



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

April 28, 2022

Mr. Ron Gaston
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; AND WATERFORD STEAM ELECTRIC STATION, UNIT 3 – ISSUANCE OF AMENDMENTS RE: REVISE TECHNICAL SPECIFICATIONS TO ADOPT TSTF-541, “ADD EXCEPTIONS TO SURVEILLANCE REQUIREMENTS FOR VALVES AND DAMPERS LOCKED IN THE ACTUATED POSITION” (EPID L-2021-LLA-0166)

Dear Mr. Gaston:

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 September 23, 2021, for Arkansas Nuclear One, Units 1 and 2 (ANO-1 and ANO-2, respectively); Grand Gulf Nuclear Station, Unit 1 (Grand Gulf); River Bend Station, Unit 1 (River Bend); and Waterford Steam Electric Station, Unit 3 (Waterford-3). The following amendments are enclosed:

- Amendment No. 275 to Renewed Facility Operating License No. DPR-51 for ANO-1,
- Amendment No. 329 to Renewed Facility Operating License No. NPF-6 for ANO-2
- Amendment No. 230 to Renewed Facility Operating License No. NPF-29 for Grand Gulf
- Amendment No. 209 to Renewed Facility Operating License No. NPF-47 for River Bend
- Amendment No. 263 to Renewed Facility Operating License No. NPF-38 for Waterford-3

The amendments are based on Technical Specifications Task Force (TSTF) Traveler TSTF-541, Revision 2, “Add Exceptions to Surveillance Requirements for Valves and Dampers Locked in the Actuated Position,” dated August 28, 2019, using the Consolidated Line Item Improvement Process. The NRC issued a Final Safety Evaluation approving TSTF-541 on December 10, 2019.

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/

Siva P. Lingam, 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, and 50-382

Enclosures:

1. Amendment No. 275 to DPR-51
2. Amendment No. 329 to NPF-6
3. Amendment No. 230 to NPF-29
4. Amendment No. 209 to NPF-47
5. Amendment No. 263 to NPF-38
6. Safety Evaluation
7. Notices and Environmental Findings

cc: Listserv



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

ENERGY OPERATIONS, INC.

DOCKET NO. 50-313

ARKANSAS NUCLEAR ONE, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 275
Renewed License No. DPR-51

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Operations, Inc. (EOI), dated September 23, 2021, 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) Technical Specifications

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

3. This 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

Jennifer L. Dixon-Herrity, 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: April 28, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 275

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

3

INSERT

3

Technical Specifications

REMOVE

3.7.9-3

3.7.11-2

INSERT

3.7.9-3

3.7.11-2

- (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) Maximum Power Level
EOI is authorized to operate the facility at steady state reactor core power levels not in excess of 2568 megawatts thermal.
 - (2) Technical Specifications
The Technical Specifications contained in Appendix A, as revised through Amendment No. 275, 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.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.9.1	Operate each CREVS train for ≥ 15 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.7.9.2	Perform required CREVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.9.3	Verify the CREVS automatically isolates the Control Room and switches into a recirculation mode of operation on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.9.4	Perform required CRE unfiltered air leakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.11.1	Operate each PRVS train for ≥ 15 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.7.11.2	Perform required PRVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.11.3	Verify each PRVS train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program



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

ENERGY OPERATIONS, INC.

DOCKET NO. 50-368

ARKANSAS NUCLEAR ONE, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 329
Renewed License No. NPF-6

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Operations, Inc. (the licensee), dated September 23, 2021, 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. 329, are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications

3. This 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

Jennifer L. Dixon-Herrity, 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: April 28, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 329
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

REMOVE
-3-

INSERT
-3-

Technical Specifications

REMOVE
3/4 7-18

INSERT
3/4 7-18

- (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) Maximum Power Level

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) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 329, 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.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

- 4.7.6.1.1 Each control room emergency air conditioning system shall be demonstrated OPERABLE:
- a. In accordance with the Surveillance Frequency Control Program by:
 1. Starting each unit from the control room, and
 2. Verifying that each unit operates for at least 1 hour and maintains the control room air temperature ≤ 84 °F D.B.
 - b. In accordance with the Surveillance Frequency Control Program by verifying a system flow rate of 9900 cfm \pm 10%.
- 4.7.6.1.2 Each control room emergency air filtration system shall be demonstrated OPERABLE:
- a. In accordance with the Surveillance Frequency Control Program by verifying that the system operates for at least 15 minutes.
 - b. In accordance with the Surveillance Frequency Control Program by verifying that on a control room high radiation signal, either actual or simulated, the system automatically isolates the control room and switches into a recirculation mode of operation, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.
 - c. By performing the required Control Room Emergency Ventilation filter testing in accordance with the Ventilation Filter Testing Program (VFTP).
 - d. Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.



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

ENERGY OPERATIONS, INC.

SYSTEM ENERGY RESOURCES, INC.

COOPERATIVE ENERGY, A MISSISSIPPI ELECTRIC COOPERATIVE

ENERGY MISSISSIPPI, LLC

DOCKET NO. 50-416

GRAND GULF NUCLEAR STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 230
Renewed License No. NPF-29

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Operations, Inc., dated September 23, 2021, 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, in part, as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 230 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

Jennifer L. Dixon-Herrity, 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: April 28, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 230

RENEWED FACILITY OPERATING LICENSE NO. NPF-29

GRAND GULF NUCLEAR STATION, UNIT 1

DOCKET NO. 50-416

Replace the following pages 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.

