



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

August 4, 2016

Vice President, Operations  
Entergy Operations, Inc.  
Grand Gulf Nuclear Station  
P.O. Box 756  
Port Gibson, MS 39150

**SUBJECT: GRAND GULF NUCLEAR STATION, UNIT 1 - ISSUANCE OF AMENDMENT  
RE: REVISION OF TECHNICAL SPECIFICATIONS TO REMOVE INSERVICE  
TESTING PROGRAM AND CLARIFY SURVEILLANCE REQUIREMENT  
USAGE RULE APPLICATION (CAC NO. MF6733)**

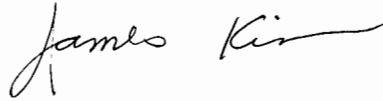
Dear Sir or Madam:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 211 to Facility Operating License No. NPF-29 for the Grand Gulf Nuclear Station, Unit 1 (GGNS). This amendment consists of changes to the technical specifications (TSs) in response to your application dated September 15, 2015 (Agencywide Documents Access and Management System Accession No. ML15259A042).

The amendment revises the GGNS TS to eliminate the "Inservice Testing [IST] Program," specification in Section 5.5, "Programs and Manuals," which is superseded by Code Case OMN-20. A new defined term, "INSERVICE TESTING PROGRAM," is added to TS Section 1.1, "Definitions." This is consistent with TS Task Force (TSTF)-545, Revision 1, "TS Inservice Testing Program Removal & Clarify SR [Surveillance Requirement] Usage Rule Application to Section 5.5 Testing." Also, existing uses of the term "Inservice Testing Program" in the TSs are capitalized throughout the TS to indicate that it is now a defined term.

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

Sincerely,

A handwritten signature in cursive script that reads "James Kim".

James Kim, Project Manager  
Plant Licensing IV-2 and Decommissioning  
Transition Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-416

Enclosures:

1. Amendment No. 211 to NPF-29
2. Safety Evaluation

cc w/encls: Distribution via Listserv



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

ENERGY OPERATIONS, INC.

SYSTEM ENERGY RESOURCES, INC.

SOUTH MISSISSIPPI ELECTRIC POWER ASSOCIATION

ENERGY MISSISSIPPI, INC.

DOCKET NO. 50-416

GRAND GULF NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 211  
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 September 15, 2015, 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.

Enclosure 1

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-29 is hereby amended to read 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. 211 are hereby incorporated into this 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



Shaun M. Anderson, Acting Chief  
Plant Licensing IV-2 and Decommissioning  
Transition Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

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

Date of Issuance: August 4, 2016

ATTACHMENT TO LICENSE AMENDMENT NO. 211

GRAND GULF NUCLEAR STATION, UNIT 1

FACILITY OPERATING LICENSE NO. NPF-29

DOCKET NO. 50-416

Replace the following pages of the 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

REMOVE  
4

INSERT  
4

Technical Specifications

REMOVE  
1.0-3  
3.1-23  
3.4-10  
3.4-15  
3.5-4  
3.5-9  
3.6-15  
3.6-17  
3.6-23  
3.6-32  
3.6-48  
3.6-61  
5.0-11

INSERT  
1.0-3  
3.1-23  
3.4-10  
3.4-15  
3.5-4  
3.5-9  
3.6-15  
3.6-17  
3.6-23  
3.6-32  
3.6-48  
3.6-61  
5.0-11

- (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 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. 211 are hereby incorporated into this 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.

1.1 Definitions

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DOSE EQUIVALENT I-131 (continued)	be those listed in Federal Guidance Report (FGR) 11, "Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion, and Ingestion," 1989.
EMERGENCY CORE COOLING SYSTEM (ECCS) RESPONSE TIME	The ECCS RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ECCS initiation setpoint at the channel sensor until the ECCS equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays, where applicable. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.
END OF CYCLE RECIRCULATION PUMP TRIP (EOC-RPT) SYSTEM RESPONSE TIME	The EOC-RPT SYSTEM RESPONSE TIME shall be that time interval from initial movement of the associated turbine stop valve or the turbine control valve to complete suppression of the electric arc between the fully open contacts of the recirculation pump circuit breaker. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured, except for the breaker arc suppression time, which is not measured but is validated to conform to the manufacturer's design value.
INSERVICE TESTING PROGRAM	The INSERVICE TESTING PROGRAM is the licensee program that fulfills the requirements of 10 CFR 50.55a(f).
ISOLATION SYSTEM RESPONSE TIME	The ISOLATION SYSTEM RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its isolation initiation setpoint at the channel sensor until the isolation valves travel to their required positions. The response time

