

Vogle PEmails

From: Gleaves, Bill
Sent: Tuesday, July 9, 2019 7:49 AM
To: Leighty, Steven; Roberts, Kelli Anne
Cc: Hughes, Brian; Patel, Chandu; Dixon-Herrity, Jennifer; Vogtle PEmails; Dudek, Michael; Stutzcage, Edward
Subject: Vogtle LAR-19-005 Draft RAI 9696 7-9-19
Attachments: Vogtle LAR-19-005 Draft RAI_9696 7-9-19.pdf
Importance: High

Steve and Kelli,

Attached is our management-approved draft RAI on the LAR-19-005, with the plan to discuss during the regular Thursday meeting on 7.11.19 at 9am.

This "draft" RAI will be final upon SNC's acceptance or within 7 days of the meeting (7.22.19), whichever is later. If SNC has comments or suggested changes, they will be considered for inclusion before finalization.

This email is also being sent to public ADAMS capture. If there is sensitive information, please inform me ASAP so that it will be prevented from public viewing.

Respectfully,

Billy

William (Billy) Gleaves
Senior Project Manager
NRO/DLSE/Licensing Branch 2 (was Licensing Branch 4)
US Nuclear Regulatory Commission

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From: Gleaves, Bill

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Options

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DRAFT

Request for Additional Information

Vogtle Nuclear Site, Units 3 and 4, Dockets 52-0025 and 52-0026

Southern Nuclear Operating Co.

Docket Nos. 52-0025 and 52-0026

Section: 14.03.08 - Radiation Protection Inspections, Tests, Analyses, and Acceptance Criteria

Application Section: Tier 1

Background

In LAR-19-005, the licensee requests changes to COL Appendix C and Tier 1, Table 3.3-1, "Definition of Wall Thicknesses for Nuclear Island Buildings, Turbine Building, and Annex Building," and Table 3.3-6, "Inspections, Tests, Analyses, and Acceptance Criteria." The proposed changes include the allowance of construction deviations from the thicknesses of radiation shielding barriers in the nuclear island structures and annex building if the changes can be made without a "loss of shielding function."

Issue

The proposed wording in Table 3.3-1, Footnotes 15 and 16 and the Table 3.3-6 ITAAC acceptance criteria for ITAAC 3.3.00.02a.i.a, 3.3.00.02a.i.b, 3.3.00.02a.i.c, 3.3.00.02a.i.d, 3.3.00.02a.ii.e, and 3.3.00.04b, are not clear. The proposed language does not specify if the radiation attenuation factor is reduced (or otherwise clarify whether an acceptable level of radiation attenuation is retained). Specifically, it is unclear to the staff what amount of radiation shielding reduction (and resulting radiation attenuation loss) can be made without being considered a loss in radiation shielding function. In addition, the radiological dose impacts and consequences of changes in radiation barrier thickness vary based on the radiation source and the dose reduction needs on the other side of the barrier. The staff is concerned that the current language will allow reductions in radiation attenuation that may not be acceptable without adding concrete density or by adding an additional shielding material to the wall.

Clarification

Please clarify or revise, as appropriate, the Table 3.3-1, Footnotes 15 and 16 and the acceptance criteria for ITAAC 3.3.00.02a.i.a, 3.3.00.02a.i.b, 3.3.00.02a.i.c, 3.3.00.02a.i.d, 3.3.00.02a.ii.e, and 3.3.00.04b, in Table 3.3-6 to provide a criteria which ensures that radiation attenuation remains appropriate and the facility has been constructed and will be operated in accordance with the design and the relevant requirements.

Regulatory Basis

10 CFR 50, Appendix A, General Design Criteria (GDC) 61, requires that the fuel storage and handling, radioactive waste, and other systems which may contain radioactivity shall be designed to assure adequate safety under normal and postulated accident conditions. These systems shall be designed (1) with a capability to permit appropriate periodic inspection and testing of components important to safety (2) with suitable shielding for radiation protection, and (3) with appropriate containment, confinement, and filtering systems.

10 CFR 52.80(a) requires that the application must contain the proposed inspections, tests, and analyses, that the licensee shall perform, and the acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, the facility has been constructed and will be operated in conformity with the combined license, the provisions of the Act, and the Commission's rules and regulations.