



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 24, 2021

Site Vice President
Entergy Operations, Inc.
Waterford Steam Electric Station, Unit 3
17265 River Road
Killona, LA 70057-3093

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 – SUMMARY OF REGULATORY AUDIT IN SUPPORT OF 10 CFR 50.69, "RISK-INFORMED CATEGORIZATION AND TREATMENT OF STRUCTURES, SYSTEMS, AND COMPONENTS FOR NUCLEAR POWER REACTORS" LICENSE AMENDMENT REQUEST (EPID L-2020-LLA-0279)

Dear Sir or Madam:

By letter dated December 18, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20353A433), Entergy Operations, Inc. (the licensee) submitted a license amendment request for the Waterford Steam Electric Station, Unit 3 (Waterford 3). The proposed amendment would modify the Waterford 3 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) Section 50.69, "Risk-informed categorization and treatment of structures, systems and components for nuclear power plants." Implementation of 10 CFR 50.69 will allow the licensee to improve focus on equipment that has safety significance resulting in improved plant safety.

To support the review of the license amendment request, the U.S. Nuclear Regulatory Commission (NRC) staff conducted an audit of the licensee's related non-docketed information (e.g., calculations, reports, and vendor oversight plans) from April 14, 2021, to June 11, 2021, including a virtual audit meeting held from June 1, 2021, through June 3, 2021. The NRC staff did not identify any significant issues during the audit; however, the NRC staff did identify the need for additional information. Requests for additional information will be transmitted at a future date. A summary of the regulatory audit is enclosed.

If you have any questions, please contact me, at 301-415-1383 or by e-mail to Perry.Buckberg@nrc.gov.

Sincerely,

/RA/

Perry H. Buckberg, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-382

Enclosure:
Regulatory Audit Summary

cc: Listserv

REGULATORY AUDIT SUMMARY

LICENSE AMENDMENT REQUEST TO ADOPT THE REQUIREMENTS OF 10 CFR 50.69,

“RISK-INFORMED CATEGORIZATION AND TREATMENT OF

STRUCTURES, SYSTEMS AND COMPONENTS FOR NUCLEAR POWER REACTORS”

ENTERGY OPERATIONS, INC.

WATERFORD STEAM ELECTRIC STATION, UNIT 3

DOCKET NO. 50-382

1.0 BACKGROUND

A regulatory audit is an activity undertaken by the U.S. Nuclear Regulatory Commission (NRC) staff to examine and evaluate licensee information with the intent to gain an understanding of, verify, or identify information that will require docketing to support the basis of a licensing or regulatory decision.

By letter dated December 18, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20353A433), Entergy Operations, Inc. (the licensee) submitted a license amendment request for the Waterford Steam Electric Station, Unit 3 (Waterford 3, WF3). The proposed amendment would modify the Waterford 3 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) Section 50.69, “Risk-informed categorization and treatment of structures, systems and components for nuclear power plants.” Implementation of 10 CFR 50.69 will allow the licensee to improve focus on equipment that has safety significance resulting in improved plant safety.

Following a preliminary review of the license amendment request, the NRC staff concluded that a regulatory audit would be needed to review the licensee’s non-docketed information (e.g., calculations, reports, and vendor oversight plans) related to the subject of its application to acquire additional understanding about the amendment request and to determine whether additional information would be needed to be docketed to complete the staff’s safety evaluation.

2.0 AUDIT ACTIVITIES AND OBSERVATIONS

The NRC’s audit plan was issued on April 14, 2021 (ADAMS Accession No. ML21099A002), and provided a high-level overview of the audit’s virtual format, the audit scope, and listed NRC staff who would be performing the audit. A more detailed agenda for the June 1-3, 2021, audit and the list of audit questions was issued on May 21, 2021 (ADAMS Accession No. ML21134A212).

On April 14, 2021, the NRC staff began its audit of non-docketed licensee documents using an internet-based portal provided by the licensee. On May 21, 2021, the staff issued a letter containing the topics and questions resulting from the audit of documents in the portal for use during the planned audit meeting. From June 1-3, 2021, the NRC staff held a virtual meeting

with the licensee to discuss the documents on the portal and the topics and questions contained in May 21, 2021 letter.

3.0 AUDIT RESULTS

On June 3, 2021, the NRC staff held an exit meeting with the licensee to inform the licensee that the formal audit had been completed satisfactorily, that the staff expected the response to APLA Question 5 regarding human factors to be updated in the portal for staff review, and that requests for additional information will be issued by the staff in the near future.

4.0 PARTICIPANTS

NRC Staff and Support	Entergy
Mihaela Biro	Remy Devoe
Alexander Schwab	Mark Thigpen
Sunwoo Park	Cecil Mahan
De Wu	Thomas Carr
Steve Alferink	Alan Harris
James Chang	Andrew Spotts
Perry Buckberg	Wesley Johnson
B.P. Jain	David Passehl
Mark Wilk (Support - PNNL)	Vince Andersen

5.0 AUDITED DOCUMENTATION

- Entergy Report, PSA-WF3-07-01, "Waterford 3 Re-Examination of External Events Evaluation in the IPEEE [Individual Plant Examination of External Events]," dated November 2017.
- Entergy Report, PSA-WF3-04-01, "Waterford 3 Seismic Risk Bounding Evaluation," dated June 6, 2018.
- Entergy Report, PSA-WF3-01-LE, "WF3 PSA [Probabilistic Safety Analysis] Large Early Release Frequency (LERF) Model," dated May 2020.
- Entergy Report, PSA-WF3-03-ES-01, "WF3 Fire PRA [Probabilistic Risk Assessment] Equipment and Cable Selection Notebook," dated December 2019.
- Entergy Report, PSA-WF3-03-ES-02, "Circuit Analysis and Failure Probability Development," dated December 2019.
- PRA-WF3-05-003, Waterford 3 Fire PRA Quantification Model Preparation and Database Development," dated December 2019.
- Entergy Report, PSA-WF3-03-FSS-06, "Development of Fire Non-suppression Factors for WF3 Fire PRA Scenarios," dated December 2019.
- PSA-WF3-03-UNC-02, "WF3 Fire PRA Parametric Uncertainty Analysis (UNCERT)," dated December 2019.

- Entergy Report, PSA-WF3-03-FSS-02, "Waterford 3 PSA Fixed Ignition Source Zone of Influence Methods," dated December 2019.
- Entergy Report, PSA-WF3-03-FSS-03. "Waterford 3 Transient Fire Scenario Report," dated December 2019.
- PSA-WF3-03-PRM, "WF3 Fire PRA Plant Response Model (PRM) Notebook," dated December 2019.
- Appendix E of PSA-WF3-03-PRM, "WF3 Fire PRA Plant Response Model (PRM) Notebook," dated December 2019.

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ADAMS Accession No. ML21167A144

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DATE	6/23/2021	6/23/2021	6/22/2021	6/23/2021
OFFICE	NRR/DRA/APLC/BC	NRR/DORL/LPL4/BC	NRR/DORL/LPL4/PM	
NAME	SRosenberg	JDixon-Herrity	PBuckberg	
DATE	6/23/2021	6/24/2021	6/24/2021	

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