Renewed Facility Operating License

Remove

-4-

Insert

-4-

Technical Specifications

Remove

3.5-5

3.5-9

3.5-12

3.6-23

3.6-51

3.7-4

3.7-5

3.7-8

Insert

3.5-5

3.5-9

3.5-12

3.6-23

3.6-51

3.7-4

3.7-5

3.7-8

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) Maximum Power Level

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) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 230 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.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.5.1.5	<p>-----NOTE----- Vessel injection/spray may be excluded. -----</p> <p>Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	In accordance with the Surveillance Frequency Control Program
SR 3.5.1.6	<p>-----NOTE----- Valve actuation may be excluded. -----</p> <p>Verify the ADS actuates on an actual or simulated automatic initiation signal.</p>	In accordance with the Surveillance Frequency Control Program
SR 3.5.1.7	<p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify each ADS valve relief-mode actuator strokes when manually actuated.</p>	In accordance with the INSERVICE TESTING PROGRAM on a STAGGERED TEST BASIS for each valve solenoid

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.5.2.6	Operate the required ECCS injection/spray subsystem through the test return line for ≥ 10 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.5.2.7	Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated isolation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.5.2.8	<p>-----NOTE----- Vessel injection/spray may be excluded. -----</p> <p>Verify the required LPCI or LPCS subsystem actuates on a manual initiation signal, or the required HPCS System can be manually operated.</p>	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5</p> <p>-----NOTE----- Vessel injection may be excluded. -----</p> <p>Verify the RCIC System actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.6.1.7.1</p> <p>-----NOTE-----</p> <ol style="list-style-type: none"> 1. RHR containment spray subsystems may be considered OPERABLE during alignment and operation for decay heat removal when below the RHR cut in permissive pressure in MODE 3 if capable of being manually realigned and not otherwise inoperable. 2. Not required to be met for system vent flow paths opened under administrative control. <p>-----</p> <p>Verify each RHR containment spray subsystem manual, power operated, and automatic valve in the flow path that is not locked, sealed, or otherwise secured in position is in the correct position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.6.1.7.2</p> <p>Verify RHR containment spray subsystem locations susceptible to gas accumulation are sufficiently filled with water.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.6.1.7.3</p> <p>Verify each RHR pump develops a flow rate of ≥ 7450 gpm on recirculation flow through the associated heat exchanger to the suppression pool.</p>	<p>In accordance with the INSERVICE TESTING PROGRAM</p>
<p>SR 3.6.1.7.4</p> <p>Verify each RHR containment spray subsystem automatic valve in the flow path actuates to its correct position on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

(continued)

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 continuous minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal, except for dampers that are locked, sealed, or otherwise secured in the open position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.7.1.3	Verify each required SSW subsystem manual, power operated, and automatic valve in the flow path servicing safety related systems or components, that is not locked, sealed, or otherwise secured in position, is in the correct position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.1.4	Verify each SSW subsystem actuates on an actual or simulated Initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program

3.7 PLANT SYSTEMS

3.7.2 High Pressure Core Spray (HPCS) Service Water System (SWS)

LCO 3.7.2 The HPCS SWS shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. HPCS SWS inoperable.	A.1 Declare HPCS System inoperable.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.2.1 Verify each required HPCS SWS manual, power operated, and automatic valve in the flow path servicing safety related systems or components, that is not locked, sealed, or otherwise secured in position, is in the correct position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.2.2 Verify the HPCS SWS actuates on an actual or simulated initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.7.3.3	Verify each CRFA subsystem actuates on an actual or simulated initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.3.4	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program



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

ENERGY LOUISIANA, LLC

AND

ENERGY OPERATIONS, INC.

DOCKET NO. 50-458

RIVER BEND STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 209
Renewed License No. NPF-47

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Operations, Inc. (EOI), dated September 23, 2021, 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) Technical Specifications and Environmental Protection Plan

- The Technical Specifications contained in Appendix A, as revised through Amendment No. 209 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

Jennifer L. Dixon-Herrity, 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: April 28, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 209

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.

Renewed Facility Operating License

Remove

-3-

Insert

-3-

Technical Specifications

Remove

3.5-5

3.5-9

3.5-12

3.6-52

3.7-4

3.7-7

Insert

3.5-5

3.5-9

3.5-12

3.6-52

3.7-4

3.7-7

- (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.

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) Maximum Power Level

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. 209 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.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.5.1.5	<p>-----NOTE----- Vessel injection/spray may be excluded. -----</p> <p>Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	In accordance with the Surveillance Frequency Control Program
SR 3.5.1.6	<p>-----NOTE----- Valve actuation may be excluded. -----</p> <p>Verify the ADS actuates on an actual or simulated automatic initiation signal.</p>	In accordance with the Surveillance Frequency Control Program
SR 3.5.1.7	<p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify each ADS valve relief mode actuator strokes when manually actuated.</p>	In accordance with the Inservice Testing Program on a STAGGERED TEST BASIS for each valve solenoid

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.2.5</p> <p>-----NOTES-----</p> <p>1. Operation may be through the test return line. 2. Credit may be taken for normal system operation to satisfy this SR.</p> <p>-----</p> <p>Operate the required ECCS injection/spray subsystem for ≥ 10 minutes.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.2.6</p> <p>Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated actuation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.2.7</p> <p>-----NOTE-----</p> <p>Vessel injection/spray may be excluded.</p> <p>-----</p> <p>Verify the required ECCS injection/spray subsystem can be manually operated.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5</p> <p>-----NOTE----- Vessel injection may be excluded. -----</p> <p>Verify the RCIC System actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 continuous minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal, except for dampers that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.4	Verify each SGT filter cooling bypass damper can be opened and the fan started, except for dampers that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.7.1.3	Operate each cooling tower fan cell for ≥ 15 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.7.1.4	Verify each required SSW subsystem manual, power operated, and automatic valve in the flow path servicing safety related systems or components, that is not locked, sealed, or otherwise secured in position, is in the correct position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.1.5	Verify each SSW subsystem actuates on an actual or simulated initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>F. Two CRFA subsystems inoperable during movement of recently irradiated fuel assemblies in the primary containment or fuel building.</p> <p><u>OR</u></p> <p>One or more CRFA subsystems inoperable due to inoperable CRE boundary during movement of recently irradiated fuel assemblies in the primary containment or fuel building.</p>	<p>F.1 Suspend movement of recently irradiated fuel assemblies in the primary containment and fuel building.</p>	<p>Immediately</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.2.1 Operate each CRFA subsystem for ≥ 15 continuous minutes.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.7.2.2 Perform required CRFA filter testing in accordance with the Ventilation Filter Testing Program (VFTP).</p>	<p>In accordance with the VFTP</p>
<p>SR 3.7.2.3 Verify each CRFA subsystem actuates on an actual or simulated initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

(continued)



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

ENERGY OPERATIONS, INC.

