

June 21, 2018

Docket Nos.: 52-025  
52-026

ND-18-0871  
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  
Supplement to Request for License Amendment:  
Technical Specification Updates for Reactivity Controls  
and other Miscellaneous Changes (LAR-17-024S3)**

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 Numbers NPF-91 and NPF-92, respectively). The requested amendment proposes to depart from approved COL Appendix A, Technical Specifications.

SNC originally submitted this request by SNC letter ND-17-1279, dated July 28, 2017 [ADAMS Accession No. ML17209A755] and supplemented by SNC letter ND-18-0058, dated January 23, 2018 [ADAMS Accession No. ML18023A440] and by SNC letter ND-18-0364, dated March 23, 2018 [ADAMS Accession No. ML18082B370].

Enclosures 1 through 3 were provided with the original License Amendment Request (LAR), Enclosures 4 and 5 were provided with the first LAR supplement, and Enclosures 6, 7, and 8 were provided with the second LAR supplement.

Enclosure 9 provides a revised description of change and technical evaluation for Change L07 in the original LAR based upon discussions held with the NRC staff on May 31, 2018 and June 14, 2018.

Enclosure 10 provides the applicable revised markups depicting the requested change to the licensing basis documents requiring NRC staff approval.

Enclosure 11 provides the applicable revised conforming Technical Specifications Bases changes for information only.

The information provided in this LAR supplement does not expand the scope of the request, or alter the conclusions of the Significant Hazards Consideration Determination or Environmental Considerations submitted in LAR-17-024.

This letter contains no regulatory commitments. This letter has been reviewed and determined not to contain security-related information.

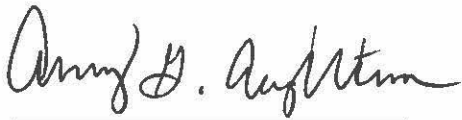
SNC now requests NRC staff approval of this license amendment by July 20, 2018 to support Operator training updates. Delayed approval of this license amendment could result in a delay in Operator training updates. SNC expects to implement the proposed amendment within thirty days of approval.

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

Should you have any questions, please contact Mr. Ryan Henderson at (205) 992-6426.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 21<sup>st</sup> of June 2018.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Amy G. Aughtman", is written over a horizontal line.

Amy G. Aughtman  
Director, Licensing  
Southern Nuclear Operating Company

- Enclosures: 1) – 3) (previously submitted with the original LAR, LAR-17-024, in SNC letter ND-17-1279)
- 4) – 5) (previously submitted as supplemental information with LAR-17-024S1 in SNC letter ND-18-0058)
- 6) – 8) (previously submitted as supplemental information with LAR-17-024S2 in SNC letter ND-18-0364)
- 9) Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – Supplement to Request for License Amendment: Technical Specification Updates for Reactivity Controls and other Miscellaneous Changes (LAR-17-024S3)
- 10) Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – Supplement to Proposed Changes to Licensing Basis Documents (LAR-17-024S3)
- 11) Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – Supplement to Conforming Technical Specifications Bases Changes (For Information Only) (LAR-17-024S3)

cc:

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**Southern Nuclear Operating Company**

**ND-18-0871**

**Enclosure 9**

**Vogtle Electric Generating Plant (VEGP) Units 3 and 4**

**Supplement to Request for License Amendment:  
Technical Specification Updates for Reactivity Controls  
and other Miscellaneous Changes (LAR-17-024S3)**

**Insertions Denoted by Blue Underline and Deletions by ~~Red~~ Strikethrough**

**Omitted text is identified by three asterisks (\* \* \*)**

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

ND-18-0871

Enclosure 9

Supplement to Request for License Amendment: Technical Specification Updates for Reactivity Controls and other Miscellaneous Changes (LAR-17-024S3)

