

December 18, 2017

Docket Nos.: 52-025
52-026

ND-17-2040
10 CFR 50.90
10 CFR 52.63

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Units 3 and 4
Supplement to Request for License Amendment and Exemption Regarding
Technical Specifications for Reactor Coolant System Vacuum Fill and
Inspections, Tests, Analyses, and Acceptance Criteria for Containment Floodup
(LAR-17-027S2)

Ladies and Gentlemen:

Pursuant to 10 CFR 52.98(c) and in accordance with 10 CFR 50.90, Southern Nuclear Operating Company (SNC) previously requested an amendment to the combined licenses (COLs) for Vogtle Electric Generating Plant (VEGP) Units 3 and 4 (License Nos. NPF-91 and NPF-92, respectively). The requested amendment proposes changes to COL Appendix A, Technical Specifications (TS), COL Appendix C (and plant-specific Design Control Document (DCD) Tier 1) information, and plant-specific DCD Tier 2 information.

SNC originally submitted this request by SNC letter ND-17-1558, dated September 25, 2017 [ADAMS Accession Number ML17268A188]. Supplement 1 to LAR-17-027 was submitted by SNC letter ND-17-1931, dated November 16, 2017 [ADAMS Accession Number ML17320A808] to update certain instrumentation function names.

It has recently been determined that additional changes to TS Surveillance Requirements are also required to conform to the changes previously proposed for LAR-17-027. This supplement updates LAR-17-027 to reflect the necessary changes as shown in Enclosures 7, 8, and 9.

Enclosure 7 provides the applicable revised detailed description and technical evaluation for the proposed changes. Enclosure 8 provides the applicable revised markup depicting the additional requested changes to the licensing basis documents requiring NRC staff approval. Enclosure 9 provides the additional conforming changes to the Technical Specifications Bases for information only.

Note that the original exemption request is not impacted by these changes.

The supplemental information provided in Enclosures 7, 8, and 9 do not change the scope of the original submittal, or alter the conclusions of the Significant Hazards Consideration Determination or Environmental Considerations submitted in LAR-17-027.

This letter, including enclosures, has been reviewed and confirmed to not contain security-related information. This letter contains no regulatory commitments.

SNC requests approval of the license amendment, and granting of the associated exemption, no later than March 30, 2018 (as originally requested). Approval by this date will allow sufficient time to implement licensing basis changes necessary to support procedure development in relation to conducting the necessary operator training to support plant operations. SNC expects to implement the proposed amendment within 30 days of approval of the requested changes.

In accordance with 10 CFR 50.91, SNC is notifying the State of Georgia of this license amendment request supplement by transmitting a copy of this letter and its enclosures to the designated State Official.

Should you have any questions, please contact Mr. Wesley A. Sparkman at (205) 992-5061.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 18th of December 2017.

Respectfully submitted,

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

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

- Enclosures: 1) - 4) (previously submitted with the original LAR, LAR-17-027, in SNC letter ND-17-1558)
- 5) - 6) (previously submitted with Supplement 1 to LAR-17-027, in SNC letter ND-17-1931)
- 7) Vogtle Electric Generating Plant (VEGP) Units 3 and 4 - Supplement to Request for License Amendment Regarding Technical Specifications for Reactor Coolant System Vacuum Fill and Inspections, Tests, Analyses, and Acceptance Criteria for Containment Floodup (LAR-17-027S2)
- 8) Vogtle Electric Generating Plant (VEGP) Units 3 and 4 - Supplement to Proposed Changes to the Licensing Basis Documents (LAR-17-027S2)
- 9) Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – Supplement to Conforming Changes to the Technical Specifications Bases (For Information Only) (LAR-17-027S2)

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Southern Nuclear Operating Company

ND-17-2040

Enclosure 7

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

**Supplement to Request for License Amendment Regarding
Technical Specifications for Reactor Coolant System Vacuum Fill and
Inspections, Tests, Analyses, and Acceptance Criteria for Containment Floodup
(LAR-17-027S2)**

(This Enclosure consists of 3 pages, including this cover page.)

Portions of the Supplement 1 changes are reflected in the following excerpts from the submittal for LAR-17-027, ND-17-1558, Enclosure 1, as **bold-underlined** text.

The Supplement 2 changes that are added to the previous submittals are shown as blue-underlined text.

Omitted text from previous submittals is indicated by *...*.

...

2. DETAILED DESCRIPTION and TECHNICAL EVALUATION

...

4. Changes to ESFAS Technical Specification

Design Function

...

Technical Evaluation

The following revisions are proposed in COL Appendix A, TS, regarding ESFAS to improve consistency within the TS.

a. *...*

b. *...*

c. *...*

... Together, these features preclude operating with the pressurizer level below P-12 in MODE 4 (i.e., prior to achieving MODE 5). Therefore, the TS 3.3.10 Functions 1 and 2 MODE 4 Applicability (including Footnote "a") is deleted since the Functions cannot be enabled in MODE 4. Furthermore, MODE 5 is proposed to be modified with a new Footnote "a" that states: "With CMT actuation on Pressurizer Water Level - Low 2 blocked," which is consistent with the design of the PMS logic.

...

