

August 23, 2019

Docket No.: 52-026

ND-19-1032  
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 4  
Preliminary Amendment Request (PAR):  
Reinforcement Changes for Wall L and Wall 7.3 (PAR-19-016)**

Ladies and Gentlemen:

The U.S. Nuclear Regulatory Commission (NRC) issued the Vogtle Electric Generating Plant (VEGP) Unit 4 combined license (COL) (License No. NPF-92) to Southern Nuclear Operating Company (SNC) on February 10, 2012.

By SNC letter ND-19-1031, dated August 22, 2019, SNC submitted License Amendment Request (LAR), LAR-19-016 (ADAMS Accession Number ML19234A327), to revise information in the VEGP Unit 4 licensing basis documents. The LAR proposes to change Tier 2\* information in the Updated Final Safety Analysis Report (UFSAR) (which includes the plant-specific Design Control Document (DCD) information) to change the provided area of horizontal reinforcement for VEGP Unit 4 Wall L and Wall 7.3 from elevation 117'-6" to 135'-3".

SNC is submitting this Preliminary Amendment Request (PAR), PAR-19-016, to minimize construction delays for VEGP Unit 4 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 licensing basis changes identified in the LAR is requested on or before September 18, 2019. Delayed determination regarding this PAR could result in delay of the completion of the concrete placement for walls affected by the LAR (Wall L and Wall 7.3).

A description of the proposed change and the reason for the change are contained in the Enclosure 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-025 [ADAMS Accession Number ML15058A377] and corresponds accurately and technically with the above-mentioned LAR-19-016. The technical scope of this PAR is consistent with the subject LAR. Section 7 of the Enclosure further identifies and details the scope of the "no objection" finding sought in this PAR.

This letter does not contain any NRC commitments. This letter has been reviewed and confirmed to not contain security-related information.

Should you have any questions, please contact Ms. Stephanie Agee at (205) 992-7556.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 23rd of August 2019.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "B.H. Whitley", is written over a horizontal line.

Brian H. Whitley  
Director, Regulatory Affairs  
Southern Nuclear Operating Company

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4 – Preliminary Amendment Request:  
Reinforcement Changes for Wall L and Wall 7.3 (PAR-19-016)

cc:

Southern Nuclear Operating Company / Georgia Power Company

Mr. S. E. Kuczynski (w/o enclosures)

Mr. P. P. Sena III (w/o enclosures)

Mr. M. D. Meier (w/o enclosures)

Mr. D. H. Jones (w/o enclosures)

Mr. G. Chick

Mr. D. L. McKinney (w/o enclosures)

Mr. T. W. Yelverton (w/o enclosures)

Mr. B. H. Whitley

Ms. C. A. Gayheart

Mr. C. R. Pierce

Ms. M. Ronnlund

Mr. D. L. Fulton

Mr. M. J. Yox

Mr. C. T. Defnall

Mr. J. Tupik

Ms. S. Agee

Ms. A. C. Chamberlain

Mr. S. Leighty

Mr. E. Riffle

Ms. K. Roberts

Mr. J. Haswell

Mr. D. T. Blythe

Document Services RTYPE: VND.LI.L00

File AR.01.02.06

Nuclear Regulatory Commission

Mr. W. Jones (w/o enclosures)

Ms. J. Dixon-Herrity

Mr. C. Patel

Mr. B. Kemker

Mr. G. Khouri

Ms. S. Temple

Mr. F. Brown

Mr. C. J. Even

Mr. A. Lerch

Mr. S. Walker

Mr. N.D. Karlovich

Ms. N. C. Coover

Mr. C. Welch

Mr. J. Gaslevic

Mr. V. Hall

Ms. K. P. Carrington

Mr. P.J. Heher

Mr. M. Webb

State of Georgia

Mr. R. Dunn

Oglethorpe Power Corporation

Mr. M. W. Price  
Ms. A. Whaley

Municipal Electric Authority of Georgia

Mr. J. E. Fuller  
Mr. S. M. Jackson

Dalton Utilities

Mr. T. Bundros

Westinghouse Electric Company, LLC

Mr. L. Oriani (w/o enclosures)  
Mr. T. Rubenstein (w/o enclosures)  
Mr. M. Corletti  
Mr. M. L. Clyde  
Mr. D. Hawkins  
Mr. J. Coward

