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Docket No.: 52-025

ND-15-1915
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):
CA04 Structural Module ITAAC Dimensions Change (PAR-15-015)

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, respectively) to Southern Nuclear Operating Company (SNC) on February 10, 2012.

By SNC letter ND-15-1742 dated September 18, 2015 [ADAMS Accession Number ML15261A757], SNC submitted a License Amendment Request (LAR), LAR-15-015, 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 change the concrete wall thickness tolerances for four walls in the Nuclear Island.

SNC is submitting a Preliminary Amendment Request (PAR), PAR-15-015, to minimize further construction delays for Unit 3 during the NRC's evaluation of the related license amendment request (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 November 12, 2015. Concrete placement to Elevation 87'-6" inside containment is scheduled for November 23, 2015. Because the concrete placement inside of containment subject to the proposed changes in LAR-15-015 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-15-015. 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 Mrs. 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



Brian H. Whitley



BHW/PTR/ljs

Sworn to and subscribed before me this 22nd day of October 2015

Notary Public: Lisa Myrick Spears

My commission expires: June 18, 19

Enclosure: 1) Vogtle Electric Generating Plant (VEGP) Unit 3 – Preliminary Amendment Request Regarding CA04 Structural Module ITAAC Dimensions Change (PAR-15-015)

cc:

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Southern Nuclear Operating Company

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Enclosure 1

Vogtle Electric Generating Plant (VEGP) Unit 3

Preliminary Amendment Request

Regarding

CA04 Structural Module ITAAC Dimensions Change (PAR-15-015)

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

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Enclosure 1

PAR-15-015: CA04 Structural Module ITAAC Dimensions Change

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 to Elevation 87'-6" inside VEGP Unit 3 containment, as identified in the Preliminary Amendment Request (PAR) provided below to be provided by the date shown below.

PAR Request Number: <u>SNC PAR-15-015</u>	Station Name: VEGP	Unit Number(s): <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	PAR Request Date: <u>October 22, 2015</u>
1. NRC PAR Notification Requested Date (see Block 7 for basis): <u>November 12, 2015</u>			
2. License Amendment Request References (as applicable): <input checked="" type="checkbox"/> LAR submittal date and SNC Correspondence Number: <u>September 18, 2015 / ND-15-1742</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 tolerances for the containment internal structural modules CA04, CA01, and CB65. The CA04 module forms the reactor vessel cavity, and the walls of the CA01 module comprise the central walls of the containment internal structures including the two steam generator compartments and the refueling canal. Finally, the CB65 module is used in creating the walls of the reactor coolant drain tank room (termed the RCDT Room).</p> <p>The concrete wall thickness tolerances for the first four Nuclear Island walls identified in COL Appendix C and associated plant-specific Design Control Document (DCD) Tier 1 Table 3.3-1, "Definition of Wall Thicknesses for Nuclear Island Buildings, Turbine Building, and Annex Building" is increased from $\pm 1"$ to $\pm 1-5/8"$ to accommodate the combined fabrication and assembly tolerance plus the installation tolerance of the adjacent modules by adding an exception to Note 2 and adding one new note to Tier 1 Table 3.3-1. Note 2 is modified to state that the tolerance is as stated in the note, except as noted elsewhere. The added note to Tier 1 Table 3.3-1, labeled Note 10, is footnoted to the concrete thickness in the four affected walls. This note specifies that this concrete thickness has a construction tolerance of $\pm 1-5/8"$. The four walls affected by the proposed change in concrete thickness tolerances are as follows:</p> <ol style="list-style-type: none">(1) Shield Wall between Reactor Vessel Cavity and RCDT Room.(2) West Reactor Vessel Cavity Wall.(3) North Reactor Vessel Cavity Wall.(4) East Reactor Vessel Cavity Wall. <p>UFSAR Tier 2 Subsection 3.8.3.6.1 "Fabrication, Erection, and Construction of Structural Modules" is revised to identify that in locations around the reactor vessel cavity, where concrete is placed between portions of unconnected modules or between a module and a left in place form, the tolerance for the wall thickness may be increased over those found in American Concrete Institute (ACI) 117, and to state that these walls have been evaluated against the ACI 349-01 reinforcement requirements.</p>			

4. Reason for License Amendment Request:

These changes are driven primarily by a need to revise, in the plant-specific Tier 1 (and associated Appendix C) and the UFSAR, the concrete wall thickness tolerances for four walls in the Nuclear Island.

UFSAR Subsection 3.8.3.6.1 specifies that the tolerances for fabrication, assembly, and installation of structural modules conform to the requirements of ACI 117, AWS D1.1, and AISC-N690, and UFSAR Subsection 3.8.4.4.1 requires that the design and analysis procedures are in accordance with ACI 349-01. For the affected walls, the concrete thickness tolerances listed in plant-specific Tier 1 Table 3.3-1 do not utilize the complete allowance specified in these codes with the exception of ACI 349-01 and ACI 117. The proposed concrete wall thickness tolerances of $\pm 1\text{-}5/8$ " for the four walls in the Nuclear Island is an additional $\pm 5/8$ " beyond the ACI 349-01 requirements and an additional $+5/8$ " and $-7/8$ " beyond the ACI 117 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 above identified walls 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-15-015 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 plant-specific DCD Tier 1 Table 3.3-1 which describes the concrete wall thickness tolerances of the Nuclear Island walls.

6. Identify Applicable Precedents:

This proposed change is substantially similar to the NRC-approved V.C. Summer Nuclear Station Units 2 and 3 Amendment No. 29 (ML15216A072). That amendment request, LAR 14-07, was submitted on September 25, 2014 (ML14268A388) and supplemented on March 13, 2015 (ML15072A306). The amendment made changes to the first four entries in COL Appendix C and plant-specific Tier 1 Tables 3.3-1, increasing the tolerance for the CA04/CB65 wall from ± 1 to $\pm 1\text{-}1/4$ " and the three CA04/CA01 walls from ± 1 " to $\pm 1\text{-}5/8$ ". While this amendment request proposes to make the same change for the three CA04/CA01 walls, this request alternatively proposes to increase the wall tolerance for the CA04/CB65 wall (Shield Wall between Reactor Vessel Cavity and RCDT Room) to $\pm 1\text{-}5/8$ ", matching the tolerance for the other entries. LAR 15-015 utilizes the same method of demonstrating adequate reinforcement for the affected walls and ensuring no adverse effects result from the increased tolerance.

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 November 9, 2015. This date is based primarily upon the time period required for processing a requested license amendment. The construction activities related to placing concrete from Elevation 83'-0" to Elevation 87'-6" 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.

Specifically, SNC requests a "no objection" finding to allow concrete placement to Elevation 87'-6" inside VEGP Unit 3 containment in accordance with the increased concrete wall

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Enclosure 1

PAR-15-015: CA04 Structural Module ITAAC Dimensions Change

thickness tolerance changes proposed in the revised plant-specific Tier 1 (and associated Appendix C) and UFSAR descriptions in LAR-15-015.

A "no objection" finding for the above construction activity would release the associated Unit 3 construction holds.

8. Impact of Change on ITAAC:

The change is specific to plant-specific 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 objections" 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 3.3.00.02a.ii.a (item No. 764) and ITAAC 3.3.00.03a (item No. 777) of the VEGP Unit 3 COL Appendix C Table 3.3-6.

9. Additional Information: None