

## Vogle PEmails

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**From:** Habib, Donald  
**Sent:** Tuesday, January 09, 2018 11:19 AM  
**To:** ptapscot@southernco.com; Chamberlain, Amy Christine; Thomas, Corey (SNC)  
**Cc:** neil.haggerty@excelservices.com; Patel, Chandu; Vogle PEmails; Le, Tuan; Terry, Leslie; Lupold, Timothy; Mitchell, Matthew  
**Subject:** RAI Transmittal for Vogle 3 & 4 ALT 08 (RAI ALT-08-01)  
**Attachments:** RAI ALT-08-01 Final to SNC.pdf

To All:

By letter dated October 20, 2017, Southern Nuclear Company submitted Alternative Request No. 08 to the U. S. Nuclear Regulatory Commission (NRC) for Vogle Electric Generating Plant Units 3 and 4, Combined License Nos. NPF-91 and NPF-92 (ADAMS Accession No. ML17293A352). The NRC staff is reviewing the request to enable the staff to reach a conclusion on the safety of the proposed alternative.

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.

If you have any questions or comments concerning this matter, you may contact me at 301-415-1035.

Sincerely,

Donald Habib, Project Manager  
Licensing Branch 4  
Division of New Reactor Licensing  
Office of New Reactors  
301-415-1035

**Hearing Identifier:** Vogtle\_COL\_Docs\_Public  
**Email Number:** 197

**Mail Envelope Properties** (SN4PR0901MB217330FFF24FE7AE958D5E8697100)

**Subject:** RAI Transmittal for Vogtle 3 & 4 ALT 08 (RAI ALT-08-01)  
**Sent Date:** 1/9/2018 11:19:19 AM  
**Received Date:** 1/9/2018 11:19:29 AM  
**From:** Habib, Donald

**Created By:** Donald.Habib@nrc.gov

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Tracking Status: None

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Tracking Status: None

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Tracking Status: None

**Post Office:** SN4PR0901MB2173.namprd09.prod.outlook.com

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RAI ALT-08-01 Final to SNC.pdf		115793

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**

## **REQUEST FOR ADDITIONAL INFORMATION ALT-08-01**

Request for Alternative No. 8: Counterboring of Class 1 Piping,  
Components, and Fittings With Weld End Transitions  
Application Title: VEGP Units 3 and 4 - LARs  
Operating Company: Southern Nuclear Operating Co.  
Docket No. 52-025 and 52-026  
(CAC No. 000463)

By letter dated October 20, 2017 (Agencywide Documents Access and Management System Accession No. ML17293A352), Southern Nuclear Operating Company, Inc. (SNC acting on behalf of all the licensees), requested U.S. Nuclear Regulatory Commission (NRC) approval of an alternative to the requirements of American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section III, Subparagraph NB-4250(c), for Vogtle Electric Generating Plant (VEGP), Units 3 and 4. Specifically, the licensee requested use of alternative counterbore configurations on weld joints for ASME Code Class 1 piping, components, and fittings with weld end transitions. The licensee has requested approval of this alternative as a contingency.

The staff requests the following information needed to complete its review of the alternative request.

1. The request states that the alternative would apply to, "ASME Class 1 piping, components, and fittings with weld end transitions." Clarify whether this alternative applies to all ASME Class 1 piping, components, and fittings with weld end transitions, or a subset of ASME Class 1 piping, components, and fittings. If it applies only to a subset, then provide information regarding which ASME Class 1 piping, components, and fittings with weld end transitions the alternative would be applicable.
2. The letter requesting this alternative states that, "The proposed request for alternative is applicable to performance of counterbores on ASME Class 1 Piping, Components, and Fittings with Weld End Transitions," while the alternative states, "SNC proposes to use alternative weld joint configurations for welds subject to preservice inspections under the following conditions."
  - a. Clarify whether the request is to use alternative counterbore configurations on weld joints or to use alternative weld joint configurations.
  - b. Provide examples of the alternative counterbore configurations on weld joints (i.e., shorter counterbore with dimensions, no counterbore, counterbore following radius of fittings, etc.) or alternative weld joint configurations that will be used, and how they provide an acceptable level of quality and safety.
  - c. Discuss what requirements in ASME Code, Section III, Subparagraph NB-4520(c), will not be met and the justification of equivalent quality and safety for not complying with the ASME Code.
3. Discuss what evaluations have been performed to determine the effect the alternative counterbore configurations or alternative weld joint configurations have on the stress

analysis; and how the alternative counterbore configurations or alternative weld joint configurations will meet the ASME Code, Section III, SubArticle NB-3200, requirements.

4. The request states that the licensee will verify that the required preservice inspection can be performed in accordance with applicable inspection requirements for the alternative weld joint configurations. However, the request also states that it applies to inservice inspection. Please explain why inservice inspection is not addressed in this condition, and discuss what evaluations have been performed to demonstrate that the performance-based preservice and inservice inspections, as specified by ASME Code and required by Section 50.55a of Title 10 of the *Code of Federal Regulations* (10 CFR), can be performed on the alternative counterbore configurations or alternative weld joint configurations. This discussion should also address whether 100 percent of the weld volume will be inspectable using the alternative counterbore configurations or alternative weld joint configurations.
5. The request states that the SNC's design specification will describe the alternative weld joint configurations and the use of the alternative will be documented in the appropriate Data Report Form. Discuss what information (i.e., weld location and alternative counterbore configuration or alternative weld joint configuration) will be provided in the design specification and the data report. In addition, clarify which Data Report Form will document the use of the alternative counterbore configurations or alternative weld joint configurations.
6. The request states, "Provided that weld joints will remain inspectable and that the weld history is appropriately documented, this proposed alternative provides an acceptable level of quality and safety in accordance with 10 CFR 50.55a(z)(1)." However, this statement is unclear to the NRC staff because it is the owner's responsibility to ensure inspectability and to meet applicable regulatory requirements concerning record retention. Therefore, the NRC staff requests a discussion of how the alternative counterbore configurations or alternative weld joint configurations will meet 10 CFR 50.55a(z)(1) by providing an acceptable level of quality and safety.