Vogtle Electric Generating Plant (VEGP) Units 3 and 4 submitted License Amendment Request LAR-17-024 via Southern Nuclear Operating Company (SNC) letter ND-17-1279 on July 28, 2017. The portion of the LAR identified as change "L07" on Page 11 of 39 and Page 34 of 39 of Enclosure 1 proposed a change to Technical Specification (TS) Table 3.3.5-1. This change included:

1. Change the Table 3.3.5-1 Function 1, Manual Reactor Trip Required Channels from "2" to "2 switches."
2. Change the Table 3.3.5-1 Function 2, Safeguards Actuation Input from Engineered Safety Feature Actuation System – Manual Required Channels from "2" to "2 switches."
3. Change the Table 3.3.5-1 Function 4, Core Makeup Tank Actuation Input from Engineered Safety Feature Actuation System – Manual Required Channels from "2 switch sets" to "2 switches."

Based on discussion with the NRC staff in the public meetings on May 31, 2018 and June 14, 2018, SNC is withdrawing the proposed changes to Function 1 and Function 2 and is proposing to revise the change to Function 4 in order to improve the presentation of the requirement. There are no changes to the design or operation of the functions. The updated proposed change continues to reflect an editorial presentation preference only.

The revision to the original LAR reflects an improvement to the LAR and does not expand the scope of the request, or alter the conclusions of the Significant Hazards Consideration Determination or Environmental Considerations submitted in LAR-17-024.

#### **Changes to Original LAR-17-024:**

##### **Changes to Enclosure 1**

Revise Page 11 of 39 of Enclosure 1 to ND-17-1279 as indicated below:

#### **L07 Detailed Description**

##### **3.3.5-3**

##### **LR**

- ~~1. Change the Table 3.3.5-1 Function 1, Manual Reactor Trip Required Channels from "2" to "2 switches."~~
- ~~2. Change the Table 3.3.5-1, Function 2, Safeguards Actuation Input from Engineered Safety Feature Actuation System – Manual Required Channels from "2" to "2 switches."~~
3. Change the Table 3.3.5-1, Function 4, Core Makeup Tank Actuation Input from Engineered Safety Feature Actuation System – Manual Required Channels from to "2 switch sets" to "2 ~~switches~~."

#### **Technical Evaluation**

A manual actuation "switch set" refers to a pair of redundant switches on the Primary Dedicated Safety Panel (PDSP), and for some protective functions, one switch on the Secondary Dedicated Safety Panel (SDSP). The second set of redundant switches is located on the SDSP for the actuation of all

safety functions that cause the operation of components with onerous consequences. In order to initiate the protective function of switch sets that have both a PDSP switch and associated SDSP switch, they must be actuated simultaneously. For Reactor Trip and Engineered Safety Features Actuation System (ESFAS) functions with manual actuation switches located only on the PDSP, the term “switch set” does not apply.

Table 3.3.5-1, ~~Functions 1 and 2 states 2 channels, and~~ Function 4, states “2 switch sets” for the manual actuation reactor trip function under the Required Channels column. The Protection and Safety Monitoring System (PMS) design of the manual actuation reactor trip provides two redundant ~~switches controls~~ on the PDSP, with no corresponding ~~switches controls~~ on the SDSP. This is consistent with the description of the manual actuation of Function 4 in UFSAR (plant-specific DCD) Subsection 7.2.1.1.8 and Figure 7.2-1 Sheet 12. For this configuration, the term “switch set” does not reflect the design. Operation of either control will result in a CMT actuation signal and also will result in a reactor trip signal. For this configuration, the term “switches” for Functions 1, 2 and 4, manual reactor trip is applicable for this proposed change. There is no change in manual actuation reactor trip functions with ~~these~~ this changes, or any change in PMS function. The proposed changes to the Reactor Trip and ESFAS manual actuation is being made for consistency with the design.

