



B. H. Whitley
Director
Regulatory Affairs

Southern Nuclear
Operating Company, Inc.
42 Inverness Center Parkway
Birmingham, AL 35242
Tel 205.992.7079
Fax 205.992.5296

May 10, 2017

Docket Nos.: 52-025
52-026

ND-17-0800
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 Units 3 and 4
Preliminary Amendment Request (PAR):
Central Chilled Water System (VWS) Optimization Changes (PAR-17-015)

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.

SNC submitted a License Amendment Request (LAR)-17-015 on April 27, 2017, by SNC letter ND-17-0704 [ADAMS Accession Number ML17118A049]. The LAR requests to amend the VEGP Units 3 and 4 Updated Final Safety Analysis Report (UFSAR) and corresponding plant-specific Tier 1 information to revise the minimum chilled water flow rates to the supply air handling units serving the Main Control Room (MCR) and the Class 1E electrical rooms, and the unit coolers serving the normal residual heat removal system (RNS) and chemical and volume control system (CVS) makeup pump rooms.

SNC is submitting this Preliminary Amendment Request (PAR), PAR-17-015, to minimize construction delays for VEGP Units 3 and 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 Units 3 and 4 CVS makeup pump room unit coolers, VAS-MS-05A/B, and the low capacity chiller pump, VWS-MP-03 (which are subject to the changes proposed in LAR-17-015), is requested on or before June 13, 2017. Delayed determination regarding this PAR could result in the delay of the completion of construction, testing and turnover of the radiologically controlled area ventilation system (VAS), nuclear island nonradioactive ventilation system (VBS) and central chilled water system (VWS) for VEGP Units 3 and 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-17-015. 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.

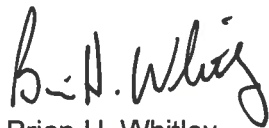
This letter does not contain any NRC commitments. This letter has been reviewed and confirmed to not contain security-related information.

Should you have any questions, please contact Ms. Paige Ridgway at (205) 992-7516.

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/JRK/ljs

Sworn to and subscribed before me this 10th day of May 2017

Notary Public: Lisa Myrick Spears

My commission expires: June 18, 2019

Enclosure: Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – Preliminary Amendment
Request: Central Chilled Water System (VWS) Optimization Changes (PAR-17-015)

cc:

Southern Nuclear Operating Company / Georgia Power Company

Mr. S. E. Kuczynski (w/o enclosure)
Mr. M. D. Rauckhorst
Mr. D. G. Bost (w/o enclosure)
Mr. M. D. Meier (w/o enclosure)
Mr. D. H. Jones (w/o enclosure)
Ms. K. D. Fili (w/o enclosure)
Mr. D. L. McKinney (w/o enclosure)
Mr. T.W. Yelverton (w/o enclosure)
Mr. B. H. Whitley
Mr. J.J. Hutto
Mr. C. R. Pierce
Ms. A. G. Aughtman
Mr. D. L. Fulton
Mr. M. J. Yox
Mr. E. W. Rasmussen
Mr. T. R. Takats
Mr. W. A. Sparkman
Mr. J. P. Redd
Ms. A. C. Chamberlain
Mr. M. K. Washington
Document Services RTYPE: VND.LI.L00
File AR.01.02.06

Nuclear Regulatory Commission

Mr. W. Jones (w/o enclosure)
Ms. J. Dixon-Herrity
Mr. C. Patel
Mr. W. C. Gleaves
Ms. R. Reyes
Ms. J. M. Heisserer
Mr. B. Davis
Mr. P. Kallan
Mr. G. Khouri
Mr. J. D. Fuller
Ms. S. Temple
Ms. V. Ordaz
Mr. T.E. Chandler
Ms. P. Braxton
Mr. T. Brimfield
Mr. C. J. Even
Mr. A. Lerch

State of Georgia

Mr. R. Dunn

Oglethorpe Power Corporation

Mr. M. W. Price
Mr. K. T. Haynes
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. R. Easterling (w/o enclosure)
Mr. G. Koucheravy (w/o enclosure)
Mr. C. D. Churchman (w/o enclosure)
Mr. P. A. Russ
Mr. A. F. Dohse
Mr. M. L. Clyde
Mr. C. A. Castell
Ms. K. Chesko
Mr. J. Hopkins
Mr. D. Hawkins

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
Mr. R. Grumbir, APOG
Mr. N. R. Kellenberger, South Carolina Electric & Gas Company
Mr. D. Kersey, South Carolina Electric & Gas Company
NDDocumentinBox@duke-energy.com, Duke Energy
Mr. S. Franzone, Florida Power & Light

Southern Nuclear Operating Company

ND-17-0800

Enclosure

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

Preliminary Amendment Request:

**Central Chilled Water System (VWS) Optimization Changes
(PAR-17-015)**

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

ND-17-0800

Enclosure

PAR-17-015: Central Chilled Water System (VWS) Optimization Changes

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 VEGP Units 3 and 4 chemical and volume control system (CVS) makeup pump room unit coolers (VAS-MS-05A/B) and the central chilled water system (VWS) low capacity chiller pump (VWS-MP-03) is subject to the changes proposed in LAR-17-015. Delayed determination regarding this Preliminary Amendment Request (PAR) could result in the delay of the completion of construction, testing and turnover of the radiologically controlled area ventilation system (VAS), nuclear island nonradioactive ventilation system (VBS) and VWS for VEGP Units 3 and 4. Accordingly, SNC requests the determination of whether the NRC has any objection to proceeding with installation of VEGP Units 3 and 4 CVS makeup pump room unit coolers (VAS-MS-05A/B) and the VWS low capacity chiller pump (VWS-MP-03) subject to the changes proposed in LAR-17-015.

