tier 1 Table 3.3-1 "Definition of Wall Thicknesses for Nuclear Island Buildings, Turbine Building, and Annex Building" which states that walls and floors have a construction tolerance of $\pm 1"$, except for exterior walls below grade, where the construction tolerance is $+12$ inches, -1 inch. A new note (Note 11) will be added to COL Appendix C and associated plant-specific DCD Tier 1 Table 3.3-1 and will state: "This wall thickness has a tolerance of $+4$ inches, -1 inch above grade."</p> <p>UFSAR Tier 2 Subsection 3.8.4.4.1 "Seismic Category 1 Structures" is revised to identify that for the column line N wall between column line 2 to 4 from elevation 100'-0" to 135'-3", the tolerance for the wall thickness is increased over those found in American Concrete Institute (ACI) 349-01, and to state that these walls have been evaluated against the ACI 349-01 reinforcement requirements.</p>			
4. Reason for License Amendment Request: <p>These changes are driven primarily by a need to identify and define in the plant-specific Tier 1 (and associated Appendix C) and the UFSAR the concrete wall thickness tolerance for the column line N wall between column lines 2 to 4 from elevation 100'-0" to 135'-3" in the VEGP Unit 3 auxiliary building.</p> <p>A review was performed of the total wall tolerances of the CA20 module, and it was identified that the total concrete thickness tolerance after fabrication and module placement for the column line N wall from column lines 2 to 4 from the 100'-0" to 135'-3" elevation will exceed the concrete thickness tolerance specified in COL Appendix C, and plant-specific Tier 1 Table</p>			

3.3-1, and ACI 349-01 due to fabrication issues of the CA20 module. Survey information was taken of the wall prior to pouring concrete for the column line N wall and indicated that a portion of the wall above grade will be over the +1" concrete thickness tolerance.

UFSAR Subsection 3.8.4.1.2 states that structural modules are used for construction in the south side of the auxiliary building. In accordance with UFSAR Section 3.8.4.6.3, the structural wall modules in the auxiliary building are designed using the same procedures as the structural modules in the containment internal structures described in Subsection 3.8.3.5.3. The CA20 structural module is fabricated in accordance with UFSAR Subsection 3.8.3.6.1. The modules in the south end of the auxiliary building include the spent fuel pool, fuel transfer canal, and cask loading and cask washdown pits. Concrete is used where required for shielding. The south end of the auxiliary building is a Seismic Category I structure which contains CA20 and is considered to be the radiologically controlled portion of the auxiliary building. As described in UFSAR Subsection 3.8.3.6.1, modular construction techniques are used extensively in the containment internal structures. Subassemblies, sized for commercial rail transport, are assembled offsite and transported to the site or are assembled onsite. Tolerances for fabrication, assembly and erection of the structural modules used in containment internal structures conform to the requirements of section 4 of ACI 117, applicable sections of AWS D1.1, and sections Q1.23 and Q1.25 of AISC-N690. For the purposes of this evaluation, the structural module comprises the formwork of the reinforced concrete wall of column line N, thus ACI 117 is not applicable. Module tolerance for fabrication, assembly, and erection of the structural modules used in the auxiliary building conform to these same requirements. Because conformance is either maintained with the applicable codes and standards identified in the underlying Tier 2 information or sufficient margin exists to justify the deviation, the increase in concrete wall thickness tolerance for the column line N wall from column lines 2 to 4 to from the 100'-0" to 135'-3" elevation is found to be acceptable.

5. Is Exemption Request Required? ☒ Yes ☐ No

If Yes, Briefly Describe the Reason for the Exemption.

An exemption is requested because LAR-16-003 requests a departure from plant-specific DCD Tier 1 information, as provided in 10 CFR Part 52, Appendix D, Design Certification Rule for the AP1000 Design. Specifically, a plant-specific departure from Tier 1 Table 3.3-1 which describes the concrete wall thickness tolerances of the column line N wall.

6. Identify Applicable Precedents:

None

7. Impact of Change on Installation and Testing Schedules:

SNC's requested date for approval of this license amendment as identified in the referenced LAR is December 10, 2016. This date is based primarily upon the time period required for processing a requested license amendment. The Unit 3 construction activities related to placing concrete from elevation 100'-0" to elevation 135'-3" are currently placed in a "construction hold" status.

As such, this PAR requests a "no objection" finding related to this license amendment by the date identified in Block 1 above (or sooner if reasonably achievable) to allow for appropriate notifications and release of concrete placement activities currently under the "construction hold" status to allow construction to continue.

Placement of concrete to elevation 100'-0" at this location will fix the west wall of CA20 in place; the concrete can be later removed to restore the wall to its current condition, if required.

Specifically, SNC requests a "no objection" finding to allow concrete placement to Elevation 100'-0" for the column line N wall in the Unit 3 auxiliary building in accordance with the increased concrete wall thickness tolerance change proposed in the plant-specific Tier 1 (and associated Appendix C) and UFSAR descriptions in LAR-16-003.

A "no objection" finding for the above construction activity would allow subsequent dependent construction activities on Unit 3 to continue.

8. Impact of Change on ITAAC:

The change is specific to Tier 1 ITAAC information and thus, will impact the closure of the ITAAC. Final approval of the License Amendment Request will be necessary for closure of the revised ITAAC, but a "no objection" finding is requested for this PAR in order to proceed with construction pursuant to the process outlined in COL Condition 2.D(1), Changes during Construction, under the current ITAAC. This PAR should be considered for any inspections related to ITAAC 3.3.00.02.a.i.d (item No. 763), ITAAC 3.3.00.02a.ii.d (item No. 767), and ITAAC 3.3.00.03d (item No. 780) of the VEGP Unit 3 COL Appendix C Table 3.3-6.

9. Additional Information:

None