

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

July 29, 2025

Mr. Otto Gustafson Vice President, Regulatory Assurance Entergy Services, LLC M-ECH-29 1340 Echelon Parkway Jackson, MS 39213

SUBJECT: ARKANSAS NUCLEAR ONE, UNITS 1 AND 2; GRAND GULF NUCLEAR

STATION, UNIT 1; RIVER BEND STATION, UNIT 1; WATERFORD STEAM ELECTRIC STATION, UNIT 3 - ISSUANCE OF AMENDMENTS RELATED TO

ADOPTION OF TSTF-591 (EPID NO. L-2025-LLA-0014)

Dear Mr. Gustafson:

The U.S. Nuclear Regulatory Commission (NRC, the Commission) has issued amendments consisting of changes to the technical specifications (TSs) in response to your application dated January 27, 2025. The following amendments are enclosed:

- Amendment Nos. 283 and 336 to Renewed Facility Operating License Nos. DPR-51 and NPF-6 for Arkansas Nuclear One, Units 1 and 2 (ANO Units 1 and 2), respectively;
- Amendment No. 238 to Renewed Facility Operating License No. NPF-29 for Grand Gulf Nuclear Station, Unit 1 (Grand Gulf);
- Amendment No. 218 to Renewed Facility Operating License No. NPF-47 for River Bend Station, Unit 1 (River Bend);
- Amendment No. 275 to Renewed Facility Operating License No. NPF-38 for Waterford Steam Electric Station, Unit 3 (Waterford 3);

The amendments revised the TSs for ANO Units 1 and 2, Grand Gulf, River Bend, and Waterford 3. Specifically, the amendments revise the "Programs and Manuals" (section is titled "Programs" for Waterford) TS section, "Risk Informed Completion Time [RICT] Program," to reference NRC's Regulatory Guide (RG) 1.200, Revision 3, instead of RG 1.200, Revision 2, and to make other changes. Additionally, a new report would be added to the "Reporting Requirements" TS section, to inform the NRC of newly developed methods used to calculate a RICT. The proposed changes are consistent with Technical Specifications Task Force (TSTF) Traveler, TSTF–591, "Revise Risk Informed Completion Time (RICT) Program," Revision 0.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's monthly *Federal Register* notice.

Sincerely,

/RA/

Michael Mahoney, Project Manager Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-313, 50-368, 50-416, 50-458, 50-382

Enclosures:

- 1. Amendment No. 283 to DPR-51
- 2. Amendment No. 336 to NPF-6
- 3. Amendment No. 238 to NPF-29
- 4. Amendment No. 218 to NPF-47
- 5. Amendment No. 275 to NPF-38
- 6. Safety Evaluation

cc: Listserv



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

ENTERGY OPERATIONS, INC.

DOCKET NO. 50-313

ARKANSAS NUCLEAR ONE, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 283
Renewed License No. DPR-51

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Operations, Inc. (the licensee), dated January 27, 2025, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.c.(2) of Renewed Facility Operating License No. DPR-51 is hereby amended to read as follows:

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 283, are hereby incorporated in the renewed license. EOI shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of its date of issuance and shall be implemented within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Tony Nakanishi, Chief Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment:

Changes to Renewed Facility
Operating License No. DPR-51
and the Technical Specifications

Date of Issuance: July 29, 2025

ATTACHMENT TO LICENSE AMENDMENT NO. 283

RENEWED FACILITY OPERATING LICENSE NO. DPR-51

ARKANSAS NUCLEAR ONE, UNIT 1

DOCKET NO. 50-313

Replace the following pages of Renewed Facility Operating License No. DPR-51 and the Appendix A, Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Renewed Facility Operating License

REMOVE	<u>INSERT</u>
3	3

Technical Specifications

<u>REMOVE</u>	<u>INSERT</u>
5.0-20a	5.0-20a
5.0-23a	5.0-23a

- (5) EOI, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;
- (6) EOI, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- c. This renewed license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) <u>Maximum Power Level</u>

EOI is authorized to operate the facility at steady state reactor core power levels not in excess of 2568 megawatts thermal.

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 283, are hereby incorporated in the renewed license. EOI shall operate the facility in accordance with the Technical Specifications.

(3) Safety Analysis Report

The licensee's SAR supplement submitted pursuant to 10 CFR 54.21(d), as revised on March 14, 2001, describes certain future inspection activities to be completed before the period of extended operation. The licensee shall complete these activities no later than May 20, 2014.

(4) Physical Protection

EOI shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans, including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Arkansas Nuclear One Physical Security Plan, Training and Qualifications Plan, and Safeguards Contingency Plan," as submitted on May 4, 2006.