PAR Request Number: SNC PAR-17-015	Station Name: VEGP	Unit Number(s): <input checked="" type="checkbox"/> 3 <input checked="" type="checkbox"/> 4	PAR Request Date: May 10, 2017
1. NRC PAR Notification Requested Date (see Block 7 for basis): June 13, 2017			
2. License Amendment Request References (as applicable): <input checked="" type="checkbox"/> LAR submittal date and SNC Correspondence Number: LAR-17-015 – April 27, 2017 / ND-17-0704 <input type="checkbox"/> Expected LAR submittal date: _____			
3. Brief Description of Proposed Change: The capacity of the air-cooled chillers and the flow rates for the central chilled water system (VWS) cooling coils are reduced due to reduced heat loads in the radiologically controlled area ventilation system (VAS) and nuclear island nonradioactive ventilation system (VBS). As a result of the reduced heat loads, equipment parameters are also changed for the VAS Normal Residual Heat Removal System (RNS) Pump Room Unit Coolers, VAS Chemical and Volume Control System (CVS) Makeup Pump Room Unit Coolers, VBS Main Control Room (MCR) / Control Support Area (CSA) Supply Air Handling Units, VBS Division "A & C" Supply Air Handling Units, and the VBS Division "B & D" Supply Air Handling Units. These changes impact COL Appendix C (and associated plant-specific Tier 1) Table 2.7.2-2 and Updated Final Safety Analysis Report (UFSAR) Tables 9.2.7-1, 9.4.1-1, 9.4.1-2 and 9.4.3-1.			
4. Reason for License Amendment Request: Due to changes in the equipment, layout, and system design, heat loads have been reduced in the areas serviced by the VBS air handling units (AHUs) and VAS unit coolers, including the MCR/CSA, Class 1E electrical rooms, RNS pump rooms, and CVS makeup pump room. The reduction in heat loads allows lower cooling coil flow rates to be provided to the VBS AHUs and VAS unit coolers for maintaining the temperatures in the serviced areas. The VWS is optimized so that overcooling does not occur in the serviced areas, which could result in undesirable room conditions such as condensation. Reduced heat loads in the MCR/CSA, Class 1E electrical rooms, RNS pump rooms, and CVS makeup pump room result in changes to the parameters of the supply fans, return air/smoke purge			

fans and cooling coils located in these rooms. The capacity of the cooling coils located in these rooms is reduced due to the need for less chilled water to meet the operational needs of the AHUs to maintain the rooms within their design temperature ranges. The changes to the AHUs do not adversely impact the function of the AHUs to maintain the environment of the rooms at the required temperatures, as the equipment is adequately sized to handle the heat loads in the area.

The change to the chilled water flow rates to the cooling coils for the VBS AHUs and VAS unit coolers and the VWS low-capacity air cooled chiller continues to demonstrate the ability to provide a reliable supply of chilled water to accommodate the reduced heat loads for the MCR/CSA, Class 1E electrical rooms, and RNS pump rooms and CVS makeup pump room. The proposed change does not introduce any adverse impact to the design function of the VWS, the systems to which the VWS supplies chilled water, including the VAS and VBS, or the cooling coils or any other components therein. The reduced flow rates do not adversely impact the ability of the VBS AHUs or VAS unit coolers, or the cooling coils contained therein, from performing their cooling function. The revised flow rates will continue to provide assurance that the VWS can provide chilled water at the flow rates necessary to remove the design basis heat loads in these areas.

Additional details are provided in the referenced LAR (LAR-17-015).

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

If Yes, Briefly Describe the Reason for the Exemption.

An exemption is requested to depart from AP1000 generic Tier 1 material related to changes to the minimum chilled water flow rates to the chilled water cooling coils for the VBS air handling units (AHUs) and VAS unit coolers serving the MCR/CSA, Class 1E electrical rooms, RNS pump rooms, and CVS makeup pump room.

An exemption is requested because LAR-17-015 requests a departure from generic DCD Tier 1 information incorporated by reference into plant-specific Tier 1 Table 2.7.2-2. Specifically, a plant-specific departure would change the minimum flow rate to cooling coils VBS MY C01A/B, VBS MY C02A/C, VBS MY C02B/D, VAS MY C07A/B, VAS MY C12A/B, and VAS MY C06A/B.

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 in the final installation of the VEGP Units 3 and 4 CVS makeup pump room unit coolers (VAS-MS-05A/B) and the VWS Low Capacity Chiller Pump (VWS-MP-03).

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 components, which will allow VAS, VBS and VWS construction, testing and turnover for VEGP Units 3 and 4 to continue.

This “no objection” finding would be specifically applicable installation of the VEGP Units 3 and 4 CVS makeup pump room unit coolers (VAS-MS-05A/B) and the VWS Low Capacity Chiller Pump (VWS-MP-03). Construction holds have been issued for the installation of these makeup pump room unit coolers and low capacity chiller pumps.

A “no objection” finding for the above activity would allow for VEGP Units 3 and 4 construction activities to proceed.

8. Impact of Change on ITAAC:

The proposed changes in LAR 17-015 would reduce the heat loads in the areas serviced by the VBS AHUs and VAS unit coolers including the MCR/CSA, Class 1E electrical rooms, RNS pump rooms, and CVS makeup pump room due to changes in the equipment located in these areas. The reduction in heat loads allows lower cooling coil flow rates to be utilized for the VBS AHUs and VAS unit coolers for maintaining the temperatures in the serviced areas. The VWS is optimized and the flow rates are effectively reduced to prevent overcooling in the serviced areas to preclude undesirable room conditions such as condensation. Therefore, COL Appendix C Table 2.7.2-2, Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) No. 2.7.02.03a is revised to identify the lower cooling coil flow rates.

9. Additional Information: None