DOCKET NO. 50-382

WATERFORD STEAM ELECTRIC STATION, UNIT 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 263
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 September 23, 2021, 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-38 is hereby amended to read as follows:

2. Technical Specifications and Environmental Protection Plan

- The Technical Specifications contained in Appendix A, as revised through Amendment No. 263, 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

Jennifer L. Dixon-Herrity, 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: April 28, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 263

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.

Renewed Facility Operating License

REMOVE

INSERT

-4-

-4-

Technical Specifications

REMOVE

INSERT

3/4 6-38

3/4 6-38

3/4 7-20

3/4 7-20

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. 263, 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.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

1. Verifying that the ventilation system satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 10,000 cfm \pm 10%.
 2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, shows the methyl iodide penetration less than 0.5% when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and a relative humidity of 70%.
 3. Verifying a system flow rate of 10,000 cfm \pm 10% during system operation when tested in accordance with ANSI N510-1975.
- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, shows the methyl iodide penetration less than 0.5% when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and a relative humidity of 70%.
- d. In accordance with the Surveillance Frequency Control Program by:
1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 7.8 inches water gauge while operating the system at a flow rate of 10,000 cfm \pm 10%.
 2. Verifying that the system starts on a safety injection actuation test signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.
 3. Verifying that the filter cooling bypass valves can be opened, except for valves that are locked, sealed, or otherwise secured in the open position.
 4. Verifying that each system produces a negative pressure of greater than or equal to 0.25 inch water gauge in the annulus within 1 minute after a start signal.
 5. Verifying that the heaters dissipate 60 \pm 6.0, -6.0 kW when tested in accordance with ANSI N510-1975.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, shows the methyl iodide penetration less than 0.5% when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and a relative humidity of 70%.
- d. In accordance with the Surveillance Frequency Control Program by:
 - 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 7.8 inches water gauge while operating the system at a flow rate of 3000 cfm \pm 10%.
 - 2. Verifying that the system starts on a Safety Injection Actuation Test Signal and achieves and maintains a negative pressure of \geq 0.25 inch water gauge within 45 seconds, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.
 - 3. Verifying that the filter cooling bypass valves can be opened, except for valves that are locked, sealed, or otherwise secured in the open position.
 - 4. Verifying that the heaters dissipate 20 + 2.0, -2.0 kW when tested in accordance with ANSI N510-1975.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.95% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 3000 cfm \pm 10%.
- f. After each complete or partial replacement of a charcoal absorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.95% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 3000 cfm \pm 10%.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO
AMENDMENT NO. 275 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-51
AMENDMENT NO. 329 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-6
AMENDMENT NO. 230 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-29
AMENDMENT NO. 209 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-47
AMENDMENT NO. 263 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

<u>Application</u> <ul style="list-style-type: none"> • September 23, 2021, ADAMS Accession No. ML21266A161 	<u>Safety Evaluation Date</u> April 28, 2022
	<u>Principal Contributor to Safety Evaluation</u> <ul style="list-style-type: none"> • Josh Wilson

1.0 PROPOSED CHANGES

Entergy Operations, Inc. (Entergy, the licensee) requested changes to the technical specifications (TSs) for Arkansas Nuclear One, Units 1 and 2 (ANO-1 and ANO-2, respectively); Grand Gulf Nuclear Station, Unit 1 (Grand Gulf); River Bend Station, Unit 1 (River Bend); and Waterford Steam Electric Station, Unit 3 (Waterford-3) by a license amendment request (LAR). In its LAR, the licensee requested that the U.S. Nuclear Regulatory Commission (NRC, the Commission) process the proposed amendments under the Consolidated Line Item Improvement Process. The proposed amendments are based on Technical Specifications Task Force (TSTF) Traveler TSTF-541, Revision 2, "Add Exceptions to Surveillance Requirements for Valves and Dampers Locked in the Actuated Position," dated August 28, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19240A315), and the associated NRC staff's final safety evaluation (SE) of TSTF-541 dated December 10, 2019 (ADAMS Accession No. ML19323E926).

Limiting conditions for operation (LCOs) in the TSs identify the lowest functional capability or performance level of equipment required for safe operation of the facility. Surveillance

requirements (SRs) are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the LCOs will be met. Several existing SRs require the licensee to verify that each train of specified trains actuates on an actual or simulated actuation signal. When the trains actuate, valves and dampers within the trains will, if needed, reposition to their "actuated" position, which is the position appropriate to respond to the transient or accident that caused the actuation. The proposed amendments would eliminate the need to verify that a damper or valve has repositioned if the damper or valve is secured in its actuated position by adding a phrase to each SR described in Section 1.2 of this SE.

Section 1.1 of the NRC staff's final SE for TSTF-541 discusses the reason for the proposed changes.

1.1 System Descriptions

ANO-1

The control room emergency ventilation system (CREVS) provides a protected environment from which occupants can control the unit following an uncontrolled release of radioactivity, hazardous chemicals, or smoke. The purpose of SR 3.7.9.3 is to verify that each train/subsystem starts and operates on an actual or simulated actuation signal.

The penetration room ventilation system (PRVS) filters air from the area of the active emergency core cooling system (ECCS) components during the recirculation phase of a loss-of-coolant accident (LOCA). Ductwork, valves or dampers, and instrumentation also form part of the PRVS. During emergency operations, the PRVS dampers are realigned, and fans are started to begin filtration. Upon receipt of the actuation signal(s), normal air discharges from the negative pressure area are isolated, and the stream of ventilation air is discharged through the system filter trains. The prefilters remove any large particles in the air, and any entrained water droplets present, to prevent excessive loading of the high-efficiency particulate air (HEPA) filters and charcoal adsorbers. The purpose of SR 3.7.11.3 is to verify proper actuation of all train components, including dampers, on an actual or simulated actuation signal.