Renewed License No. DPR-51 Amendment No. 283 Revised by letter dated July 18, 2007

5.0 ADMINISTRATIVE CONTROLS

5.5 Programs and Manuals

- c. When a RICT is being used, any change to the plant configuration, as defined in NEI 06-09-A, Appendix A, must be considered for the effect on the RICT.
 - 1. For planned changes, the revised RICT must be determined prior to implementation of the change in configuration.
 - For emergent conditions, the revised RICT must be determined within the time limits of the Required Action Completion Time (i.e., not the RICT) or 12 hours after the plant configuration change, whichever is less.
 - 3. Revising the RICT is not required If the plant configuration change would lower plant risk and would result in a longer RICT.
- d. For emergent conditions, if the extent of condition evaluation for inoperable structures, systems, or components (SSCs) is not complete prior to exceeding the Completion Time, the RICT shall account for the increased possibility of common cause failure (CCF) by either:
 - 1. Numerically accounting for the increased possibility of CCF in the RICT calculation; or
 - Risk Management Actions (RMAs) not already credited in the RICT calculation shall be implemented that support redundant or diverse SSCs that perform the function(s) of the inoperable SSCs, and, if practicable, reduce the frequency of initiating events that challenge the function(s) performed by the inoperable SSCs.
- e. A RICT calculation must include the following hazard groups: internal flood and internal events using a PRA model, internal fires using a PRA model, seismic hazards using penalty factors, and configuration specific extreme winds and tornado hazards using penalty factors. Changes to these means of assessing the hazard groups require prior NRC approval.
- f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."
- g. A report shall be submitted in accordance with Specification 5.6.8 before a newly developed method is used to calculate a RICT.

5.0 ADMINISTRATIVE CONTROLS

5.6 Reporting Requirements

- e. The number and percentage of tubes plugged to date, and the effective plugging percentage in each SG; and
- f. The results of any SG secondary side inspections.

5.6.8 Risk Informed Completion Time (RICT) Program Upgrade Report

A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT. The report shall include:

- a. The PRA models upgraded to include newly developed methods;
- b. A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"
- c. Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and
- d. All changes to key assumptions related to newly developed methods or their implementation.



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

ENTERGY OPERATIONS, INC.

DOCKET NO. 50-368

ARKANSAS NUCLEAR ONE, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 336 Renewed License No. NPF-6

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Operations, Inc. (the licensee), dated January 27, 2025, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-6 is hereby amended to read as follows:

(2) **Technical Specifications**

The Technical Specifications contained in Appendix A, as revised through Amendment No. 336, are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications

3. The license amendment is effective as of its date of issuance and shall be implemented within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Tony Nakanishi, Chief Plant Licensing Branch IV **Division of Operating Reactor Licensing** Office of Nuclear Reactor Regulation

Attachment: Changes to Renewed Facility Operating License No. NPF-6 and the Technical Specifications

Date of Issuance: July 29, 2025

ATTACHMENT TO LICENSE AMENDMENT NO. 336

RENEWED FACILITY OPERATING LICENSE NO. NPF-6

ARKANSAS NUCLEAR ONE, UNIT 2

DOCKET NO. 50-368

Replace the following pages of Renewed Facility Operating License No. NPF-6 and the Appendix A, Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Renewed Facility Operating License

<u>REMOVE</u>	<u>INSERT</u>
3	3

Technical Specifications

<u>REMOVE</u>	<u>INSERT</u>
6-18c	6-18c
6-22a	6-22a

- (4) EOI, pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) EOI, pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (6) EOI, pursuant to the Act and 10 CFR Parts 30 and 70 to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This renewed license shall be deemed to contain and is subject to conditions specified in the following Commission regulations in 10 CFR Chapter I; Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) <u>Maximum Power Level</u>

EOI is authorized to operate the facility at steady state reactor core power levels not in excess of 3026 megawatts thermal. Prior to attaining this power level EOI shall comply with the conditions in Paragraph 2.C.(3).

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 336, are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications.

Exemptive 2nd paragraph of 2.C.2 deleted per Amendment 20, 3/3/81.

(3) Additional Conditions

The matters specified in the following conditions shall be completed to the satisfaction of the Commission within the stated time periods following issuance of the renewed license or within the operational restrictions indicated. The removal of these conditions shall be made by an amendment to the renewed license supported by a favorable evaluation by the Commission.

2.C.(3)(a) Deleted per Amendment 24, 6/19/81.

6.5.20 Risk Informed Completion Time Program (continued)

- c. When a RICT is being used, any change to the plant configuration, as defined in NEI 06-09-A, Appendix A, must be considered for the effect on the RICT.
 - 1. For planned changes, the revised RICT must be determined prior to implementation of the change in configuration.
 - For emergent conditions, the revised RICT must be determined within the time limits of the Required Action Completion Time (i.e., not the RICT) or 12 hours after the plant configuration change, whichever is less.
 - 3. Revising the RICT is not required If the plant configuration change would lower plant risk and would result in a longer RICT.
- d. For emergent conditions, if the extent of condition evaluation for inoperable structures, systems, or components (SSCs) is not complete prior to exceeding the Completion Time, the RICT shall account for the increased possibility of common cause failure (CCF) by either:
 - 1. Numerically accounting for the increased possibility of CCF in the RICT calculation; or
 - Risk Management Actions (RMAs) not already credited in the RICT calculation shall be implemented that support redundant or diverse SSCs that perform the function(s) of the inoperable SSCs, and, if practicable, reduce the frequency of initiating events that challenge the function(s) performed by the inoperable SSCs.
- e. A RICT calculation must include the following hazard groups: internal flood and internal events using a PRA model, internal fires using a PRA model, seismic hazards using penalty factors, and configuration specific extreme winds and tornado hazards using penalty factors. Changes to these means of assessing the hazard groups require prior NRC approval.
- f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."
- g. A report shall be submitted in accordance with Specification 6.6.9 before a newly developed method is used to calculate a RICT.