- Table 3.3.10-1, Function 1 *...*

- Table 3.3.10-1, Function 2 (Hot Leg Level – **Low 2**) is revised to remove MODE 4 applicability.
 - * * * *
 - * * * *
 - TS 3.3.10, Required Action E.2.2 (renumbered as "D.2") * * * *
 - Table 3.3.10-1, Function 2 (Hot Leg Level – **Low 2**) MODE 6 applicability is revised to remove Note (c) which states "Below the P-12 (Pressurizer Level) interlock" since Note (d) also requires "With the water level < 23 feet above the top of the reactor vessel flange." A water level 23 feet above the top of the reactor vessel flange is approximately 11 inches above the P-12 (Pressurizer Level) interlock. Therefore, Note (d) is the more conservative applicability (i.e., a higher level) and Note (c) can be removed with no functional change to the required Applicability.
 - TS 3.3.15 and TS 3.3.16 Surveillances that require "Verify CVS letdown isolation valves actuate to the isolation position on an actual or simulated actuation signal," with Note(s) modifying when they are required to be met, are revised. These Surveillances provide the actuated device test for the CVS letdown valves that are actuated by the Table 3.3.10-1, Function 2, actuation signals. As such, the applicability of the actuated device Surveillances should match the applicability of the actuation signals that control them. Consistent with the changes to Table 3.3.10-1 Function 2 Applicabilities (where MODE 4 is being deleted), the TS 3.3.15 Surveillance for CVS letdown isolation valves is deleted since LCO 3.3.15 is only Applicable in MODES 1, 2, 3, and 4, and the actuation signal is not applicable in any of MODES 1, 2, 3, and 4. As such, subsequent Surveillances in TS 3.3.15 are also renumbered.
- Additionally, consistent with the changes to Table 3.3.10-1 Function 2 Applicabilities, a change to the TS 3.3.16 Surveillance Note 2 for CVS letdown isolation valves is proposed to delete "above the P-12 (Pressurizer Level) interlock and" and add in its place "with" in order to retain the requirement that this surveillance be met in MODE 6 with water level \geq 23 feet above the top of the reactor vessel flange.

The changes to the ESFAS Technical Specifications are made for consistency and clarification and do not affect the operation of the plant.

* * *

Southern Nuclear Operating Company

ND-17-2040

Enclosure 8

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

**Supplement to Proposed Changes to the Licensing Basis Documents
(LAR-17-027S2)**

Additions identified by blue underlined text.

~~Deletions identified by red strikethrough of text.~~

* * * indicates omitted text that is not shown.

(This Enclosure consists of 2 pages, including this cover page.)

* * *

COL Appendix A, Technical Specifications, Specification 3.3.15

* * *

SURVEILLANCE		FREQUENCY
SR 3.3.15.4	<p>-----</p> <p style="text-align: center;">-NOTE-</p> <p style="text-align: center;">Only required to be met in MODE 4 with the RCS being cooled by the RNS or below the P-12 (Pressurizer Level) interlock.</p> <p>-----</p> <p>Verify CVS letdown isolation valves actuate to the isolation position on an actual or simulated actuation signal.</p>	24 months
SR 3.3.15.54	* * *	* * *
SR 3.3.15.65	* * *	* * *

* * *

COL Appendix A, Technical Specifications, Specification 3.3.16

* * *

SURVEILLANCE		FREQUENCY
SR 3.3.16.3	<p>-----</p> <p style="text-align: center;">- NOTES -</p> <ol style="list-style-type: none"> Not required to be met in MODE 5 above the P-12 (Pressurizer Level) interlock. Not required to be met in MODE 6 above the P-12 (Pressurizer Level) interlock and with water level \geq 23 feet above the top of the reactor vessel flange. <p>-----</p> <p>Verify CVS letdown isolation valves actuate to the isolation position on an actual or simulated actuation signal.</p>	24 months

Southern Nuclear Operating Company

ND-17-2040

Enclosure 9

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

**Supplement to Conforming Changes to the Technical Specifications Bases
(For Information Only)
(LAR-17-027S2)**

Additions identified by blue underlined text.

~~Deletions identified by red strikethrough of text.~~

* * * indicates omitted existing text that is not shown.

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Technical Specification Bases - B 3.3.15

* * *

SR 3.3.15.4

~~SR 3.3.15.4 demonstrates that the CVS letdown isolation valves actuate to the isolation position in response to an actual or simulated actuation signal. The ACTUATION LOGIC TEST overlaps this Surveillance to provide complete testing of the assumed safety function.~~

~~The Frequency of 24 months is based on the need to perform this surveillance during periods in which the plant is shutdown for refueling to prevent any upsets of plant operation.~~

~~This Surveillance Requirement is modified by a Note that states that the SR is only required to be met in MODE 4 with the RCS being cooled by the Normal Residual Heat Removal System (RNS) or below the P-12 (Pressurizer Level) interlock.~~

SR 3.3.15.54

SR 3.3.15.54 demonstrates that the main feedwater and startup

* * *

SR 3.3.15.65

SR 3.3.15.65 demonstrates that the auxiliary spray and purification line

* * *

Technical Specification Bases - B 3.3.16

* * *

SR 3.3.16.3

SR 3.3.16.3 demonstrates that the CVS letdown isolation valves actuate to the isolation position in response to an actual or simulated actuation signal. The ACTUATION LOGIC TEST overlaps this Surveillance to provide complete testing of the assumed safety function.

* * *

The SR is modified by a Note stating that the SR is not required to be met in MODE 5 above the P-12 (Pressurizer Level) interlock. A second Note states that the SR is not required to be met in MODE 6 ~~above the P-12 (Pressurizer Level) interlock~~ with water level \geq 23 feet above the top of the reactor vessel flange.