ANO-2

The control room emergency ventilation and air conditioning system provides a protected environment from which occupants can control the unit following an uncontrolled release of radioactivity, hazardous chemicals, or smoke. The purpose of SR 4.7.6.1.2.b is to verify that each train/subsystem starts and operates on an actual or simulated actuation signal.

Grand Gulf

The ECCS is designed to limit the release of radioactive materials to the environment following a LOCA and consists of the high pressure core spray (HPCS) system, the low pressure core spray (LPCS) system, the low pressure coolant injection (LPCI) mode of the residual heat removal (RHR) system, and the automatic depressurization system. The purpose of SR 3.5.1.5 is to verify the automatic initiation logic of HPCS, LPCS, and LPCI will cause the systems or subsystems to operate as designed, including actuation of the system throughout its emergency operating sequence, automatic pump startup, and actuation of all automatic valves to their required positions on receipt of an actual or simulated actuation signal.

The reactor pressure vessel (RPV) contains penetrations below the top of the active fuel (TAF) that have the potential to drain the reactor coolant inventory to below the TAF. If the water level should drop below the TAF, the ability to remove decay heat is reduced. Reduced decay heat removal could lead to elevated cladding temperatures and clad perforation. The purpose of SR 3.5.2.7 is to verify that each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated RPV water level isolation signal. This is required to prevent RPV water inventory from dropping below the TAF, should an unexpected draining event occur.

The function of the reactor core isolation cooling (RCIC) system is to respond to transient events by providing makeup coolant to the reactor. The purpose of SR 3.5.3.5 is to verify the system operates as designed, including actuation of the system throughout its emergency operating sequence; that is, automatic pump startup and actuation of all automatic valves to their required positions on receipt of an actual or simulated actuation signal.

The RHR containment spray system is designed to mitigate the effects of primary containment bypass leakage and low-energy line breaks. The purpose of SR 3.6.1.7.4 is to verify that each RHR containment spray subsystem automatic valve actuates to its correct position upon receipt of an actual or simulated automatic actuation signal.

The function of the standby gas treatment (SGT) system is to ensure that radioactive materials that leak from the primary containment into the secondary containment following a design-basis accident (DBA) are filtered and adsorbed prior to exhausting to the environment. The purpose of SR 3.6.4.3.3 is to verify that each SGT subsystem starts on receipt of an actual or simulated initiation signal.

The standby service water (SSW) system and ultimate heat sink are designed to provide cooling water for the removal of heat from equipment, such as the diesel generators, RHR pump coolers and heat exchangers, and room coolers for ECCS equipment, required for a safe reactor shutdown following a DBA or transient. The SSW system also provides cooling to unit components, as required, during normal shutdown and reactor isolation modes. During a DBA, the equipment required only for normal operation is isolated and cooling is directed to only safety-related equipment. The purpose of SR 3.7.1.4 is to verify the systems will automatically switch to the position to provide cooling water exclusively to safety-related equipment during an accident.

The HPCS service water system (SWS) provides cooling water for the removal of heat from components of the Division 3 HPCS system. The purpose of SR 3.7.2.2 is to verify that the automatic valves of the HPCS SWS will automatically switch to the safety or emergency position to provide cooling water exclusively to the safety-related equipment on an actual or simulated initiation signal.

The control room fresh air (CRFA) system provides a protected environment from which occupants can control the unit following an uncontrolled release of radioactivity, hazardous chemicals, or smoke. The purpose of SR 3.7.3.3 is to verify that each train/subsystem starts and operates on an actual or simulated actuation signal.

River Bend

The ECCS is designed to limit the release of radioactive materials to the environment following a LOCA and consists of the HPCS system, LPCS system, the LPCI mode of the RHR system,

and the automatic depressurization system. The purpose of SR 3.5.1.5 is to verify the automatic initiation logic of HPCS, LPCS, and LPCI will cause the systems or subsystems to operate as designed, including actuation of the system throughout its emergency operating sequence, automatic pump startup, and actuation of all automatic valves to their required positions on receipt of an actual or simulated actuation signal.

The RPV contains penetrations below the TAF that have the potential to drain the reactor coolant inventory to below the TAF. If the water level should drop below the TAF, the ability to remove decay heat is reduced. Reduced decay heat removal could lead to elevated cladding temperatures and clad perforation. The purpose of SR 3.5.2.6 is to verify that each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated RPV water level isolation signal. This is required to prevent RPV water inventory from dropping below the TAF, should an unexpected draining event occur.

The function of the RCIC system is to respond to transient events by providing makeup coolant to the reactor. The purpose of SR 3.5.3.5 is to verify the system operates as designed, including actuation of the system throughout its emergency operating sequence; that is, automatic pump startup and actuation of all automatic valves to their required positions on receipt of an actual or simulated actuation signal.

The function of the SGT system is to ensure that radioactive materials that leak from the primary containment into the secondary containment following a DBA are filtered and adsorbed prior to exhausting to the environment. The purpose of SR 3.6.4.3.3 is to verify that each SGT subsystem starts on receipt of an actual or simulated initiation signal. The purpose of SR 3.6.4.3.4 is to verify that the filter cooler bypass damper can be opened, and the fan started. This ensures that the ventilation mode of SGT system operation is available.

The SSW system and ultimate heat sink are designed to provide cooling water for the removal of heat from equipment, such as the diesel generators, RHR pump coolers and heat exchangers, and room coolers for ECCS equipment, required for a safe reactor shutdown following a DBA or transient. The SSW system also provides cooling to unit components, as required, during normal shutdown and reactor isolation modes. During a DBA, the equipment required only for normal operation is isolated and cooling is directed to only safety-related equipment. The purpose of SR 3.7.1.5 is to verify the systems will automatically switch to the position to provide cooling water exclusively to safety-related equipment during an accident.