6.6.8 Specific Activity

The results of specific activity analysis in which the primary coolant exceeded the limits of Specification 3.4.8. The following information shall be included: (1) Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded; (2) Results of the last isotopic analysis for radioiodine performed prior to exceeding the limit, results of analysis while limit was exceeded the results of one analysis after the radioiodine activity was reduced to less than limit. Each result should include date and time of sampling and the radioiodine concentrations; (3) Clean-up system flow history starting 48 hours prior to the first sample in which the limit was exceeded; (4) Graph of the I-131 concentration and one other radioiodine isotope concentration in microcuries per gram as a function of time for the duration of the specific activity above the steady-state level; and (5) The time duration when the specific activity of the primary coolant exceeded the radioiodine limit.

6.6.9 Risk Informed Completion Time (RICT) Program Upgrade Report

A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT. The report shall include:

- a. The PRA models upgraded to include newly developed methods;
- A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"
- c. Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and
- d. All changes to key assumptions related to newly developed methods or their implementation



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

ENTERGY OPERATIONS, INC.

SYSTEM ENERGY RESOURCES, INC.

COOPERATIVE ENERGY, A MISSISSIPPI ELECTRIC COOPERATIVE

ENTERGY MISSISSIPPI, LLC

DOCKET NO. 50-416

GRAND GULF NUCLEAR STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 238
Renewed License No. NPF-29

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Operations, Inc. (the licensee), dated January 27, 2025, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-29 is hereby amended to read as follows:

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 238 are hereby incorporated into this renewed license. Entergy Operations, Inc. shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Tony Nakanishi, Chief Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-29 and
the Technical Specifications

Date of Issuance: July 29, 2025

ATTACHMENT TO LICENSE AMENDMENT NO. 238

RENEWED FACILITY OPERATING LICENSE NO. NPF-29

GRAND GULF NUCLEAR STATION, UNIT 1

DOCKET NO. 50-416

Replace the following page of Renewed Facility Operating License No. NPF-29 and the Appendix A, Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Facility Operating License

<u>REMOVE</u>	<u>INSERT</u>
-4-	-4-

Technical Specifications

<u>REMOVE</u>	<u>INSERT</u>
5.0-16c	5.0-16c
5.0 - 21a	5.0-21a
-	5.0-21b

amended, are fully applicable to the lessors and any successors in interest to those lessors, as long as the renewed license of GGNS Unit 1 remains in effect.

- (b) SERI is required to notify the NRC in writing prior to any change in (i) the terms or conditions of any new or existing sale or lease agreements executed as part of the above authorized financial transactions, (ii) the GGNS Unit 1 operating agreement, (iii) the existing property insurance coverage for GGNS Unit 1 that would materially alter the representations and conditions set forth in the Staff's Safety Evaluation Report dated December 19, 1988 attached to Amendment No. 54. In addition, SERI is required to notify the NRC of any action by a lessor or other successor in interest to SERI that may have an effect on the operation of the facility.
- C. The renewed license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) <u>Maximum Power Level</u>

Entergy Operations, Inc. is authorized to operate the facility at reactor core power levels not in excess of 4408 megawatts thermal (100 percent power) in accordance with the conditions specified herein.

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 238 are hereby incorporated into this renewed license. Entergy Operations, Inc. shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

During Cycle 19, GGNS will conduct monitoring of the Oscillation Power Range Monitor (OPRM). During this time, the OPRM Upscale function (Function 2.f of Technical Specification Table 3.3.1.1-1) will be disabled and operated in an "indicate only" mode and technical specification requirements will not apply to this function. During such time, Backup Stability Protection measures will be implemented via GGNS procedures to provide an alternate method to detect and suppress reactor core thermal hydraulic instability oscillations. Once monitoring has been successfully completed, the OPRM Upscale function will be enabled and technical specification requirements will be applied to the function; no further operating with this function in an "indicate only" mode will be conducted.