Revise the description of change L07 on Page 34 of 39 to match the above discussion as follows:

\* \* \*

- L07** SNC proposes to amend TS, Section 3.3.5, "Reactor Trip System Manual Actuation," Table 3.3.5-1 "Reactor Trip System Manual Actuation," ~~Functions 1. Manual Reactor Trip, 2. Safeguards Actuation Input from Engineered Safety Feature Actuation System – Manual and~~ 4. Core Makeup Tank Actuation Input from Engineered Safety Feature Actuation System – Manual for Required Channels to 2 (delete “switch sets”) ~~switches~~.

\* \* \*



**Southern Nuclear Operating Company**

**ND-18-0871**

**Enclosure 10**

**Vogtle Electric Generating Plant (VEGP) Units 3 and 4**

**Supplement to Proposed Changes to Licensing Basis Documents  
(LAR-17-024S3)**

**Insertions Denoted by Blue Underline and Deletions by ~~Red~~ Strikethrough**

**Omitted text is identified by three asterisks (\* \* \*)**

**Withdrawal of added text Denoted by Blue Strikethrough with Yellow Highlight**

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

On Page 8 of 9 of Enclosure 2 of SNC letter ND-17-1279, replace change L07 with the following:

**Revised COL Appendix A (Technical Specifications), TS 3.3.5, RTS Manual Actuation, as follows (L07):**

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS
1. Manual Reactor Trip	* * *	2 switches
2. Safeguards Actuation Input from Engineered Safety Feature Actuation System – Manual	* * *	2 switches
3. ADS Stages 1, 2, and 3 Actuation Input from Engineered Safety Feature Actuation System – Manual	* * *	2 switch sets
4. Core Makeup Tank Actuation Input from Engineered Safety Feature Actuation System – Manual	* * *	2 switches <del>switch sets</del>

**Southern Nuclear Operating Company**

**ND-18-0871**

**Enclosure 11**

**Vogtle Electric Generating Plant (VEGP) Units 3 and 4**

**Supplement to Conforming Technical Specifications Bases Changes**

**(For Information Only)**

**(LAR-17-024S3)**

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**Omitted text is identified by three asterisks (\* \* \*)**

**Withdrawal of inserted text Denoted by ~~Blue~~ Strikethrough with Yellow Highlight**

**Withdrawal of change to existing text Denoted by ~~Black~~ with Yellow Highlight**

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

ND-18-0871

Enclosure 11

Supplement to Conforming Technical Specifications Bases Changes (For Information Only)  
(LAR-17-024S3)

On Page 10 and 11 of 12 of Enclosure 3 to SNC letter ND-17-1279, replace change L07 with the following:

**Revised Technical Specification Bases, Section B 3.3.5, RTS Manual Actuation, as follows (L07):**

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APPLICABLE

\* \* \*

SAFETY

ANALYSES, LCOs, and APPLICABILITY

1. Manual Reactor Trip

\* \* \*

The LCO requires two Manual Reactor Trip actuation **channelswitches** to be OPERABLE in MODES 1 and 2, and in MODES 3, 4, and 5 when the Plant Control System (PLS) is capable of rod withdrawal, or one or more rods are not fully inserted. Two independent actuation **channelswitches** are required to be OPERABLE so that no single random failure will disable the Manual Reactor Trip Function.

\* \* \*

2. Safeguards Actuation Input from Engineered Safety Feature Actuation System – Manual

\* \* \*

The LCO requires two manual **channelswitches** of Safeguards Actuation Input from ESFAS to be OPERABLE in MODES 1 and 2.

\* \* \*

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4. Core Makeup Tank (CMT) Actuation Input from Engineered Safety  
Feature Actuation System – Manual

\* \* \*

The LCO requires two manual actuation ~~switch~~  
~~sets~~ ~~switches~~ ~~channels~~ for the CMT Actuation Input from  
Engineered Safety Feature Actuation System to be OPERABLE.  
Two OPERABLE manual actuation ~~switch-sets~~ ~~switches~~ ~~channels~~  
are provided to ensure that random failure of a single logic  
channel will not prevent reactor trip.

\* \* \*