The CRFA system provides a protected environment from which occupants can control the unit following an uncontrolled release of radioactivity, hazardous chemicals, or smoke. The purpose of SR 3.7.2.3 is to verify that each train/subsystem starts and operates on an actual or simulated actuation signal.

Waterford-3

The shield building ventilation system is required to ensure that radioactive materials that leak from the primary containment into the shield building (secondary containment) following a DBA are filtered and adsorbed prior to exhausting to the environment. The containment has a secondary containment called the shield building, which is a concrete structure that surrounds the steel primary containment vessel. Between the containment vessel and the shield building inner wall is an annular space that collects any containment leakage that may occur following a LOCA. The shield building ventilation system establishes a negative pressure in the annulus between the shield building and the steel containment vessel. Filters in the system then control

the release of radioactive contaminants to the environment. The shield building ventilation system consists of two separate and redundant trains. Each train includes a heater, cooling coils, prefilter, moisture separators, HEPA filter, an activated charcoal adsorber section for removal of radioiodines, and a fan. Ductwork, valves and/or dampers, and instrumentation also form part of the system. The system initiates and maintains a negative air pressure in the shield building by means of filtered exhaust ventilation of the shield building following receipt of a safety injection signal. The purpose of SR 4.6.6.1.d.2 is to verify proper actuation of all train components, including dampers, on an actual or simulated actuation signal. The purpose of SR 4.6.6.1.d.3 is to ensure that the system is functioning properly by operating the filter bypass damper.

The controlled ventilation area system, in conjunction with other normally operating systems, provides environmental control of temperature and humidity in the ECCS pump room area and the lower reaches of the auxiliary building. The controlled ventilation area system also filters air from the penetration area between containment and the auxiliary building. The controlled ventilation area system consists of two independent and redundant trains. Each train consists of a heater, prefilter or demister, HEPA filter, an activated charcoal adsorber section for removal of gaseous activity (principally iodines), and a fan. Ductwork, valves or dampers, and instrumentation, and demisters, functioning to reduce the relative humidity of the air stream, also form part of the system. During emergency operations, the controlled ventilation area system dampers are realigned, and fans are started to begin filtration. Upon receipt of the actuating engineered safety features actuation system signal(s), normal air discharges from the ECCS pump room are isolated, and the stream of ventilation air is discharged through the system filter trains. The prefilters or demisters remove any large particles in the air, and any entrained water droplets present, to prevent excessive loading of the HEPA filters and charcoal adsorbers. The purpose of SR 4.7.7.d.2 is to verify proper actuation of all train components, including dampers, on an actual or simulated actuation signal. The purpose of SR 4.7.7.d.3 is to ensure that the system is functioning properly by operating the controlled ventilation area system filter bypass damper.

1.2 Description of Proposed Changes to Adopt TSTF 541

In accordance with NRC staff-approved TSTF-541, the licensee proposed to revise certain SRs by adding exceptions to the SRs for automatic valves or dampers that are locked, sealed or otherwise secured in the actuated position. Specifically, the licensee proposed the following changes to adopt TSTF-541. The proposed new text is shown in *italics*.

ANO-1

SR 3.7.9.3, "Verify the CREVS automatically isolates the Control Room and switches into a recirculation mode of operation on an actual or simulated actuation signal, *except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.*"

SR 3.7.11.3, "Verify each PRVS train actuates on an actual or simulated actuation signal, *except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.*"

ANO-2

SR 4.7.6.1.2.b, "In accordance with the Surveillance Frequency Control Program by verifying that on a control room high radiation signal, either actual or simulated, the system automatically isolates the control room and switches into a recirculation mode of operation, *except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.*"

Grand Gulf

SR 3.5.1.5, "Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, *except for valves that are locked, sealed, or otherwise secured in the actuated position.*"

SR 3.5.2.7, "Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated isolation signal, *except for valves that are locked, sealed, or otherwise secured in the actuated position.*"

SR 3.5.3.5, "Verify the RCIC System actuates on an actual or simulated automatic initiation signal, *except for valves that are locked, sealed, or otherwise secured in the actuated position.*"

SR 3.6.1.7.4, "Verify each RHR containment spray subsystem automatic valve in the flow path actuates to its correct position on an actual or simulated automatic initiation signal, *except for valves that are locked, sealed, or otherwise secured in the actuated position.*"

SR 3.6.4.3.3, "Verify each SGT subsystem actuates on an actual or simulated initiation signal, *except for dampers that are locked, sealed, or otherwise secured in the open position.*"

SR 3.7.1.4, "Verify each SSW subsystem actuates on an actual or simulated initiation signal, *except for valves that are locked, sealed, or otherwise secured in the actuated position.*"

SR 3.7.2.2, "Verify the HPCS SWS actuates on an actual or simulated initiation signal, *except for valves that are locked, sealed, or otherwise secured in the actuated position.*"

SR 3.7.3.3, "Verify each CRFA subsystem actuates on an actual or simulated initiation signal, *except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.*"

River Bend

SR 3.5.1.5, "Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, *except for valves that are locked, sealed, or otherwise secured in the actuated position.*"

SR 3.5.2.6, "Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated actuation signal, *except for valves that are locked, sealed, or otherwise secured in the actuated position.*"

SR 3.5.3.5, "Verify the RCIC System actuates on an actual or simulated automatic initiation signal, *except for valves that are locked, sealed, or otherwise secured in the actuated position.*"

SR 3.6.4.3.3, "Verify each SGT subsystem actuates on an actual or simulated initiation signal, *except for dampers that are locked, sealed, or otherwise secured in the actuated position.*"

SR 3.6.4.3.4, "Verify each SGT filter cooling bypass damper can be opened and the fan started, *except for dampers that are locked, sealed, or otherwise secured in the actuated position.*"