4

5.5 Programs and Manuals

5.5.14 <u>Risk Informed Completion Time Program (continued)</u>

- c. When a RICT is being used, any change to the plant configuration, as defined in NEI 06-09-A, Appendix A, must be considered for the effect on the RICT.
 - 1. For planned changes, the revised RICT must be determined prior to implementation of the change in configuration.
 - For emergent conditions, the revised RICT must be determined within the time limits of the Required Action Completion Time (i.e., not the RICT) or 12 hours after the plant configuration change, whichever is less.
 - 3. Revising the RICT is not required if the plant configuration change would lower plant risk and would result in a longer RICT.
- d. For emergent conditions, if the extent of condition evaluation for inoperable structures, systems, or components (SSCs) is not complete prior to exceeding the Completion Time, the RICT shall account for the increased possibility of common cause failure (CCF) by either:
 - 1. Numerically accounting for the increased possibility of CCF in the RICT calculation; or
 - Risk Management Actions (RMAs) not already credited in the RICT calculation shall be implemented that support redundant or diverse SSCs that perform the function(s) of the inoperable SSCs, and, if practicable, reduce the frequency of initiating events that challenge the functions(s) performed by the inoperable SSCs.
- e. A RICT calculation must include the following hazard groups: internal flood and internal events using a PRA model, internal fires using a PRA model, and seismic hazards using penalty factors. Changes to these means of assessing the hazard groups require prior NRC approval.
- f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."
- g. A_report shall be submitted in accordance with Specification 5.6.8 before a newly developed method is used to calculate a RICT.

5.6 Reporting Requirements

5.6.6 Reactor Coolant System (RCS) Pressure and Temperature Limits Report (PTLR)

- a. RCS pressure and temperature limits for heatup, cooldown, low temperature operation, criticality, and hydrostatic testing as well as heatup and cooldown rates shall be established and documented in the PTLR for the following:
 - i) Limiting Conditions for Operations Section 3.4.11, "RCS Pressure and Temperature (P/T) Limits"
 - ii) Surveillance Requirements Section 3.4.11, "RCS Pressure and Temperature (P/T) Limits"
- b. The analytical methods used to determine the RCS pressure and temperature limits shall be those previously reviewed and approved by the NRC, specifically those described in the following document:
 - NEDC-33178P-A, "GE Hitachi Nuclear Energy Methodology for Development of Reactor Pressure Vessel Temperature Curves" Revision 1, June 2009
- c. The PTLR shall be provided to the NRC upon issuance for each reactor vessel fluence period and for any revision or supplement thereto.

5.6.7 Oscillation Power Range Monitor (OPRM) Report

When an OPRM report is required by CONDITION J of LCO 3.3.1.1, "RPS Instrumentation," it shall be submitted within the following 90 days. The report shall outline the preplanned means to provide backup stability protection, the cause of the inoperability, and the plans and schedule for restoring the required instrumentation channels to OPERABLE status.

5.6.8 Risk Informed Completion Time (RICT) Program Upgrade Report

A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT. The report shall include:

- a. The PRA models upgraded to include newly developed methods;
- A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"

(continued)

5.6 Reporting Requirements

5.6.8 Risk Informed Completion Time (RICT) Program Upgrade Report (continued)

- c. Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; _and
- d. All changes to key assumptions related to newly developed methods or their implementation.



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

ENTERGY LOUISIANA, LLC

AND

ENTERGY OPERATIONS, INC.

DOCKET NO. 50-458

RIVER BEND STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 218 Renewed License No. NPF-47

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Operations, Inc. (the licensee), dated January 27, 2025, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-47 is hereby amended to read as follows:
 - (2) <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 218 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. EOI shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance and shall be implemented within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Tony Nakanishi, Chief Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility Operating
License No. NPF-47 and the
Technical Specifications

Date of Issuance: July 29, 2025

ATTACHMENT TO LICENSE AMENDMENT NO. 218

RENEWED FACILITY OPERATING LICENSE NO. NPF-47

RIVER BEND STATION, UNIT 1

DOCKET NO. 50-458

Replace the following pages of Renewed Facility Operating License No. NPF-47 and the Appendix A, Technical Specifications, with the attached revised pages. The revised pages are identified by Amendment number and contain marginal lines indicating the areas of change.

Facility Operating License

Remove	<u>Insert</u>	
-3-	-3-	

Technical Specifications

<u>Remove</u>	<u>Insert</u>
5.0-16c	5.0-16c
5.0-19	5.0-19

- (2) EOI, pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use and operate the facility at the above designated location in accordance with the procedures and limitations set forth in this renewed license;
- (3) EOI, pursuant to Section 103 of the Act and 10 CFR Part 70, to receive, possess and to use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- (4) EOI, pursuant to Section 103 of the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) EOI, pursuant to Section 103 of the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (6) EOI, pursuant to Section 103 of the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- (7) EOI, pursuant to the Act and 10 CFR Part 30, 40, and 70 to receive, possess and use, in amounts as required, such byproduct and special nuclear materials as may be produced by the operation of Arkansas Nuclear One, Units 1 and 2, Grand Gulf Nuclear Station, Unit 1, River Bend Station, Unit 1, and Waterford Steam Electric Station, Unit 3, without restriction to chemical or physical form for the purposes of sample analysis, equipment calibration, or equipment repair.
- C. This renewed license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) <u>Maximum Power Level</u>

