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SOUTHERN COMPANY

May 14, 2015

Docket Nos.: 52-025
52-026

ND-15-0876
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:
Piping Line Number Additions, Deletions and Functional
Capability Re-Designation (LAR-13-031S1)

Ladies and Gentlemen:

In accordance with the provisions of 10 CFR 50.90, Southern Nuclear Operating Company (SNC), the licensee for Vogtle Electric Generating Plant (VEGP) Units 3 and 4, requested an amendment to the combined licenses (COLs) for VEGP Units 3 and 4, COL Numbers NPF-91 and NPF-92, respectively, by letter ND-14-1300 dated October 16, 2014 [ADAMS Accession No. ML14290A139] (LAR-13-031). SNC requested the amendment to allow various changes to update line number information in Tier 1 and promote consistency with the Updated Final Safety Analysis Report (UFSAR) Tier 2 information.

The NRC staff provided a draft request for additional information to SNC on April 14, 2015, regarding LAR-13-031. SNC is providing a response to the question and supplemental information to LAR-13-031. SNC is revising the information contained in Enclosures 1, 2, and 3 of SNC LAR-13-031 to identify supporting information in the current licensing basis and to remove piping lines from the scope of this LAR. The revised information in Enclosure 4 supplements the information provided in Enclosures 1, 2, and 3 of SNC LAR-13-031.

The information provided in Enclosure 4 does not change the conclusion in the Technical Evaluation in Enclosure 1, Section 2, nor does it change the conclusions in the Significant Hazards Consideration Determination in Enclosure 1, Section 4.3 of the original amendment request. However this supplement does reduce the scope of the original LAR-13-031 as described above. This letter contains no regulatory commitments.

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 enclosure to the designated State Official.

Should you have any questions, please contact Mr. Jason Redd at (205) 992-6435.

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/WES/ljs

Sworn to and subscribed before me this 14th *day of* May, *2015*

Notary Public: Kristin Marie Seibert

My commission expires: August 16, 2016

Enclosures 1, 2 and 3: (previously submitted with the original LAR, LAR-13-031, in SNC Letter ND-14-1300)

Enclosure 4: Supplemental Information Regarding Request for License Amendment and Exemption, LAR-13-031 (LAR-13-031S1)

cc:

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Southern Nuclear Operating Company

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

ND-15-0876

Enclosure 4

Supplemental Information Regarding Request for License Amendment and Exemption, LAR-13-031 (LAR-13-031S1)

Enclosures 1, 2 and 3 provided previously with the original LAR-13-031

(This enclosure contains five pages including this cover page)

With this supplement, Southern Nuclear Operating Company (SNC) is providing a response to a draft request for additional information (RAI) dated April 14, 2015, regarding SNC letter ND-14-1300, Request for License Amendment and Exemption: Piping Line Number Additions, Deletions and Functional Capability Re-Designation (LAR-13-031). This response identifies the location of information in the Updated Final Safety Analysis Report (UFSAR) that supports the amendment request. This supplement also removes piping lines from the scope of LAR-13-031 that will be addressed in a future SNC License Amendment Request (LAR). Those piping lines were included in the NRC draft RAI.

NRC Draft RAI:

In the License Amendment Request (LAR) the licensee is proposing that piping lines PXS-L133A and PXS-L134A be added to Line Name "IRWST injection Line A to DVI line A," and that these piping lines were qualified to Leak-Before-Break. This change is identified in Table 2.2.3-2.

In the LAR the licensee is proposing that piping lines PXS-L133B and PXS-L134B be added to Line Name "IRWST injection line B to DVI line B," and that these piping lines were qualified to Leak-Before-Break. This change is identified in Table 2.2.3-2

In the LAR the licensee is proposing that piping lines PXS-L019A and PXS-L019B be added to Line Name "RNS Discharge Lines from the RCS Pressure Boundary Isolation Valves RNS-PL-V015A and RNS-PL-V015B to Reactor Vessel Direct Vessel Injection (DVI) Nozzles," and that these lines were qualified to Leak-Before-Break. This change is identified in Table 2.3.6-2.

Please confirm which piping system (i.e., Surge Line, Main Steam Line, etc) that was qualified for Leak-Before-Break using the Bounding Analysis Curve methodology for the AP1000 Design Certification Document is applicable for the piping lines that are being proposed to be added to the Line Names specified in LAR13-031.

SNC Response:

SNC confirms that piping lines PXS-L019A and PXS-L019B were qualified for Leak-Before-Break in the Bounding Analysis Curve for the Normal Residual Heat Removal System (RNS). These piping lines are shown in UFSAR Appendix 3B, Leak-Before-Break Evaluation of the AP1000 Piping, Figure 3B-18 Bounding Analysis Curve for RNS Discharge (AP1000 Bounding Analysis Curve for RNS Discharge Line Number(s): L019A, B)

SNC has also identified the need to remove from the scope of LAR 13-031 the following piping lines: PXS-L133A, PXS-L133B, PXS-L134A and PXS-L134B. These four piping lines will be included in a future SNC LAR that will include other supporting changes in UFSAR Appendix 3B. The changes to ND-13-1300, Enclosures 1, 2 and 3 to reflect the removal of these lines, are provided below.