SR 3.7.1.5, "Verify each SSW subsystem actuates on an actual or simulated initiation signal, *except for valves that are locked, sealed, or otherwise secured in the actuated position.*"

SR 3.7.2.3, "Verify each CRFA subsystem actuates on an actual or simulated initiation signal, *except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.*"

Waterford-3

SR 4.6.6.1.d.2, "Verifying that the system starts on a safety injection actuation test signal, *except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.*"

SR 4.6.6.1.d.3, "Verifying that the filter cooling bypass valves can be *opened, except for valves that are locked, sealed, or otherwise secured in the open position.*"

SR 4.7.7.d.2, "Verifying that the system starts on a Safety Injection Actuation Test Signal and achieves and maintains a negative pressure of ≥ 0.25 inch water gauge within 45 seconds, *except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.*"

SR 4.7.7.d.3, "Verifying that the filter cooling bypass valves can be *opened, except for valves that are locked, sealed, or otherwise secured in the open position.*"

1.3 Additional Proposed TS Changes

In addition to the proposed changes consistent with Traveler TSTF-541, Revision 2, as described in Section 1.2 of this SE, the licensee proposed the following variations from the TS changes described in TSTF-541. The licensee stated that these variations do not affect the applicability of TSTF-541.

1.3.1 Editorial Variations

ANO-1

The licensee noted that ANO-1 TSs have different numbering and nomenclature than standard technical specifications (STS).

ANO-2

The licensee stated in its LAR that ANO-2 TS format, numbering, and terminology are consistent with the NUREG-0212, "Standard Technical Specifications for Combustion Engineering Pressurized Water Reactors," Revision 1, dated August 1979 (ADAMS Accession No. ML17266A004). The NUREG-0212 STS numbering for SRs differs from the numbering in NUREG-1432, "Standard Technical Specifications, Combustion Engineering Plants," Volume 1, "Specifications," and Volume 2, "Bases," Revision 4.0, dated April 2012 (ADAMS Accession Nos. ML12102A165 and ML12102A169, respectively), which was used to develop TSTF-541.

Grand Gulf

The licensee noted that Grand Gulf TSs have different numbering than STS.

River Bend

The licensee noted that River Bend TSs have different numbering and nomenclature than STS.

Waterford-3

The Waterford-3 TS format, numbering, and terminology are consistent with the NUREG-0212 STS. The NUREG-0212 STS numbering for surveillance requirements differs from the numbering in NUREG-1432, which was used to develop TSTF-541.

The licensee also noted that editorial changes in font, font size, and formatting were made to Waterford-3 TS pages affected by this LAR.

1.3.2 Other Variations

The licensee did not propose changes to all SRs in STS modified by TSTF-541. The LAR indicates that the ANO-1, ANO-2, Grand Gulf, River Bend, and Waterford-3 TSs do not contain, or do not require modification of all the equivalent SRs affected by TSTF-541.

ANO-1 and ANO-2

ANO-1 TSs contain a Surveillance Frequency Control Program (SFCP).

Grand Gulf

The licensee proposed the following variations from the TS changes described in TSTF-541 or the applicable parts of the NRC staff's final SE of TSTF-541. The licensee stated that these variations do not affect the applicability of TSTF-541 or the associated NRC staff's final SE.

- A variation from changes approved in TSTF-541 in which the exception inserted into certain SRs would be applied to Grand Gulf SR 3.5.2.7. Grand Gulf SR 3.5.2.7 had not been incorporated into the version of STS on which TSTF-541 was based.
- Grand Gulf TSs contain an SFCP.

River Bend

The licensee proposed the following variations from the TS changes described in TSTF-541 or the applicable parts of the NRC staff's final SE for TSTF-541. The licensee stated that these variations do not affect the applicability of TSTF-541 or the associated NRC staff's final SE.

- A variation from changes approved in TSTF-541 in which the exception inserted into certain SRs would be applied to River Bend SR 3.5.2.6. River Bend SR 3.5.2.6 had not been incorporated into the version of STS on which TSTF-541 was based.
- River Bend TSs contain an SFCP.

Waterford-3

The licensee stated that in SRs 4.7.7.d.3 and 4.6.6.1.d.3, the words "manually cycled" will be replaced with the word "opened."

Waterford-3 TSs contain an SFCP.

2.0 REGULATORY EVALUATION

The regulation under Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36(b) states 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.

Additionally, the considerations for issuance of operating licenses in 10 CFR 50.57(a)(3) provide, in part, that there must be reasonable assurance that the activities at issue will not endanger the health and safety of the public.

The LAR asks for proposed changes to SRs, which are defined in 10 CFR 50.36(c)(3) as "requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the LCOs will be met". Accordingly, the proposed amended SRs that no longer require verification of valves and dampers already in, and secured in, their actuated positions, must continue to provide reasonable assurance that the LCOs will be met, and the other standards of 10 CFR 50.36(c)(3) will be met.

The NRC staff's guidance for the review of TSs is in Chapter 16.0, Revision 3, "Technical Specifications," of NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition" (SRP), dated March 2010 (ADAMS Accession No. ML100351425). As described therein, as part of the regulatory standardization effort, the NRC staff has prepared STS for each of the LWR nuclear designs. Accordingly, the NRC staff's review includes consideration of whether the proposed changes are consistent with NUREG-1430, "Standard Technical Specifications, Babcock and Wilcox Plants," Volume 1, "Specifications," and Volume 2, "Bases," Revision 4.0, dated April 2012 (ADAMS Accession Nos. ML12100A177 and ML12100A178, respectively), as modified by NRC-approved travelers for ANO-1; NUREG-1432, as modified by NRC-approved travelers for ANO-2 and Waterford-3; and NUREG-1434, "Standard Technical Specifications, General Electric BWR/6 Plants," Volume 1, "Specifications," and Volume 2, "Bases," Revision 4.0, dated April 2012 (ADAMS Accession Nos. ML12104A195 and ML12104A196, respectively), as modified by NRC-approved travelers for Grand Gulf and River Bend.