EOI is authorized to operate the facility at reactor core power levels not in excess of 3091 megawatts thermal (100% rated power) in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 218 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. EOI shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

5.5.16 <u>Risk Informed Completion Time Program (continued)</u>

- c. When a RICT is being used, any change to the plant configuration, as defined in NEI 06-09-A, Appendix A, must be considered for the effect on the RICT.
 - 1. For planned changes, the revised RICT must be determined prior to implementation of the change in configuration.
 - For emergent conditions, the revised RICT must be determined within the time limits of the Required Action Completion Time (i.e., not the RICT) or 12 hours after the plant configuration change, whichever is less.
 - 3. Revising the RICT is not required if the plant configuration change would lower plant risk and would result in a longer RICT.
- d. For emergent conditions, if the extent of condition evaluation for inoperable structures, systems, or components (SSCs) is not complete prior to exceeding the Completion Time, the RICT shall account for the increased possibility of common cause failure (CCF) by either:
 - 1. Numerically accounting for the increased possibility of CCF in the RICT calculation; or
 - 2. Risk Management Actions (RMAs) not already credited in the RICT calculation shall be implemented that support redundant or diverse SSCs that perform the function(s) of the inoperable SSCs, and, if practicable, reduce the frequency of initiating events that challenge the functions(s) performed by the inoperable SSCs.
- e. A RICT calculation must include the following hazard groups: internal flood and internal events using a PRA model, internal fires using a PRA model, and seismic hazards using penalty factors. Changes to these means of assessing the hazard groups require prior NRC approval.
- f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-informed Activities."
- g. A report shall be submitted in accordance with Specification 5.6.6 before a newly developed method is used to calculate a RICT.

5.6.5 <u>CORE OPERATING LIMITS REPORT (COLR)</u> (continued)

- 24) NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel (GESTAR-II)".
- 25) NEDC-33383P, "GEXL97 Correlation Applicable to ATRIUM-10 Fuel," Global Nuclear Fuel.
- c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.
- d. The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.6.6 <u>Risk Informed Completion Time (RICT) Program Upgrade Report</u>

A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT. The report shall include:

- a. The PRA models upgraded to include newly developed methods;
- A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"
- c. Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and
- d. All changes to key assumptions related to newly developed methods or their implementation.



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

ENTERGY OPERATIONS, INC.

DOCKET NO. 50-382

WATERFORD STEAM ELECTRIC STATION, UNIT 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 275 Renewed License No. NPF-38

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Operations, Inc. (EOI), dated January 27, 2025, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.2 of Facility Operating License No. NPF-38 is hereby amended to read as follows:
 - 2. <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 275, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. EOI shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Tony Nakanishi, Chief Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility Operating
License No. NPF-38 and the
Technical Specifications

Date of Issuance: July 29, 2025

ATTACHMENT TO LICENSE AMENDMENT NO. 275

TO RENEWED FACILITY OPERATING LICENSE NO. NPF-38

WATERFORD STEAM ELECTRIC STATION, UNIT 3

DOCKET NO. 50-382

Replace the following pages of Renewed Facility Operating License No. NPF-38 and the Appendix A, Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Facility Operating License

<u>REMOVE</u>	<u>INSERT</u>
4	4

Technical Specifications

<u>REMOVE</u>	<u>INSERT</u>	
6-10	6-10	
	6-10a	
6-20b	6-20b	

the NRC of any action by equity investors or successors in interest to Entergy Louisiana, LLC that may have an effect on the operation of the facility.

C. This renewed license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

1. Maximum Power Level

EOI is authorized to operate the facility at reactor core power levels not in excess of 3716 megawatts thermal (100% power) in accordance with the conditions specified herein.

2. Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 275, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. EOI shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. Antitrust Conditions

- (a) Entergy Louisiana, LLC shall comply with the antitrust license conditions in Appendix C to this renewed license.
- (b) Entergy Louisiana, LLC is responsible and accountable for the actions of its agents to the extent said agent's actions contravene the antitrust license conditions in Appendix C to this renewed license.

6.5.19 Risk Informed Completion Time Program

This program provides controls to calculate a Risk Informed Completion Time (RICT) and must be implemented in accordance with NEI 06-09-A, Revision 0, "Risk-Managed Technical Specifications (RMTS) Guidelines." The program shall include the following:

