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Docket Nos.: 52-026

ND-17-0459  
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):  
Addition of Two Turbine Building Sump Pumps (PAR-15-019)

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.

SNC submitted a License Amendment Request (LAR)-15-019 on December 22, 2015, by SNC letter ND-15-1978 [ADAMS Accession Number ML15356A655]. By SNC letter ND-16-0876, dated July 27, 2016, SNC submitted a revised request, LAR-15-019R1 [ADAMS Accession Number ML16209A477], to address feedback from discussions with the Nuclear Regulatory Commission (NRC) Staff held on March 3, 2016. After further discussions with NRC staff, it was concluded that additional information was required in order for the NRC to complete the review of this LAR. By SNC letter ND-17-0878, dated May 19, 2017, SNC submitted a revised request, LAR-15-019R2 [ADAMS Accession Number ML17139D394] to include changes to COL Appendix C (and plant-specific Tier 1) and UFSAR Tier 2 information to clarify that there is more than one turbine building main sump and to add a second sump pump (WWS-MP-07A/B) for each of the two turbine building main sumps.

SNC is submitting this Preliminary Amendment Request (PAR), PAR-15-019, 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 installation of the VEGP Unit 4 turbine building sump pumps, WWS-MP-07A/B (which are subject to the changes proposed in LAR-15-019R2), is requested on or before July 3, 2017. Delayed determination regarding this PAR could result in the delay of the completion of construction, testing and turnover of the Waste Water System (WWS) for VEGP Unit 4.

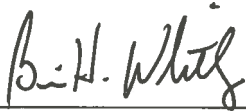
A description of the proposed change and the reason for the change are contained in the Enclosure to this letter. This PAR has been developed in accordance with guidance provided in the most recent revision to the Interim Staff Guidance on Changes during Construction Under

10 CFR Part 52, COL-ISG-25 [ADAMS Accession Number ML15058A377], and corresponds accurately and technically with the above-mentioned LAR-15-019R2. 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. Paige Ridgway at (205) 992-7516.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 23<sup>rd</sup> of May 2017.

Respectfully submitted,



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

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4 – Preliminary Amendment Request:  
Addition of Two Turbine Building Sump Pumps (PAR-15-019)

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**Southern Nuclear Operating Company**

**ND-17-0459**

**Enclosure**

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

**Preliminary Amendment Request:**

**Addition of Two Turbine Building Sump Pumps  
(PAR-15-019)**

**(This Enclosure consists of 4 pages, including this cover page.)**

ND-17-0459

Enclosure

PAR-15-019: Addition of Two Turbine Building Sump Pumps

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.

Installation of two VEGP Unit 4 turbine building sump pumps (WWS-MP-07A/B) are subject to the changes proposed in LAR-15-019R2 and are currently on hold. Delayed determination regarding this Preliminary Amendment Request (PAR) could result in the delay of the completion of construction, testing and turnover of the Waste Water System (WWS) for VEGP Unit 4. Accordingly, SNC requests the determination of whether the NRC has any objection to proceeding with installation of two VEGP Unit 4 turbine building sump pumps (WWS-MP-07A/B) subject to the changes proposed in LAR-15-019R2.

PAR Request Number: <b>SNC PAR-15-019</b>	Station Name: <b>VEGP</b>	Unit Number(s): <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4	PAR Request Date: <b>May 23, 2017</b>
<b>1. NRC PAR Notification Requested Date (see Block 7 for basis): July 3, 2017</b>			
<b>2. License Amendment Request References (as applicable):</b> <input checked="" type="checkbox"/> <b>LAR submittal date and SNC Correspondence Number:</b> LAR-15-019 – December 22, 2015 / ND-15-1978 LAR-15-019R1 – July 27, 2016 / ND-16-0876 LAR-15-019R2 – May 19, 2017 / ND-17-0878 <input type="checkbox"/> <b>Expected LAR submittal date:</b> _____			
<b>3. Brief Description of Proposed Change:</b> The proposed changes clarify that there is more than one turbine building main sump and adds a second sump pump (WWS-MP-07A/B) for each of the two turbine building main sumps. This change impacts COL Appendix C (and associated plant-specific Tier 1) Subsection 2.3.29 and Table 2.3.29-1 and Updated Final Safety Analysis Report (UFSAR) Subsection 9.2.9.2.2 and Figure 9.3.5-1.			
<b>4. Reason for License Amendment Request:</b> The proposed change adds a second sump pump (WWS-MP-07A/B) for each turbine building main sump. The condensate polishing system (CPS) rinse effluent path was modified to discharge to the waste water system (WWS) via the turbine building main sumps. Since the original turbine building sump design had insufficient volume and pumping capacity to account for the increased inflows resulting from addition of the CPS rinse effluent stream, it was necessary to add one air operated pump for each of the two turbine building main sumps (WWS-MP-07A/B) and increase the size of the turbine building main sumps. Each of the added pumps is identical in design and size as the original sump pumps (WWS-MP-01A/B) and is operated in the same manner.  With the addition of a second sump pump (WWS-MP-07A/B) for each main sump, the turbine building main sumps are able to accommodate the maximum CPS rinse effluent flow into the sumps. During CPS rinse operations, the lag pair of turbine building main sump pumps will be started to aid the lead pair of turbine building main sump pumps in draining the sump contents and avoiding sump overflow. Operational restrictions will also prevent initiation of CPS rinsing operations if the turbine building main			

