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JAN 21 2014

Docket No.: 52-025

ND-14-0141
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):
Coating Thermal Conductivity (PAR-13-039)

Ladies and Gentlemen:

The U.S. Nuclear Regulatory Commission (NRC) issued the Vogtle Electric Generating Plant (VEGP) Unit 3 combined license (COL) (License No. NPF-91) to Southern Nuclear Operating Company (SNC) on February 10, 2012. By letter dated November 21, 2013, SNC submitted a request for a license amendment (LAR-13-039, SNC correspondence ND-13-2287) to revise VEGP Units 3 and 4 Updated Final Safety Analysis Report (UFSAR) identified methodology to determine the effective thermal conductivity resulting from oxidation of the inorganic zinc (IOZ) used in the containment vessel coating system.

SNC is submitting a Preliminary Amendment Request, PAR-13-039, to avoid possible 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 the proposed plant licensing basis changes identified in the PAR/LAR is needed prior to March 6, 2014, according to the current schedule. Delayed determination regarding this PAR could result in a delay in the installation of the first ring of the lower containment vessel.

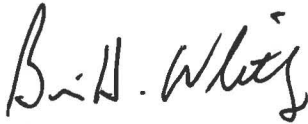
A description of the requested change and the reason for the change are contained in Enclosure 1 to this letter. This PAR has been developed consistent with guidance provided in the most recent revision to the Interim Staff Guidance on Changes during Construction Under 10 CFR Part 52, COL-ISG-25 [ML13045A125], and corresponds accurately and technically with the above-mentioned LAR-13-039. The technical scope of this PAR is consistent with the technical scope of the LAR as accepted by the NRC for technical review [ML13345A321]. Section 9 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 Mr. Brian Meadors at (205) 992-7331.

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



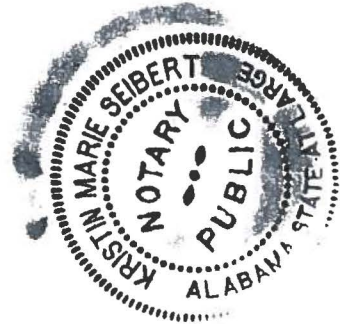
Brian H. Whitley

BHW/ERG/kms

Sworn to and subscribed before me this 21st day of January 2014

Notary Public: Kristine Marie Seibert

My commission expires: August 16, 2016



Enclosure 1: Vogtle Electric Generating Plant (VEGP) Unit 3 – Preliminary Amendment
Request Regarding Coating Thermal Conductivity (PAR-13-039)

cc:

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Mr. R. W. Prunty, Bechtel Power Corporation
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Mr. S. Roetger, Georgia Public Service Commission
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Southern Nuclear Operating Company

ND-14-0141

Enclosure 1

Vogtle Electric Generating Plant (VEGP) Unit 3

**Preliminary Amendment Request
Regarding
Coating Thermal Conductivity
(PAR-13-039)**

Pursuant to 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 the setting of the first ring of the lower containment vessel as identified in the Preliminary Amendment Request (PAR) provided below to be provided by the date shown below.

PAR Request Number: SNC PAR-13-039	Station Name: VEGP	Unit Number(s): <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4	PAR Request Date: January 21, 2014
1. NRC PAR Notification Requested Date (see Block 9 for basis): March 6, 2014			
2. License Amendment Request References (as applicable): <input checked="" type="checkbox"/> LAR submittal date and SNC Correspondence Number: November 21, 2013 / ND-13-2287 <input type="checkbox"/> Expected LAR submittal date: _____			
3. Brief Description of Proposed Change: <p>This proposed change would revise the licensing basis for the Combined Licenses to allow use of a new methodology (found in WCAP-15846 Addendum 1 as attached to LAR-13-039) for determining the effective thermal conductivity of the inorganic zinc (IOZ) coating system. This new methodology eliminates non-mechanistic modeling of IOZ thermal conductivity and accounts for a commercially available coating when determining the conservatism of the thermal conductivity value utilized in the WGOTHIC modeling. The new methodology results in a thermal conductivity value greater than the thermal conductivity value used in the design and licensing basis analysis. Since a higher thermal conductivity value is better for heat transfer, the values used in the design and licensing basis analysis continue to be conservative and bounding. Therefore, the thermal conductivity value used in the design and licensing basis analysis is not changed and there is no change to the calculated design basis peak pressure reported in the UFSAR. The coating utilized for this project meets the criteria identified in the WCAP addendum for its use.</p> <p>Note that the value of the WGOTHIC model input is not proposed to be changed, only the method for determining the conservatism of the model input when compared to the effective thermal conductivity of the available coatings.</p>			
4. Reason for License Amendment Request: <p>WCAP-15846, "WGOTHIC Application to AP600 and AP1000," describes specific modeling and defines methods used to develop conservative input for the WGOTHIC code to create a bounding containment peak pressure evaluation model (Updated Final Safety Analysis Report (UFSAR) Section 6.2, Reference 20). This containment evaluation model is used to calculate the design basis peak pressure reported in the UFSAR. WCAP-15846 provides the thermal conductivity value of the inorganic zinc (IOZ) coating to use for application to the AP1000 plant in support of containment response analyses. To conservatively account for the oxidation of the zinc constituent of the IOZ coating system, the methodology contained in WCAP-15846 stipulates that the overall thermal conductivity of the coating system is reduced by a factor of four to conservatively account for the effects of oxidation. This is a conservative but non-mechanistic assumption and when applied to available coatings would result in an unrealistic value for the input to the WGOTHIC model. Thus, a new method is proposed to show the conservatism of the existing WGOTHIC input (see UFSAR Table 6.2.1.1-8) as it relates to the effective thermal conductivity of the available coatings.</p>			

5. Is Exemption Request Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Briefly Describe the Reason for the Exemption. Not Applicable
6. Identify Applicable Precedents: None
7. Preliminary Assessment of Significant Hazards Consideration [10 CFR 50.92(c)]: Included with the referenced LAR
8. Preliminary Assessment of Categorical Exclusion from Environmental Review [10 CFR 51.22]: Included with the referenced LAR
9. Impact of Change on Installation and Testing Schedules: SNC's need date for approval of this license amendment as identified in the referenced LAR was January 13, 2014. This date was based upon the scheduled construction activity for setting of the first ring of the lower containment vessel. SNC has since re-evaluated the schedule for this activity and determined that the setting of the first ring is now scheduled for March 20, 2014. As such, this PAR requests a "no objections" finding related to this license amendment by March 6, 2014, which would allow for appropriate notifications and "hold" releases to allow construction to continue. With an allowed setting of the first ring of the lower containment vessel under the "no objections" finding, the need date for the license amendment, i.e., the point at which SNC would not risk further construction under the "no objections" finding, is currently identified as May of 2015.
10. Impact of Change on ITAAC: None
11. Additional Information: None