- a. The RICT may not exceed 30 days;
- b. A RICT may only be utilized in MODES 1 and 2;
- c. When a RICT is being used, any change to the plant configuration, as defined in NEI 06-09-A, Appendix A, must be considered for the effect on the RICT.
 - 1. For planned changes, the revised RICT must be determined prior to implementation of the change in configuration.
 - 2. For emergent conditions, the revised RICT must be determined within the time limits of the Required Action Completion Time (i.e., not the RICT) or 12 hours after the plant configuration change, whichever is less.
 - 3. Revising the RICT is not required if the plant configuration change would lower plant risk and would result in a longer RICT.
- d. For emergent conditions, if the extent of condition evaluation for inoperable structures, systems, or components (SSCs) is not complete prior to exceeding the Completion Time, the RICT shall account for the increased possibility of common cause failure (CCF) by either:
 - 1. Numerically accounting for the increased possibility of CCF in the RICT calculation; or
 - 2. Risk Management Actions (RMAs) not already credited in the RICT calculation shall be implemented that support redundant or diverse SSCs that perform the function(s) of the inoperable SSCs, and, if practicable, reduce the frequency of initiating events that challenge the function(s) performed by the inoperable SSCs.
- e. A RICT calculation must include the following hazard groups: internal flood and internal events using a PRA model, internal fires using a PRA model, seismic hazards using penalty factors. Changes to these means of assessing the hazard groups require prior NRC approval.
- f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."

6.5.19 Risk Informed Completion Time Program (Continued)

g. A report shall be submitted in accordance with Specification 6.9.3 before a newly developed method is used to calculate a RICT.

CORE OPERATING LIMITS REPORT COLR (Continued)

- 6.9.1.11.2 The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met.
- 6.9.1.11.3 The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance, for each reload cycle, to the NRC.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted in accordance with 10 CFR 50.4 within the time period specified for each report.

RISK INFORMED COMPLETION TIME (RICT) PROGRAM UPGRADE REPORT

- 6.9.3 A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT. The report shall include:
 - a. The PRA models upgraded to include newly developed methods;
 - A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"
 - c. Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and
 - d. All changes to key assumptions related to newly developed methods or their implementation.

6.10 Not Used



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO

AMENDMENT NOS. 283 AND 336 TO RENEWED FACILITY OPERATING LICENSE NOS.

DPR-51 AND NPF-6,

AMENDMENT NO. 238 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-29,

AMENDMENT NO. 218 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-47

AMENDMENT NO. 275 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-38

ENTERGY OPERATIONS, INC.

ARKANSAS NUCLEAR ONE, UNITS 1 AND 2

GRAND GULF NUCLEAR STATION, UNIT 1

RIVER BEND STATION, UNIT 1

WATERFORD STEAM ELECTRIC STATION, UNIT 3

DOCKET NOS. 50-313, 50-368, 50-416, 50-458, AND 50-382

1.0 <u>INTRODUCTION</u>

By letter CNRO2024-00022, dated January 27, 2025 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML25027A421), Entergy Operations Inc. (Entergy, the licensee), submitted a license amendment request (LAR, application), requesting changes to the technical specifications (TSs) for Arkansas Nuclear One (ANO), Units 1 and 2; Grand Gulf Nuclear Station, Unit No. 1 (Grand Gulf); River Bend Station, Unit 1 (River Bend); and Waterford Steam Electric Station, Unit 3 (Waterford 3) (collectively, the Entergy facilities).

The proposed changes would revise the TSs for each facility based on Technical Specifications Task Force (TSTF) Traveler TSTF-591, Revision 0, "Revise Risk-Informed Completion Time (RICT) Program" (ML22081A224), and the associated U.S. Nuclear Regulatory Commission (NRC, the Commission) staff final safety evaluation (SE) of Traveler TSTF-591 (ML23262B230).

The proposed changes would revise the TSs listed in table 1 below for the RICT program, by referencing NRC Regulatory Guide (RG) 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment [PRA] Results for Risk-Informed Activities," Revision 3, December 2020 (ML20238B871), instead of RG 1.200, Revision 2, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment for Risk-Informed Activities," March 2009 (ML090410014). The proposed changes would also add a requirement in the TSs listed in table 2 below for the licensee to submit a report to the NRC before calculating a RICT using a newly developed method (NDM).

Description of Risk-Informed Completion Time Program

The TS limiting conditions for operations (LCOs) are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When an LCO is not met, the licensee must shut down the reactor or follow any remedial or required action (e.g., testing, maintenance, or repair activity) permitted by the TSs until the condition can be met. The remedial actions (i.e., ACTIONS) associated with an LCO contain Conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated Condition are Required Action(s) and Completion Times (CTs). The CTs are referred to as the "front stops" in the context of this SE. For certain Conditions, the TS require exiting the Mode of Applicability of an LCO (e.g., shutdown the reactor).

Topical Report Nuclear Energy Institute (NEI) 06-09, "Risk Informed Technical Specifications Initiative 4b: Risk Managed Technical Specifications (RMTS) Guidelines," Revision 0-A (NEI 06-09-A) (Package ML122860402), provides a methodology for extending existing CTs and thereby delay exiting the operational mode of applicability or taking Required Actions if risk is assessed and managed within the limits and programmatic requirements established by a RICT program.

1.1 Proposed TS Changes to Adopt TSTF-591

TSs for the Risk Informed Completion Time Program

The TSs listed in table 1 below, which describes the RICT program, would be revised. Existing paragraph e would be replaced with the new paragraph e below. New paragraphs f and g would be added.