sumps are filled to greater than 20 percent of capacity, and significant flows into the turbine building sumps from other sources will also be avoided during CPS rinse operations.

Discharge from the turbine building main sumps is automatically terminated in the event radioactive contamination in excess of the radiation monitor setpoint is detected in the turbine building main sump effluent discharge line. The radiation monitor design does not include provisions to secure CPS rinse inflow to the turbine building main sumps when effluent discharges from the sumps have been terminated due to the detection of radioactive contamination in excess of the monitor setpoint in the effluent discharge line. However, high level alarms are provided for the turbine building main sumps to notify the operator of abnormal conditions that could result in overfilling of the sumps during CPS rinse operations. There are no provisions to automatically terminate CPS rinse water inflows to the turbine building main sumps in order to prevent overflow.

The scope of the proposed changes associated with this activity involves the addition of the second sump pump for each of the two turbine building main sumps and change the description of the turbine building sump from being reflected as a singular entity and reflect that the turbine building sump is actually comprised of more than one sump (i.e.; change “sump” to “sumps”).

The proposed changes do not involve an increase in the number of turbine building sumps, modify the turbine building sump design or capacity, or impact the turbine building basemat design.

Additional details are provided in the referenced LAR (LAR-15-019R2).

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

**If Yes, Briefly Describe the Reason for the Exemption.**

An exemption is requested to depart from AP1000 plant-specific DCD Tier 1 material related to the addition of two non-safety related turbine building sump pumps (WWS-MP-07A/B) and clarify that there is more than one turbine building sump.

An exemption is requested because LAR-15-019R2 requests a departure from plant-specific DCD Tier 1 information in Subsection 2.3.29, Radioactive Waste Drain System, and Table 2.3.29-1, Inspections, Tests, Analyses and Acceptance Criteria (ITAAC). Specifically, a plant-specific departure would clarify that there is more than one turbine building main sump and add a second sump pump (WWS-MP-07A/B) for each of the two turbine building main sumps.

**6. Identify Applicable Precedents:** No precedent identified.

**7. Impact of Change on Installation and Testing Schedules:**

A delayed determination regarding this PAR will result in delay of the final installation of the VEGP Unit 4 turbine building sump pumps (WWS-MP-07A/B).

As such, this PAR requests a “no objection” finding related to this LAR 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 installing these pumps, which will allow WWS construction, testing and turnover for VEGP Unit 4 to continue.

This “no objection” finding would be specifically applicable to the installation of the VEGP Unit 4 turbine building sump pumps, WWS-MP-07A/B. Construction holds have been issued for the installation of these turbine building sump pumps.

A “no objection” finding for the above activity would allow for VEGP Unit 4 construction activities to proceed.

**8. Impact of Change on ITAAC:**

The proposed changes in LAR 15-019R2 would revise COL Appendix C to add two additional turbine building sump pumps to Table 2.3.29-1, Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) 2.3.29.04, to accommodate the increased flow that will be experienced during CPS rinsing operations. Specifically, the proposed changes will add two turbine building sump pumps (WWS-MP-07A/B) as pumps that will be confirmed to stop operating on a simulated high radiation signal from the radiation discharge monitor. These pumps will operate in the same manner as the existing sump pumps (WWS-MP-01A/B). The proposed changes to the information presented in ITAAC 2.3.29.04 are at a level of detail that is consistent with the information currently provided therein. The proposed change neither adversely impacts the ability to meet the design functions of the components nor involves a significant decrease in the level of safety provided by the components.

**9. Additional Information:** None