

Vogle PEmails

From: Habib, Donald
Sent: Thursday, March 01, 2018 2:44 PM
To: WASPARKM@southernco.com
Cc: neil.haggerty@excelservices.com; Patel, Chandu; ptapscot@southernco.com; Chamberlain, Amy Christine; Vogtle PEmails; Dixon-Herrity, Jennifer
Subject: Draft RAI Related to Vogtle Units 3 and 4 LAR 17-037 Regarding Tier 2* Departure Process
Attachments: Draft RAI_9426 for LAR 17-037.docx

To All –

Attached is a draft RAI related to Vogtle Units 3 and 4 LAR 17-037 regarding the Tier 2* departure process.

If you would like to schedule a conference call to discuss this RAI, please let me know before 4pm on Tuesday, March 6, 2018. If no request for a conference call is received, this RAI will be issued as final.

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NRO/DNRL, Licensing Branch 4
301-415-1035

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DRAFT

Request for Additional Information

Issue Date:

Application Title: Vogtle Nuclear Site, Units 3 and 4, – LAR 17-024

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 50 Appendix A, General Design Criteria 1, 2, 4, 14, and 15 provide requirements related to the design of these valves. 10 CFR 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.