Other

Mr. S. W. Kline, Bechtel Power Corporation  
Ms. L. A. Matis, Tetra Tech NUS, Inc.  
Dr. W. R. Jacobs, Jr., Ph.D., GDS Associates, Inc.  
Mr. S. Roetger, Georgia Public Service Commission  
Ms. S. W. Kernizan, Georgia Public Service Commission  
Mr. K. C. Greene, Troutman Sanders  
Mr. S. Blanton, Balch Bingham  
NDDocumentinBox@duke-energy.com, Duke Energy  
Mr. S. Franzone, Florida Power & Light

**Southern Nuclear Operating Company**

**ND-19-1032**

**Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 4**

**Preliminary Amendment Request:**

**Reinforcement Changes for Wall L and Wall 7.3  
(PAR-19-016)**

**(This Enclosure consists of 4 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 license amendment request (LAR)-19-016 to change the Vogtle Electric Generating Plant (VEGP) Unit 4 licensing basis documents associated with Combined License No. NPF-92.

Accordingly, SNC requests the determination of whether the NRC has any objection to SNC proceeding with construction of VEGP Unit 4 Wall L and Wall 7.3, which are subject to the changes proposed in LAR-19-016. Delayed determination regarding this Preliminary Amendment Request (PAR) will result in delay in the construction completion of VEGP Unit 4, as identified in the PAR provided below, to be provided by the date shown below.

PAR Request Number: <b>SNC PAR-19-016</b>	Station Name: <b>VEGP</b>	Unit Number(s): <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4	PAR Request Date: <b>August 23, 2019</b>
<b>1. NRC PAR Notification Requested Date (see Block 7 for basis): September 18, 2019</b>			
<b>2. License Amendment Request References (as applicable):</b> <input checked="" type="checkbox"/> <b>LAR submittal date and SNC Correspondence Number:</b> LAR-19-016 – August 22, 2019 / ND-19-1031  <input type="checkbox"/> <b>Expected LAR submittal date:</b> _____			
<b>3. Brief Description of Proposed Change:</b>  The proposed change would revise licensing basis information in the Updated Final Safety Analysis Report (UFSAR) Tier 2* information (plant-specific DCD), to change the provided area of horizontal reinforcement for Vogtle Electric Generating Plant (VEGP) Unit 4 Wall L and Wall 7.3 from elevation (EL) 117'-6" to 135'-3".  The proposed change impacts UFSAR Tier 2* information in Tables 3H.5-5 and 3H.5-7, and Figures 3H.5-4 and 3H.5-12.			
<b>4. Reason for License Amendment Request:</b>  <u>Wall L Changes</u>  In accordance with UFSAR Figure 3H.5-12, the design of the Auxiliary Building Wall L from EL. 117'-6" to 135'-3" requires horizontal reinforcement bar (rebar) consisting of #11@6" EF + #10@12" Each Face (EF) in two layers. At VEGP Unit 4, the Shield Building wall has 35 #11 hook bar dowel outs EF from EL. 117'-6" to 135'-3". The vertical construction joint at the face of Wall 11 represents the north boundary for Wall L. At VEGP Unit 4, Wall 11 has 36 #11 hook bar (or U-bar) dowel outs EF from EL. 117'-6" to 135'-3". This means that for one #11 bar EF there is not a Shield Building wall dowel (35 dowel out EF) to splice to that matches the configuration of Wall 11 (36 dowel out EF). One horizontal reinforcement bar #11 (EF) located directly above EL. 117'-6" is omitted from the VEGP Unit 4 Wall L (EL. 117'-6" to EL. 135'-3").  This results in the as-built provided amount of horizontal reinforcement area being less than the existing UFSAR Table 3H.5-7 Wall Section 2 (Elevation 135'-3" to 117'-6") provided minimum value of 4.39 in <sup>2</sup> /ft; the actual provided value is 4.36 in <sup>2</sup> /ft. As shown			

in UFSAR Table 3H.5-7, the horizontal demand in Wall L between Elevations 117'-6" to 135'-3" ( $1.36 \text{ in}^2/\text{ft}$ ) remains less than the revised capacity of this wall segment ( $4.36 \text{ in}^2/\text{ft}$ ).

This condition results in the provided horizontal reinforcement area and reinforcement configuration not in compliance with the Tier 2\* information contained in UFSAR Table 3H.5-7 and Figure 3H.5-12.

