

## Vogtle PEmails

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**From:** Hoellman, Jordan  
**Sent:** Friday, January 19, 2018 11:17 AM  
**To:** Vogtle PEmails  
**Subject:** RAI Transmittal for VEGP Units 3 and 4 LAR 17-035, Use of ASME NB-3200 for Piping Component Analysis  
**Attachments:** Final RAI for LAR 17-035.docx

To All:

By letter dated September 22, 2017, Southern Nuclear Operating Company (SNC) submitted License Amendment Request (LAR) 17-035 to the U. S. Nuclear Regulatory Commission (NRC) for Vogtle Electric Generating Plant Units 3 and 4, Combined License Nos. NPF-91 and NPF-92 (ADAMS Accession No. ML17265A787). The NRC staff is reviewing the request to enable the staff to reach a conclusion on the safety of the proposed changes.

The NRC staff has identified that additional information is needed to continue the review. The staff's request for additional information (RAI) is contained in the attachment to this email. To support the review schedule, you are requested to respond within 30 days of the date of this email. If changes are needed to the final safety analysis report, the staff requests that the RAI response include the proposed wording changes.

As a result of needing additional information, staff will not be able to complete the review until an acceptable supplement to the request is received. If the change is needed sooner than that date to support construction, please consider submitting a Preliminary Amendment Request (PAR).

If you have any questions or comments concerning this matter, you may contact me at 301-415-5481.

**Jordan Hoellman**

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**Sent Date:** 1/19/2018 11:17:28 AM  
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**REQUEST FOR INFORMATION (RAI) REGARDING**  
**USE OF ASME NB-3200 FOR PIPING COMPONENT ANALYSIS (LAR-17-035)**  
**SOUTHERN NUCLEAR OPERATING COMPANY**  
**VOGTLE ELECTRIC GENERATING PLANT UNITS 3 AND 4**  
**DOCKET NOS.: 52-025 AND 52-026**

By letter dated September 22, 2017 (Agencywide Document Access and Management System Accession Number ML17265A787), Southern Nuclear Operating Company, Inc. (SNC, the licensee) requested that the U.S. Nuclear Regulatory Commission (NRC) amend the combined operating licenses (COLs) for Vogtle Electric Generating Plant (VEGP) Units 3 and 4, COL Numbers NPF-91 and NPF-92, respectively. 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. Specifically, it requests modifying the licensing requirements for the ASME Class 1 piping component analysis to permit the use of design by analysis evaluations, as described in ASME Section III, NB-3200.

The NRC staff evaluated the information provided by SNC, and has determined that the following information is needed in order to complete its review of the alternative request.

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 10CFR50.55a 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).