

Vogle PEmails

From: Habib, Donald
Sent: Wednesday, March 07, 2018 3:17 PM
To: ptapscot@southernco.com; Chamberlain, Amy Christine;
WASPARKM@southernco.com
Cc: neil.haggerty@excelservices.com; Patel, Chandu; Vogtle PEmails; Dixon-Herrity, Jennifer
Subject: RAI Transmittal for Vogtle 3 & 4 LAR 17-037 (RAI LAR 17-037-1)
Attachments: RAI LAR 17-037-01 RAI_9426 As Issued 03-07-2018.docx

To All:

By letter dated December 21, 2017, Southern Nuclear Company submitted License Amendment Request No. 17-037 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. ML17355A416). 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.

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

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Subject: RAI Transmittal for Vogtle 3 & 4 LAR 17-037 (RAI LAR 17-037-1)
Sent Date: 3/7/2018 3:17:26 PM
Received Date: 3/7/2018 3:17:31 PM
From: Habib, Donald

Created By: Donald.Habib@nrc.gov

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Tracking Status: None

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MESSAGE	1227	3/7/2018 3:17:31 PM
RAI LAR 17-037-01 RAI_9426 As Issued 03-07-2018.docx		30275

Options

Priority: Standard

Return Notification: No

Reply Requested: No

Sensitivity: Normal

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Recipients Received:

Request for Additional Information LAR 17-037-1

Issue Date: 03/07/2018

Application Title: Vogtle Nuclear Site, Units 3 and 4, LAR 17-037

Operating Company: Southern Nuclear Operating Co.

Docket No. 52-0025 and 52-0026

Review/Application Section: Not Applicable

Question 1

Section VIII.B.6.a of 10 CFR Part 52, Appendix D, states that an applicant who references this appendix may not depart from Tier 2* information, which is designated with italicized text or brackets and an asterisk in the generic DCD, without NRC approval. Additionally, General Design Criterion 1 of 10 CFR Part 50, Appendix A, "Quality standards and records" requires, in part, that structures, systems, and components important to safety be designed, fabricated, erected, and tested to quality standards commensurate with the importance of the safety functions to be performed.

In the technical evaluation, the licensee states that "SNC performed an analysis of the Tier 2* matters listed in 10 CFR Part 52, Appendix D, Section VIII paragraphs B.6.b and B.6.c." The Reviewer's Aid included as Enclosure 5 also addresses matters based on Section VIII.B.6.b and VIII.B.6.c. The DCD contains additional text designated as Tier 2* that may not clearly fall under the matters listed in Section VIII.B.6.b and VIII.B.6.c, but is still subject to the requirements of Section VIII.B.6.a. Specifically, the CVS piping inside containment is non-ASME Code piping subject to additional requirements for design, fabrication, examination, inspection, and testing. These additional requirements are designated Tier 2* and support the basis for satisfying GDC 1. The licensee should describe how a potential change to the treatment of this non-ASME Code piping would be handled by the proposed process. Additionally, the licensee should consider if there are any other topics designated as Tier 2* information in the DCD that may not be adequately covered by the specified criteria.

Question 2

Section VIII.B.6.b of 10 CFR Part 52, Appendix D, states that an applicant who references this appendix may not depart from the following Tier 2* matters without prior NRC approval, of which one of these matters is titled "piping design acceptance criteria." The licensee states that "SNC performed an analysis of the Tier 2* matters listed in 10 CFR Part 52, Appendix D, Section VIII paragraphs B.6.b and B.6.c."

In the LAR 17-037 submittal, Page 9 of Enclosure 1 indicates that Criterion 2 was developed as a screening criterion as a result of the analysis performed of these Tier 2* matters, which included, among other things, piping design acceptance criteria. The bases for Criterion 2 provides a list of three design processes:

- a. Diverse Actuation System
- b. Protection and Safety Monitoring System
- c. Human Factors Engineering

Notably missing from this list is piping design acceptance criteria, one of the topics identified on Page 9 of Enclosure 1. Please elaborate on how piping design acceptance criteria will be treated by the proposed process.

Question 3

Section VIII.B.6.b of 10 CFR Part 52, Appendix D, states that an applicant who references this appendix may not depart from the following Tier 2* matters without prior NRC approval, of which one of these matters is titled “Motor-operated and power-operated valves.” 10 CFR Part 50 Appendix A, General Design Criteria 1, 2, 4, 14, and 15 provide requirements related to the design of these valves. 10 CFR Part 50 Appendix B additionally provides requirements related to quality assurance in the design, fabrication, construction, and testing of safety-related valves.

The screening criteria provided in LAR 17-037 use the phrase “used to implement an industry standard or endorsed regulatory guidance” or “construction materials that deviate from a code or standard credited...” to determine whether the Tier 2* change process may be departed from. In the case of the design and qualification provisions for motor-operated valves (MOVs) and power-operated valves (POVs), the Tier 2* information contained in the AP1000 DCD was not considered part of a code, standard, or endorsed regulatory guidance at the time, but subsequent to the certification of the AP1000 design, became classified as such. Furthermore, the applicant states in Enclosure 5 of LAR 17-037 that the topic of MOVs and POVs is adequately addressed in Tier 1 and by paragraph VIII.B.5. Please provide additional basis for supporting this conclusion, including the means by which the qualification of MOVs and POVs will be accomplished. The licensee should elaborate on how they would evaluate changes to the provisions for MOVs and POVs— specifically if changes would be made pursuant to 10 CFR Part 52, Appendix D, Section VIII paragraph B.5.