#### Wall 7.3 Changes

In accordance with UFSAR Figure 3H.5-4, the design of the Auxiliary Building Wall 7.3 from EL. 117'-6" to EL. 135'-3" require horizontal reinforcing bar (rebar) consisting of #10@12" EF + #10@12" EF in one layer (note that this is equivalent to #10@6" EF). At VEGP Unit 4, the Shield Building wall has 35 #10 hook bar dowel outs EF from EL. 117'-6" to EL. 135'-3". The vertical construction joint at the face of Wall I represents the east boundary for Wall 7.3. At VEGP Unit 4, Wall I has 36 #10 hook bar (or U-bar) dowel outs EF from EL. 117'-6" to EL. 135'-3". This means that for one #10 bar EF there is not a Shield Building wall dowel (35 dowel out EF) to splice to that matches the configuration of Wall I (36 dowel out EF).

One horizontal reinforcement bar #10 (EF) located directly below EL. 135'-3" is to be spliced to standard hook bar (EF) in Wall I and extend to 2'-0" from the Shield Building. The associated #10 (EF) dowel developed into the Shield Building is not installed.

This results in the as-built provided amount of horizontal reinforcement area being less than the existing UFSAR Table 3H.5-5 Wall Section 3 (Elevation 135'-3" to 117'-6") provided minimum value of  $2.54 \text{ in}^2/\text{ft}$ . The actual provided value is  $2.50 \text{ in}^2/\text{ft}$  for this segment of Wall 7.3. As shown in UFSAR Table 3H.5-5, the horizontal demand in Wall 7.3 between EL. 117'-6" to EL. 135'-3" ( $2.03 \text{ in}^2/\text{ft}$ ) remains less than the revised capacity ( $2.50 \text{ in}^2/\text{ft}$ ) of this wall segment.

This condition results in the provided reinforcement area and reinforcement configuration not in compliance with the Tier 2\* information contained in UFSAR Table 3H.5-5 and Figure 3H.5-4.

#### Summary

For both wall reinforcement changes, the structural design meets the acceptance criteria specified in UFSAR Section 3.8. Furthermore, the seismic floor response spectra meet the acceptance criteria specified in UFSAR Subsection 3.7.5.4. Considering the applicable loading scenarios and acceptance criteria required by the current licensing basis, as discussed above, the demands in Wall L and Wall 7.3 remain below their respective capacities. The proposed changes to the reinforcement are in accordance with and continue to satisfy the acceptance criteria of ACI 349-01.

The proposed change requires a change to Tier 2\* information in UFSAR. Therefore, the proposed change requires NRC approval in accordance with 10 CFR 52.98(c).

Additional details are provided in the referenced LAR (LAR-19-016).

**5. Is Exemption Request Required?** ☐ Yes ☒ No

<b>If Yes, Briefly Describe the Reason for the Exemption.</b> No exemption required for the PAR.
<b>6. Identify Applicable Precedents:</b> No precedent identified.
<b>7. Impact of Change on Installation and Testing Schedules:</b> <p>A delayed determination regarding this PAR will result in delay of rebar installation and concrete placement for VEGP Unit 4 Wall L and Wall 7.3, as described below.</p> <p>As such, this PAR requests a “no objection” finding related to the changes described in LAR-19-016 by the date identified in Block 1 above (or sooner if reasonably achievable) to allow for appropriate notifications and release of further activities dependent on construction of the VEGP Unit 4 Wall L and Wall 7.3, as noted below.</p> <p>Specifically, SNC is requesting a “no objection” finding to allow:</p> <ul style="list-style-type: none"><li>• Rebar installation and concrete placement for VEGP Unit 4 Wall 7.3 above elevation 117'-6"</li><li>• Rebar installation and concrete placement for VEGP Unit 4 Wall L above elevation 117'-6"</li></ul> <p>Construction holds have been issued for these activities.</p> <p>A “no objection” finding for the above activities would allow for VEGP Unit 4 construction activities to proceed.</p>
<b>8. Impact of Change on ITAAC:</b> <p>No ITAAC are affected by this change, but it will impact the closure of the ITAAC. Final approval of the License Amendment Request will be necessary for closure of the related 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. This PAR should be considered for any inspections related to ITAAC 3.3.00.02.a.i.d (Item No. 763) of the VEGP Unit 4 COL Appendix C Table 3.3-6.</p>
<b>9. Additional Information:</b> None