

CNRO2024-00003

10 CFR 50.55a

January 12, 2024

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Response to 2nd Round Request for Additional Information concerning Relief Request Number EN-RR-22-001 – Proposed Alternative to Use ASME Code Case N-752, Risk-Informed Categorization and Treatment for Repair/ Replacement Activities in Class 2 and 3 Systems, Section XI, Division 1

Grand Gulf Nuclear Station, Unit 1
NRC Docket No. 50-416
Renewed Facility Operating License No. NPF-29

River Bend Station, Unit 1
NRC Docket No. 50-458
Renewed Facility Operating License No. NPF-47

Waterford Steam Electric Station, Unit 3
NRC Docket No. 50-382
Renewed Facility Operating License No. NPF-38

By letter dated June 30, 2022 (Reference 1), Entergy Operations, Inc. (Entergy) submitted a proposed alternative to the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," at Grand Gulf Nuclear Station, Unit 1 (GGNS), River Bend Station, Unit 1, (RBS) and Waterford Steam Electric Station, Unit 3 (WF3). Specifically, pursuant to 10 CFR 50.55a(z)(1), Entergy requested authorization to use the alternative requirements of Code Case N-752, "Risk Informed Categorization and Treatment for Repair/Replacement Activities in Class 2 and 3 Systems, Section XI, Division 1," for determining the risk-informed categorization and for implementing alternative treatment for repair/replacement activities on moderate and high energy Class 2 and 3 items in lieu of certain ASME Boiler and Pressure Vessel Code, Section XI, IWA-1000, IWA-4000, and IWA-6000 requirements.

The NRC staff has reviewed the request and determined that additional information is required to complete their review (Reference 2).

The 2nd Round Request for Additional Information (RAI) and the associated response, specific to Waterford 3 only, are provided in the Enclosure.

This letter contains no new regulatory commitments.

Should you have any questions or require additional information, please contact me at 601 368-5102.

Respectfully,

Phil Couture

PC/gpn

Enclosure: Response to Request for Information

- References:
- 1) Entergy Operations, Inc. (Entergy) letter to the U. S. Nuclear Regulatory Commission (NRC), " Relief Request Number EN-RR-22-001 – Proposed Alternative to Use ASME Code Case N-752, Risk-Informed Categorization and Treatment for Repair/ Replacement Activities in Class 2 and 3 Systems, Section XI, Division 1," ML22181B114, dated June 30, 2022.
 - 2) NRC email to David Williams (Entergy) "Grand Gulf, River Bend, and Waterford, Unit 3 – 2nd Round of Official RAIs for RR EN-RR-22-001, Use ASME Code Case N-752, Risk informed Categorization for Class 2 and 3 Systems," ML23348A122, dated December 14, 2023.

cc: NRC Region IV- Regional Administrator
NRC Senior Resident Inspector- GGNS
NRC Senior Resident Inspector- RBS
NRC Senior Resident Inspector- WF3
NRC Project Manager- GGNS
NRC Project Manager- RBS
NRC Project Manager- WF3
NRC Project Manager- Entergy Fleet

ENCLOSURE

CNRO2024-00003

Response to Request for Information

RESPONSE TO REQUEST FOR INFORMATION

NOTE: The U.S. Nuclear Regulatory Commission (NRC) staff's Request for Additional Information (RAI) is shown in italics within this enclosure to distinguish from the Entergy Operations, Inc. (Entergy) response.

Background to RAI:

In its letter dated June 30, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22181B114), supplemented by letter dated April 21, 2023 (ML23111A213), Entergy Operations, LLC, (the licensee, Entergy) submitted an alternative request for Waterford Steam Electric Station, Unit 3 (WF-3). Specifically, Entergy requested to use the alternative requirements of American Society of Mechanical Engineers (ASME) Code Case N-752, "Risk-Informed Categorization and Treatment for Repair/Replacement Activities in Class 2 and 3 Systems Section XI, Division 1," for determining the risk-informed categorization and for implementing alternative treatment for repair/replacement activities on moderate and high energy Class 2 and 3 items in lieu of certain ASME Code Section XI, paragraph IWA-1000, IWA-4000, and IWA 6000 requirements. Entergy submitted the request pursuant to Section 50.55a(z) (1) of Title 10 of the Code of Federal Regulations, which requires the applicant to demonstrate that the proposed alternative would provide an acceptable level of quality and safety.

The U.S. Nuclear Regulatory Commission (NRC) staff has determined that requests for additional information (RAIs) are needed for the staff to complete its review, as discussed below specific to WF-3 only:

Pursuant to 10 CFR 50.55a(z)(1), the probabilistic risk assessment (PRA) must demonstrate an acceptable level of quality to authorize a proposed risk-informed alternative to the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI requirements. Entergy's relief request states that the WF-3 PRA model meets the supporting requirements (SRs) for the internal events and internal flooding portions of the ASME PRA standard at Capability Category II or higher. In letter dated August 19, 2022 (ADAMS Accession No. ML22231B160), "Response to Request for Additional Information Regarding License Amendment Request to Adopt 10 CFR 50.69 and TSTF-505," Entergy proposed a condition to close Facts and Observations (F&Os) associated with SRs HR-G6, HR-C2, HR-I1 and HR-I2 by utilizing an accepted NRC process ("U.S. Nuclear Regulatory Commission Acceptance on Nuclear Energy Institute Appendix X to Guidance 05-04, 07-12, and 12-13, Close-out of Facts and Observations (F&Os)").

- i. Provide confirmation that the above SRs were closed using an accepted NRC process.*
- ii. Alternatively, to part i, propose a mechanism to resolve the F&Os, using an accepted NRC process ("U.S. Nuclear Regulatory Commission Acceptance on Nuclear Energy Institute Appendix X to Guidance 05-04, 07-12, and 12-13, Close-out of Facts and Observations (F&Os)", prior to implementation of Relief Request EN-RR-22-001 at WF-3.*

Entergy's Response to RAI:

- i. The Waterford 3 Finding Level F&O Independent Assessment was conducted to review actions taken by Entergy against the ASME/ANS PRA Standard and to support current and future License Amendment Request (LAR) submittals. This assessment included a review of all four subject F&Os, all of which were closed. This closure review was done utilizing NEI 17-07, Revision 2, which has been endorsed by Regulatory Guide 1.200, Revision 3. There are no remaining open findings for WF3.
- ii. Not applicable, see response to i.

References:

1. Entergy letter to NRC, "Relief Request Number EN-RR-22-001 – Proposed Alternative to Use ASME Code Case N-752, Risk-Informed Categorization and Treatment for Repair/ Replacement Activities in Class 2 and 3 Systems, Section XI, Division 1," (ADAMS Accession No. ML22181B114), dated June 30, 2022.
2. Entergy letter to NRC, "Responses to Request for Additional Information concerning Relief Request Number EN-RR-22-001 – Proposed Alternative to Use ASME Code Case N-752, Risk-Informed Categorization and Treatment for Repair/Replacement Activities in Class 2 and 3 Systems, Section XI, Division 1," (ADAMS Accession No. ML23111A213), dated April 21, 2023.
3. Entergy letter to NRC, "Response to Request for Additional Information Regarding License Amendment Request to Adopt 10 CFR 50.69 and TSTF-505," (ADAMS Accession No. ML22231B160), dated August 19, 2022.
4. Nuclear Energy Institute (NEI) 17-07, Revision 2, Performance of PRA Peer Reviews Using the ASME/ANS PRA Standard.