3.0 TECHNICAL EVALUATION

3.1 Proposed TS Changes to Adopt TSTF-541

The NRC staff compared the licensee's proposed TS changes in Section 1.2 of this SE against the changes approved in TSTF-541. In accordance with the SRP Chapter 16.0, the NRC staff determined that the STS changes approved in TSTF-541 are applicable to the subject plants' TSs because ANO-1 is a Babcock and Wilcox Plant and the NRC staff approved the TSTF-541 changes for Babcock and Wilcox Plant designs; ANO-2 and Waterford-3 are Combustion Engineering Pressurized Water Reactors and the NRC staff approved the TSTF-541 changes for Combustion Engineering Pressurized Water Reactor designs; and Grand Gulf and River Bend are General Electric Boiling Water Reactors and the NRC staff approved the TSTF-541 for General Electric Boiling Water Reactor designs. Therefore, the NRC staff concludes that the licensee's proposed changes to the TSs as described in Section 1.2 of this SE for ANO-1, ANO-2, Grand Gulf, River Bend, and Waterford-3 are consistent with TSTF-541.

As defined in TS 1.1 for ANO 1, and TS 1.6 for ANO 2, TS 1.1 for Grand Gulf and River Bend, and TS 1.17 for Waterford 3, a train is operable when it is capable of performing its specified safety function(s) and when all necessary attendant instrumentation, controls, electrical power, cooling and seal water, lubrication, and other auxiliary equipment required for the system, subsystem, train, component, or device to perform its specified safety function(s) are also capable of performing their related support function(s).

The proposed amended SRs would exclude the need to verify actuation of dampers and valves that do not, in fact, actuate (e.g., change position) in response to an actuation signal. The licensee's LAR contains the following statements in Sections 1.5, "Waterford-3 SRs Affected by the Proposed Change," and 2.1, "Applicability of Safety Evaluation," respectively:

While the proposed exceptions permit automatic valves and dampers that are locked, sealed, or otherwise secured in the actuated position to be excluded from the SR in order to consider the SR met, the proposed changes will not permit a system that is made inoperable by locking, sealing, or otherwise securing an automatic valve or damper in the actuated position to be considered operable. As stated in the SR 3.0.1 (for ANO-2 and Waterford-3 SR 4.0.1) Bases, "Nothing in this Specification, however, is to be construed as implying that systems or

components are OPERABLE when: a. The systems or components are known to be inoperable, although still meeting the SRs.”

Entergy acknowledges that under the proposed change, the affected valves and dampers may be excluded from the SR when locked, sealed or otherwise secured in the actuated position. However, if the safety analysis assumes movement from the actuated position following an event, or the system is rendered inoperable by locking, sealing, or otherwise securing the valve or damper in the actuated position, then the system cannot perform its specified safety function and is inoperable regardless of whether the SR is met.

Entergy acknowledges for components for which the SR allowance can be utilized, the SR must be verified to have been met within its required Frequency after removing the valve or damper from the locked, sealed or otherwise secured status. If the SR exception is utilized to not test the actuation of a valve or damper and the specified Frequency of the SR is exceeded without testing the component, the SR must be performed on the component when it is returned to service in order to meet the SR.

The proposed amended SRs will continue to require the licensee to verify that valves and dampers that must actuate, perform their safety functions and support functions by being able to change position. The NRC staff finds that it is not necessary to verify actuation of valves and dampers that are already in their actuated positions, and are locked, sealed, or otherwise secured in those positions.

Given the licensee’s statements provided in the LAR to adopt TSTF 541, Revision 2, the NRC staff determined that there is reasonable assurance that the licensee will continue to properly control affected equipment in accordance with existing regulations and requirements when using the proposed exceptions added to the respective SRs. Therefore, the NRC staff determined that the proposed amended ANO 1, ANO 2, Grand Gulf, River Bend, and Waterford-3 TSs will continue to provide an acceptable way to meet 10 CFR 50.36(c)(3) because the revised SRs will continue to provide reasonable assurance that necessary quality of systems and components is maintained and that the LCOs will be met.

Thus, the proposed changes continue to meet the requirements of 10 CFR 50.36(c)(3) as discussed in Section 3.0 of the NRC staff’s SE of TSTF-541.

3.2 Additional Proposed TS Changes

3.2.1 Editorial Variations

ANO-1

The licensee noted that ANO-1 TSs have different numbering and nomenclature than STS. The NRC staff finds that the different TS numbering and nomenclature changes are acceptable because they do not substantively alter TS requirements.

ANO-2

The licensee noted that ANO-2 TSs format, numbering, and terminology is consistent with the NUREG-0212 STS. The NUREG-0212 STS numbering and wording for surveillance

requirements differs from NUREG-1432, which were used to develop TSTF-541. The NRC staff finds that these variations are administrative, and do not affect the applicability of TSTF-541 to the ANO-2 TS.

Grand Gulf

The licensee noted that Grand Gulf TSs have different numbering than STS. The NRC staff finds that the different TS numbering changes are acceptable because they do not substantively alter TS requirements.

River Bend

The licensee noted that River Bend TSs have different numbering and nomenclature than STS. The NRC staff finds that the different TS numbering and nomenclature changes are acceptable because they do not substantively alter TS requirements.

Waterford, Unit 3

The licensee noted that Waterford-3 TSs format, numbering, and terminology is consistent with the NUREG-0212 STS. The NUREG-0212 STS numbering and wording for surveillance requirements differs from NUREG-1432, which were used to develop TSTF-541. The NRC staff finds that these variations are administrative, and do not affect the applicability of TSTF-541 to the Waterford-3 TS.

The NRC staff finds that the editorial changes in font, font size, and formatting are acceptable as they do not alter TS requirements.

