

GNRO2024/00022

10 CFR 50.90

June 13, 2024

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

Subject: Second Supplement to License Amendment Request to Adopt Risk Informed Completion Times TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b" and Application to Adopt 10 CFR 50.69, "Risk-Informed Categorization and Treatment of Structures, Systems and Components for Nuclear Power Reactors"

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

By the two letters dated June 6, 2023 (References 1 and 2), Entergy Operations, Inc. (Entergy) submitted two separate license amendment requests (LARs) for Grand Gulf Nuclear Station, Unit 1 (GGNS). The proposed amendment in Reference 1 would modify Technical Specification (TS) requirements to permit the use of Risk-Informed Completion Times in accordance with TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b" (ADAMS Accession No. ML18183A493). The proposed amendment in Reference 2 would modify the GGNS licensing basis, by the addition of a License Condition, to allow for the implementation of the provisions of Title 10 of the Code of Federal Regulations (10 CFR), Part 50.69, "Risk-Informed Categorization and Treatment of Structures, Systems and Components for Nuclear Power Reactors."

By letter dated August 18, 2023 (Reference 3), the Nuclear Regulatory Commission (NRC) notified Entergy of their intent to conduct a regulatory virtual audit with Entergy staff in support of the LARs in References 1 and 2. Following the audit, the NRC requested that Entergy respond in the form of a supplement to selected audit questions, either for clarification, to add or remove detail, or to formally document Entergy's responses to the questions (Reference 4).

This letter is a supplement to Reference 4 for both LARs. The Attachment to this letter provides a response to two (2) of the audit questions posed by the NRC staff during the regulatory virtual audit for both the TSTF-505 LAR and the 10 CFR 50.69 LAR.

Entergy has reviewed the information supporting the No Significant Hazards Consideration Determination and the Environmental Consideration that was previously provided to the NRC in References 1 and 2. The additional information provided in this LAR supplement does not impact the conclusion that the proposed license amendments in both References 1 and 2 do

not involve a significant hazards consideration. Additionally, the information does not impact the conclusion that there is no need for an environmental assessment to be prepared in support of the proposed amendments.

In accordance with 10 CFR 50.91, Entergy is notifying the State of Mississippi of this amendment request by transmitting a copy of this letter and attachment to the designated State Official.

This letter and its attachment contain no regulatory commitments.

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

I declare under penalty of perjury that the foregoing is true and correct.
Executed on June 13, 2024.

Respectfully,

Phil Couture

PC/ram/gpn

Attachment:

1. Responses to NRC Audit Questions Related to the TSTF-505 and 10 CFR 50.69 License Amendment Requests

- References:
1. Entergy Operations, Inc. letter to U.S. Nuclear Regulatory Commission, "License Amendment Request to Revise Technical Specifications to Adopt Risk Informed Completion Times TSTF-505, Revision 2, 'Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b'," dated June 6, 2023 (ADAMS Accession No. ML23158A043)
 2. Entergy Operations, Inc. letter to U.S. Nuclear Regulatory Commission, "Application to Adopt 10 CFR 50.69, 'Risk-Informed Categorization and Treatment of Structures, Systems and Components for Nuclear Power Reactors'," dated June 6, 2023 (ADAMS Accession No. ML23158A044)
 3. U.S. Nuclear Regulatory Commission Letter to Entergy Operations, Inc., "Grand Gulf Nuclear Station, Unit 1 – Regulatory Audit in Support of License Amendment Requests to Adopt TSTF-505, Revision 2, 'Provide Risk-Informed Completion Times – RITSTF Initiative 4b,' and 10 CFR 50.69, 'Risk-Informed Categorization and Treatment of Structures, Systems, and Components for Nuclear Power Reactors'," dated August 18, 2023 (ADAMS Accession No. ML23226A100)
 4. Entergy Operations, Inc. letter to U.S. Nuclear Regulatory Commission, Supplement to License Amendment Request to Adopt Risk Informed Completion Times TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b" and Application to Adopt 10 CFR 50.69, "Risk-Informed Categorization and Treatment of Structures, Systems and Components for Nuclear Power Reactors," dated May 1, 2024 (ADAMS Accession No. ML24122C611)

cc: NRC Region IV Regional Administrator
NRC Senior Resident Inspector – Grand Gulf Nuclear Station
NRC Project Manager – Grand Gulf Nuclear Station
State Health Officer, Mississippi Department of Health

Attachment

GNRO2024/00022

**Responses to NRC Audit Questions Related to the
TSTF-505 and 10 CFR 50.69 License Amendment Requests**

Responses To NRC Supplemental Audit Questions

Grand Gulf - TSTF-505/50.69 Post-Audit Request for Clarification of APLC-12, APLC-11, and APLC-24

The NRC staff has reviewed the supplemental letter dated May 1, 2024 (ML24122C611), concerning the Grand Gulf TSTF-505/50.69 LARs, and would like confirmation of the following issues:

1. Finalization of Updated Seismic Penalty
 - In response to Audit Question APLC-12 and APLC-24 on the reevaluated plant level high confidence low probability (HCLP) capacity, the licensee stated, “Based on preliminary assessment, the re-evaluated [seismic core damage frequency] SCDF is $1.41E-06$ and the re-evaluated [seismic large early release frequency] SLERF is $4.04E-07$.” The implication of this wording is that final seismic CDF and seismic LERF penalty remains to be confirmed. The U.S. Nuclear Regulatory Commission (NRC) staff requests the licensee to confirm whether the licensee intends to perform further assessment or the SCDF and SLERF penalty estimates are finalized.
2. Update to License Amendment Request (LAR) Table E1-2
 - In response to Audit Question APLC-11 on seismic penalty from the risk-informed completion time (RICT) estimates in the LAR, the licensee used the phrases “Table E1-2 will be updated” and “Table E1-2 will include” the necessary changes and corrections. It is not clear to the NRC staff whether the RICTs in the updated LAR Table E1-2 already include the changes to the seismic penalty described in the licensee’s response to Audit Question APLC-12 and APLC-13. The NRC staff requests the licensee to confirm whether it intends to perform further assessment.

Entergy Response:

1. The re-evaluated SCDF of $1.41E-06$ and re-evaluated SLERF of $4.04E-07$ as provided in the May 1, 2024, supplement are the final seismic penalty values. No further revisions to these numbers are currently planned.
2. The updated Table E1-2 provided in Attachment 2 of the May 1, 2024, supplement contains the final RICT estimates based on the re-evaluated SCDF of $1.41E-06$ and re-evaluated SLERF of $4.04E-07$. No further revisions to these numbers are currently planned.

List of Acronyms

CDF	Core Damage Frequency
HCLP	High Confidence Low Probability
LAR	License Amendment Request
LERF	Large Early Release Frequency
NRC	Nuclear Regulatory Commission
RICF	Risk-Informed Completion Time
SCDF	Seismic Core Damage Frequency
SLERF	Seismic Large Early Release Frequency
TSTF	Technical Specification Task Force