Southern Nuclear

Southern Nuclear
Operating Company, Inc.
42 Inverness Center Parkway
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January 19, 2018

Docket Nos.: 52-025
52-026

ND-18-0071
10 CFR 50.90
10 CFR 52.98

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 Regarding:
Use of ASME NB-3200 for Piping Component Analysis (LAR-17-035S1)

Ladies and Gentlemen:

Pursuant to 10 CFR 52.98(c) and in accordance with 10 CFR 50.90, Southern Nuclear Operating Company (SNC) requests 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), by SNC letter ND-17-1583, dated September 22, 2017 [ADAMS Accession Number ML17265A787]). The requested amendment proposes to depart from approved AP1000 Design Control Document (DCD) Tier 2 information (text) and involved Tier 2* information (as incorporated into the Updated Final Safety Analysis Report (UFSAR) as plant-specific DCD information).

The requested amendment proposes to modify the licensing requirements for the ASME Class 1 Piping component analysis from limited to design by rule evaluation as described in ASME Section III, NB-3600 to include the ability to perform design by analysis evaluations, as described in ASME Section III, NB-3200. During the NRC review of the license amendment request (LAR), LAR-17-035, the NRC determined a need for additional information regarding how SNC addresses conditions included in 10 CFR 50.55a in an e-mail dated January 12, 2018 [ADAMS Accession Number ML18012A402]. The SNC response is provided in Enclosure 3 of this letter, which supplements the original LAR-17-035.

The supplemental information provided in this LAR supplement does not impact the scope, technical content, or conclusions of the Technical Evaluation, Significant Hazards Consideration Determination, or Environmental Considerations of the original LAR provided in Enclosure 1 of SNC letter ND-17-1583.

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

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

Should you have any questions, please contact Corey Thomas at (205) 992-5221.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 19TH of January 2018.

Respectfully submitted,

Amy G. Aughtman
Licensing Director, Regulatory Affairs
Southern Nuclear Operating Company

Enclosures: 1 - 2) (Previously submitted with the original LAR, LAR-17-035, in SNC letter ND-17-1583)

3) Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – Response to NRC Request for Additional Information (RAI) Regarding LAR 17-035 Review (LAR-17-035S1)

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Southern Nuclear Operating Company

ND-18-0071

Enclosure 3

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

Response to NRC Request for Additional Information (RAI)

Regarding LAR 17-035 Review

(LAR-17-035S1)

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

The following request for additional information was provided by the NRC Staff regarding the review of Southern Nuclear Operating Company (SNC) License Amendment Request (LAR) 17-035, which was submitted by SNC letter ND-17-1583 (ADAMS Accession Number ML17265A787) on September 22, 2017.

Request for Additional Information (RAI):

10 CFR 50.55a(b)(1)(iii) "Section III condition: Seismic design of piping" states that applicants or licensees may use Subarticles NB-3200, NB-3600, NC-3600, and ND-3600 for seismic design of piping, up to and including the 1993 Addenda, subject to the condition specified in paragraph (b)(1)(ii) of this section. Applicants or licensees may not use these subarticles for seismic design of piping in the 1994 Addenda through the 2005 Addenda incorporated by reference in paragraph (a)(1) of this section, except that Subarticle NB-3200 in the 2004 Edition through the 2008 Addenda may be used by applicants and licensees, subject to the condition in paragraph (b)(1)(iii)(A) of this section. Applicants or licensees may use Subarticles NB-3600, NC-3600, and ND-3600 for the seismic design of piping in the 2006 Addenda through the 2008 Addenda, subject to the conditions of this paragraph corresponding to those subarticles.

The AP1000 piping design and Design Certification use the ASME Section III 1998 Edition, 2000 Addenda. The staff notices that there is the restriction for the use of ASME Section III, Code Editions for the AP1000 seismic piping design, as stated in 10 CFR 50.55a, (iii). The staff requests the licensee to discuss whether the ASME Section III Subarticle NB-3200 in the 2004 Edition through the 2008 Addenda will be used, and that the condition 10 CFR 50.55a paragraph (b)(1)(iii)(A) of this section is applied.

10 CFR 50.55a paragraph (b)(1)(iii)(A) "*Seismic design of piping: First provision*" requires that when applying Note (1) of Figure NB–3222–1 for Level B service limits, the calculation of P_b stresses must include reversing dynamic loads (including inertia earthquake effects) if evaluation of these loads is required by NB–3223(b).

SNC Response to RAI:

The NRC condition in 10 CFR 50.55a paragraph (b)(1)(iii)(A) for seismic design of piping is addressed by utilizing the 1989 Edition, 1989 Addenda of ASME Code, Section III for dynamic loads. As noted in UFSAR 5.2.1.1, "…*the treatment of dynamic loads, including seismic loads, in pipe stress analysis will satisfy the requirements of the ASME Code, Section III, Subarticles NB-3210, NB-3220, NB-3620, NB-3650, NC-3620, NC-3650, ND-3620, and ND-3650 1989 Edition, 1989 Addenda…"* Approval is not requested for alternate treatment of dynamic loads, as SNC will continue to utilize the 1989 Edition, 1989 Addenda of ASME Code, Section III for treatment of dynamic loads.