ENCLOSURE 1 (Request for License Amendment) Changes

Section 2, Detailed Description and Technical Evaluation, (Pages 7&8 of 18)

The proposed addition of PXS-L133A/B, and PXS-L134A/B piping lines to Table 2.2.3-2 is deleted.

Section 2.4 is revised to read:

2.4 Table 2.2.3-2

The PXS uses two different sets of screens following a LOCA, the IRWST screens and containment recirculation screens. These screens prevent debris from entering the reactor and blocking core cooling passages during a LOCA. The screens are Equipment Class C and are designed to meet seismic Category I requirements. The structural frames, attachment to the building structure, and attachment of the screen modules use the criteria of the ASME Code, Section III, Subsection NF. Piping lines from the IRWST screen and containment recirculation screens are essential for the PXS operation (UFSAR subsection 6.3.2.2.7). The PXS screens are shown on plant-specific Tier 1 and COL Appendix C Figure 2.2.3-1, (sheet 2 of 2). Tier 2 UFSAR Figure 6.3-2, sheet 2 of 2, the simplified P&ID for the PXS, shows the IRWST and containment recirculation screens and flow paths. In addition, UFSAR Figure 6.3-3 also shows the screens and piping configuration. Neither the piping line numbers nor piping size is a level of detail shown on these figures.

During review of the current design and piping layout, changes were noted related to the PXS screens. As a result of this review, process piping line number changes and new piping line segments were identified. However, because piping line numbers are not shown on the UFSAR simplified P&IDs, there are no changes needed for UFSAR Figure 6.3-2, sheet 2 and 2, UFSAR Figure 6.3-3, or plant-specific Tier 1 and COL Appendix C Figure 2.2.3-1.

The piping lines from the IRWST screens and containment recirculation screens are required to maintain functional capability during normal and safe shutdown earthquake (SSE) loadings. The need for piping line number changes and additional piping line segments in the piping lines from an IRWST screen and the containment recirculation screens was identified during the review. It was also determined this information should be included in COL Appendix C Table 2.2.3-2 to provide a complete listing of the piping lines that comprise the flow path and that are required to maintain functional capability. The proposed changes to COL Appendix C Table 2.2.3-2 are as follows:

- Table 2.2.3-2 Line Name ‘IRWST injection line B to DVI line B’ piping line PXS-L114B is proposed to be changed to PXS-L114 to reflect the correct piping design designation for one of the initial piping segments comprising the flow path from the IRWST screen PXS-MY-Y01B.

- Table 2.2.3-2 Line Name ‘Containment recirculation line B’ piping lines PXS-L100, PXS-L101, and PXS-L106 are lines that immediately exit the containment recirculation screen PXS-MY-Y02B. These piping lines are

proposed to be added to the Line Number in this row of Table 2.2.3-2 to reflect the piping that is in the design of the system for the flow path from containment recirculation screen PXS-MY-Y02B.

Each of the lines identified above is ASME Code Section III piping, not designed for leak before break, and is required to maintain functional capability. The re-designation or addition of these piping lines as Functional Capability Required in Table 2.2.3-2 is necessary to provide a complete listing of the lines in the PXS flow path that are required to maintain design and functional capability to satisfy the ITAAC in plant-specific Tier 1 and COL Appendix C Table 2.2.3-4.

ENCLOSURE 2 (Exemption Request) Changes

Section 1.0, Purpose (Page 2 of 7)

The fourth bullet in the second paragraph is revised to read:

- Tier 1 Table 2.2.3-2
  - Revise the piping line number PXS-L114B to the correct designation of PXS-L114,
  - Add new piping line numbers PXS-L100, PXS-L101, and PXS-L106 to reflect the containment recirculation system design flow path,

ENCLOSURE 3 (Licensing Basis Documents- Proposed Changes) Changes

Tier 1 Section 2.2.3 Passive Core Cooling System Table 2.2.3-2 (This change applies to VEGP Unit 3 and Unit 4 COLs, Appendix C) Replace Page 5 of 10 with the following:

Tier 1 Section 2.2.3 Passive Core Cooling System

Table 2.2.3-2

(This change also applies to VEGP Unit 3 and Unit 4 COLs, Appendix C)

Table 2.2.3-2				
Line Name	**Line Number**	**ASME Code Section III**	**Leak Before Break**	**Functional Capability Required**
…	…	…	…	…
Accumulator B discharge line to DVI line B	PXS-L025B, PXS-L027B, PXS-L029B	Yes	Yes	Yes
IRWST injection line A to DVI line A	PXS-L125A, PXS-L127A	Yes	Yes	Yes
	PXS-L123A, PXS-L124A, PXS-L118A, PXS-L117A, PXS-L116A, PXS-L112A	Yes	No	Yes
IRWST injection line B to DVI line B	PXS-L125B, PXS-L127B	Yes	Yes	Yes
	PXS-L123B, PXS-L124B, PXS-L118B, PXS-L117B, PXS-L116B, PXS-L114~~B~~, PXS-L112B, PXS-L120	Yes	No	Yes