Table 1: TSs Revised for the RICT Program

Facility	TSs Revised for the RICT Program
ANO Unit 1	TS 5.5.18: "Risk Informed Completion Time Program"
	e. A RICT calculation must include the following hazard groups: internal flood and internal events using a PRA model, internal fires using a PRA model, seismic hazards using penalty factors, and configuration specific extreme winds and tornado hazards using penalty factors. Changes to these means of assessing the hazard groups require prior NRC approval.
	f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."
	g. A report shall be submitted in accordance with Specification 5.6.8 before a newly developed method is used to calculate a RICT.

Facility	TSs Revised for the RICT Program
ANO Unit 2	TS 6.5.20: "Risk Informed Completion Time Program"
	e. A RICT calculation must include the following hazard groups: internal flood and internal events using a PRA model, internal fires using a PRA model, seismic hazards using penalty factors, and configuration specific extreme winds and tornado hazards using penalty factors. Changes to these means of assessing the hazard groups require prior NRC approval.
	f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."
	 g. A report shall be submitted in accordance with Specification 6.6.9 before a newly developed method is used to calculate a RICT.
Grand Gulf	TS 5.5.14: "Risk Informed Completion Time Program"
	e. A RICT calculation must include the following hazard groups: internal flood and internal events using a PRA model, internal fires using a PRA model, and seismic hazards using penalty factors. Changes to these means of assessing the hazard groups require prior NRC approval.
	f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."
	g. A report shall be submitted in accordance with Specification 5.6.8 before a newly developed method is used to calculate a RICT.
River Bend	TS 5.5.16 "Risk Informed Completion Time Program"
	e. A RICT calculation must include the following hazard groups: internal flood and internal events using a PRA model, internal fires using a PRA model, and seismic hazards using penalty factors. Changes to these means of assessing the hazard groups require prior NRC approval.
	f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."
	g. A report shall be submitted in accordance with Specification 5.6.6 before a newly developed method is used to calculate a RICT.

Facility	TSs Revised for the RICT Program		
Waterford 3	TS 6.5.19 "Risk Informed Completion Time Program		
	e. A RICT calculation must include the following hazard groups: internal flood and internal events using a PRA model, internal fires using a PRA model, and seismic hazards using penalty factors. Changes to these means of assessing the hazard groups require prior NRC approval.		
	f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."		
	g. A report shall be submitted in accordance with Specification 6.9.3 before a newly developed method is used to calculate a RICT.		

TS for the Risk Informed Completion Time Program Upgrade Report

Table 2: TSs Added for the RICT Program Upgrade Report

Facility	TS Section	TS Title	
ANO Unit 1	5.6.8		
ANO Unit 2	6.6.9	"Risk Informed Completion Time (RICT) Program	
Grand Gulf	5.6.8	Upgrade Report"	
River Bend	5.6.6		
Waterford 3	6.9.3		

Table 2 above lists the new specification that would be added to each of the facilities as follows:

Risk Informed Completion Time (RICT) Program Upgrade Report

A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT. The report shall include:

- a. The PRA models upgraded to include newly developed methods;
- b. A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"
- Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and
- d. All changes to key assumptions related to newly developed methods or their implementation.

1.2 Additional Proposed TS Changes

In addition to the changes proposed consistent with the traveler discussed in section 1.1, above, the licensee proposed the variation below.

1.2.1 Editorial Variations

The licensee noted that all the facilities TSs listed in table 2, have different numbering than Standard Technical Specifications (STSs).

2.0 REGULATORY EVALUATION

2.1 Applicable Regulatory Requirements

The regulation under Title 10 of the Code of Federal Regulations (CFR) 50.36(b) requires that:

Each license authorizing operation of a ... utilization facility ... will include technical specifications. The technical specifications will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to [10 CFR] 50.34 ["Contents of applications; technical information"]. The Commission may include such additional technical specifications as the Commission finds appropriate.

The categories of items required to be in the TSs are listed in 10 CFR 50.36(c).

The regulation at 10 CFR 50.36(c)(5), states, in part, that "[a]dministrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner."

2.2 Applicable Regulatory Guidance

NRC RGs provide one way to ensure that the regulations continue to be met. The NRC staff considered during its review of the proposed changes, along with industry guidance endorsed by the NRC, the guidance in RG 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities.,"

- NUREG-0800, Revision 3, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition" (SRP):
 - Chapter 19, Section 19.2, "Review of Risk Information Used to Support Permanent Plant-Specific Changes to the Licensing Basis: General Guidance," June 2007 (ML071700658).
 - Chapter 16, Section 16.0, "Technical Specifications," Revision 3, March 2010 (ML100351425). As described therein, as part of the regulatory standardization effort, the NRC staff has prepared STSs for each of the LWR nuclear designs. Accordingly, the NRC staff's review includes consideration of whether the proposed changes are consistent with the applicable STSs, as modified by NRC-approved travelers. The applicable STSs to the facilities are:

- NRC NUREG-1431, "Standard Technical Specifications, Westinghouse Plants,"
 Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21259A155 and ML21259A159, respectively).
- NRC NUREG-1432, "Standard Technical Specifications, Combustion Engineering Plants," Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21258A421 and ML21258A424, respectively).
- NRC NUREG-1433, "Standard Technical Specifications, General Electric, BWR/4 Plants" Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21272A357 and ML21272A358, respectively).
- NRC NUREG-1434, "Standard Technical Specifications, General Electric, BWR/6 Plants" Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21271A582 and ML21271A596, respectively).
- Chapter 16, Section 16.1, Revision 1, "Risk-Informed Decision Making: Technical Specifications," March 2007 (ML070380228).
- NEI 06-09-A, Revision 0, "Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines" (ML063390639), provides guidance for risk-informed TS. The NRC staff issued a final SE approving NEI 06-09 dated May 17, 2007 (ML071200238).
- NEI 17-07, Revision 2, "Performance of PRA Peer Reviews Using the ASME/ANS
 [American Society of Mechanical Engineers/American Nuclear Society] PRA Standard,"
 provides guidance material for conducting and documenting a PRA peer review using the
 ASME/ANS PRA Standard, issued August 2019 (ML19231A182).
- Pressurized Water Reactor Owners' Group (PWROG) Topical Report PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review," establishes the definitions, processes, and technical requirements necessary to implement newly developed methods, issued July 2020 (ML20213C660). RG 1.200, Revision 3, endorsed specified portions of PWROG-19027-NP.

3.0 TECHNICAL EVALUATION

3.1 <u>Proposed TS Changes to Adopt TSTF-591</u>

The NRC staff compared the licensee's proposed TS changes in section 1.1 of this SE against the changes approved in Traveler TSTF-591. The NRC staff finds that the licensee's proposed changes to the Entergy facilities TSs in section 1.1 of this SE are consistent with those found acceptable in Traveler TSTF-591.

In the final SE for Traveler TSTF-591, the NRC staff concluded that the TSTF-591 proposed changes to STS 5.5.20, "Risk Informed Completion Time Program," and the proposed addition of STS 5.6.8, "Risk Informed Completion Time (RICT) Program Upgrade Report," were acceptable. These modifications were acceptable because, as discussed in that SE, they continued to ensure the PRA models used to calculate a RICT are maintained and upgraded by the licensee's appropriate use of endorsed guidance (i.e., the ASME/ANS PRA Standard

requirements, and specific industry guidance that the NRC staff has determined are sufficient for determining the acceptability of PRA models and NDMs for use in the RICT program).

Furthermore, as discussed in the SE, for TSTF-591, the addition of reporting requirements does not preclude any NRC staff oversight of PRA changes performed to ensure the PRA model(s) continue to be maintained and upgraded consistent with RG 1.200, Revision 3. Therefore, the NRC staff found that the proposed changes to the RICT program and addition of the RICT Program Upgrade Report requirements were acceptable because they continued to meet the requirements of 10 CFR 50.36(c)(5) by providing administrative controls necessary to assure operation of the facility in a safe manner. For these same reasons, the NRC staff concludes that the corresponding proposed changes to the Entergy facilities TSs in section 1.1 of this SE continue to meet the requirements of 10 CFR 50.36(c)(5).

3.2 Additional Proposed TS Changes

In addition to the changes proposed consistent with TSTF-591 discussed in section 1.1, the licensee proposed the variations discussed in section 1.2, which are discussed below.

3.2.1 Editorial Variations

The licensee noted that all the facilities TSs listed in Table 2, have different numbering than STSs. The NRC staff finds that the different TS numbering changes proposed in the LAR are acceptable because they do not alter TS requirements.

3.3 TS Change Consistency

The NRC staff reviewed the proposed TS changes for technical clarity and consistency with the existing requirements for customary terminology and formatting. The NRC staff finds that the proposed changes are consistent with Chapter 16.0 of the SRP and are therefore acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, State officials for Arkansas, Louisiana, and Mississippi were notified of the proposed issuance of the amendments on July 16, 2025. The State officials had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to installation or use of facility components located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, published in the *Federal Register* on May 14, 2025 (90 FR 20513), and there has been no public comment on such finding. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: A. Russell, NRR

M. Mahoney, NRR

Date: July 29, 2025

SUBJECT: ARKANSAS NUCLEAR ONE, UNITS 1 AND 2; GRAND GULF NUCLEAR

STATION, UNIT 1; RIVER BEND STATION, UNIT 1; WATERFORD STEAM ELECTRIC STATION, UNIT 3 - ISSUANCE OF AMENDMENTS RELATED TO ADOPTION OF TSTF-591 (EPID NO. L-2025-LLA-0014) DATED JULY 29, 2025

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DATE	07/23/2025	7/24/2025	06/27/2025
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