3.2.2 Other Variations

The NRC staff reviewed the variations from TSTF-541 changes described in Section 1.3.2. The licensee did not propose changes to all SRs in STS modified by TSTF-541. The LAR indicates that the ANO-1, ANO-2, Grand Gulf, River Bend, and Waterford-3 TSs do not contain, or do not require modification of all the equivalent SRs affected by TSTF-541. The NRC staff determined that this does not affect the applicability of TSTF-541 to the TSs and is acceptable.

ANO-1 and ANO-2

The NRC staff reviewed the licensee's statement regarding the ANO-1 and ANO-2 SFCP and determined that the existence of a SFCP in ANO-1 and ANO-2 TSs has no effect on the applicability of the proposed change and is therefore acceptable.

Grand Gulf

The NRC staff reviewed the variation from changes approved in TSTF-541 in which the exception inserted into certain SRs would be applied to Grand Gulf SR 3.5.2.7. The NRC staff determined that SR 3.5.2.7, which was proposed for addition to the TSs via TSTF-542, had not been incorporated into the version of STS on which TSTF-541 was based because the SR was created after TSTF-541 development began. As the licensee has already adopted TSTF-542, which replaced this SR with a more explicit requirement, exclusion of this SR from the proposed changes is appropriate.

The NRC staff reviewed the licensee's statement regarding the Grand Gulf SFCP and determined that the existence of an SFCP in Grand Gulf TSs has no effect on the applicability of the proposed change and is therefore acceptable.

River Bend

The NRC staff reviewed the variation from changes approved in TSTF-541 in which the exception inserted into certain SRs would be applied to River Bend SR 3.5.2.6. The NRC staff determined that SR 3.5.2.6, which was proposed for addition to the TSs via TSTF-542, had not been incorporated into the version of STS on which TSTF-541 was based because the SR was created after TSTF-541 development began. As the licensee has already adopted TSTF-542, which replaced this SR with a more explicit requirement, exclusion of this SR from the proposed changes is appropriate.

The NRC staff reviewed the licensee's statement regarding the River Bend SFCP and determined that the existence of an SFCP in River Bend TSs has no effect on the applicability of the proposed change and is therefore acceptable.

Waterford-3

The NRC staff reviewed the licensee's proposed rewording in SR 4.7.7.d.3 and SR 4.6.6.1.d.3, to change the words "manually cycled" with the word "opened." The NRC staff finds that the change is consistent with NUREG-1432, and accurately describes the testing requirement, and is therefore acceptable.

The NRC staff reviewed the licensee's statement regarding the Waterford-3 SFCP and determined that the existence of an SFCP in Waterford-3 TSs has no effect on the applicability of the proposed change and is therefore acceptable.

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 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.

NOTICES AND ENVIRONMENTAL FINDINGS

RELATED TO

AMENDMENT NO. 275 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-51
AMENDMENT NO. 329 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-6
AMENDMENT NO. 230 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-29
AMENDMENT NO. 209 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-47
AMENDMENT NO. 263 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

<u>Application</u> <ul style="list-style-type: none">September 23, 2021, ADAMS Accession No. ML21266A161	<u>Safety Evaluation Date</u> April 28, 2022
	<u>Principal Contributor to Safety Evaluation</u> <ul style="list-style-type: none">Josh Wilson

1.0 INTRODUCTION

Entergy Operations, Inc. (the licensee) requested changes to the technical specifications for 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 by a license amendment request (LAR). In its LAR, the licensee requested that the U.S. Nuclear Regulatory Commission (NRC, the Commission) process the proposed amendments under the Consolidated Line Item Improvement Process. The proposed amendments are based on Technical Specifications Task Force (TSTF) Traveler TSTF-541, Revision 2, "Add Exceptions to Surveillance Requirements for Valves and Dampers Locked in the Actuated Position" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19240A315), and the associated U.S. Nuclear Regulatory Commission (NRC, the Commission) staff's final safety evaluation for TSTF-541 (ADAMS Accession No. ML19323E926).

2.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Arkansas, Mississippi, and Louisiana State officials were notified of the proposed issuance of the amendments on March 21, 2022. The State officials had no comments.

3.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to installation or use of facility components located within the restricted area as defined in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20 and changes surveillance requirements. 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 November 30, 2021 (86 FR 67987), 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.

SUBJECT: 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 – ISSUANCE OF AMENDMENTS RE: REVISE TECHNICAL SPECIFICATIONS TO ADOPT TSTF-541, “ADD EXCEPTIONS TO SURVEILLANCE REQUIREMENTS FOR VALVES AND DAMPERS LOCKED IN THE ACTUATED POSITION” (EPID L-2021-LLA-0166) DATED APRIL 28, 2022

DISTRIBUTION:

PUBLIC
 PM File Copy
 RidsACRS_MailCTR Resource
 RidsNrrDorlLpl4 Resource
 RidsNrrDssStsb Resource
 RidsNrrDssScpb Resource
 RidsNrrDexEmib Resource
 RidsNrrPMGrandGulf Resource
 RidsNrrPMRiverBend Resource

RidsNrrPMANO Resource
 RidsNrrPMWaterford Resource
 RidsNrrLAPBlechman Resource
 RidsRgn4MailCenter Resource
 JWilson, NRR
 DScully, NRR
 YWong, NRR

ADAMS Accession No. ML22083A124

***by email**

OFFICE	NRR/DORL/LPL4/PM*	NRR/DORL/LPL4/LA*	NRR/DSS/STSB/BC*	NRR/DSS/SCP/BC*
NAME	SLingam	PBlechman	VCusumano	BWittick
DATE	3/23/2022	3/31/2022	3/11/2022	4/13/2022
OFFICE	NRR/DEX/EMIB/BC (A)*	OGC NLO*	NRR/DORL/LPL4/BC*	NRR/DORL/LPL4/PM*
NAME	ITseng	JAzeizat	JDixon-Herrity	SLingam
DATE	4/4/2022	4/25/2022	4/28/2022	4/28/2022

OFFICIAL RECORD COPY