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.1.7.6	Verify each SLC 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, or can be aligned to the correct position.	31 days
SR 3.1.7.7	Verify each pump develops a flow rate $\geq 41.2$ gpm at a discharge pressure $\geq 1370$ psig.	In accordance with the INSERVICE TESTING PROGRAM
SR 3.1.7.8	Verify flow through one SLC subsystem from pump into reactor pressure vessel.	24 months on a STAGGERED TEST BASIS
SR 3.1.7.9	Determine Boron-10 enrichment in atom percent (E).	Once within 24 hours after boron is added to the solution.
SR 3.1.7.10	Verify piping between the storage tank and the pump suction is not blocked.	Once within 24 hours after solution temperature is restored to $\geq 45^{\circ}\text{F}$



3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.4 Safety/Relief Valves (S/RVs)

LCO 3.4.4 The safety function of nine S/RVs shall be OPERABLE

AND

The relief function of six additional S/RVs shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required S/RVs inoperable.	A.1 Be in MODE 3.	12 hours
	<u>AND</u> A.2 Be in MODE 4.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY								
SR 3.4.4.1	Verify the safety function lift setpoints of the required S/RVs are as follows:	In accordance with the INSERVICE TESTING PROGRAM								
	<table border="0"> <tr> <td style="text-align: center;"><u>Number of S/RVs</u></td> <td style="text-align: center;"><u>Setpoint (psig)</u></td> </tr> <tr> <td style="text-align: center;">8</td> <td style="text-align: center;">1165 ± 34.9</td> </tr> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">1180 ± 35.4</td> </tr> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">1190 ± 35.7</td> </tr> </table>		<u>Number of S/RVs</u>	<u>Setpoint (psig)</u>	8	1165 ± 34.9	6	1180 ± 35.4	6	1190 ± 35.7
<u>Number of S/RVs</u>	<u>Setpoint (psig)</u>									
8	1165 ± 34.9									
6	1180 ± 35.4									
6	1190 ± 35.7									

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. (continued)	A.2 Isolate the high pressure portion of the affected system from the low pressure portion by use of a second closed manual, deactivated automatic, or check valve.	72 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	12 hours
	<u>AND</u> B.2 Be in MODE 4.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.4.6.1 -----NOTE----- Only required to be performed in MODES 1 and 2. ----- Verify equivalent leakage of each RCS PIV is $\leq 1$ gpm, at an RCS pressure $\geq 1040$ psig and $\leq 1060$ psig.	In accordance with INSERVICE TESTING PROGRAM

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY												
SR 3.5.1.1	Verify, for each ECCS injection/spray subsystem, locations susceptible to gas accumulation are sufficiently filled with water.	31 days												
SR 3.5.1.2	<p>-----NOTE-----</p> <p>Not required to be met for system vent flow paths opened under administrative control.</p> <p>-----</p> <p>Verify each ECCS injection/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>	31 days												
SR 3.5.1.3	Verify ADS accumulator supply pressure is $\geq 150$ psig.	31 days												
SR 3.5.1.4	<p>Verify each ECCS pump develops the specified flow rate with the specified total developed head.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th><u>SYSTEM</u></th> <th><u>FLOW RATE</u></th> <th><u>TOTAL DEVELOPED HEAD</u></th> </tr> </thead> <tbody> <tr> <td>LPCS</td> <td><math>\geq 7115</math> gpm</td> <td><math>\geq 290</math> psid</td> </tr> <tr> <td>LPCI</td> <td><math>\geq 7450</math> gpm</td> <td><math>\geq 125</math> psid</td> </tr> <tr> <td>HPCS</td> <td><math>\geq 7115</math> gpm</td> <td><math>\geq 445</math> psid</td> </tr> </tbody> </table>	<u>SYSTEM</u>	<u>FLOW RATE</u>	<u>TOTAL DEVELOPED HEAD</u>	LPCS	$\geq 7115$ gpm	$\geq 290$ psid	LPCI	$\geq 7450$ gpm	$\geq 125$ psid	HPCS	$\geq 7115$ gpm	$\geq 445$ psid	In accordance with the INSERVICE TESTING PROGRAM
<u>SYSTEM</u>	<u>FLOW RATE</u>	<u>TOTAL DEVELOPED HEAD</u>												
LPCS	$\geq 7115$ gpm	$\geq 290$ psid												
LPCI	$\geq 7450$ gpm	$\geq 125$ psid												
HPCS	$\geq 7115$ gpm	$\geq 445$ psid												

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE			FREQUENCY	
SR 3.5.2.5	Verify each required ECCS pump develops the specified flow rate with the specified total developed head.		In accordance with the INSERVICE TESTING PROGRAM	
	<u>SYSTEM</u>	<u>FLOW RATE</u>		<u>TOTAL DEVELOPED HEAD</u>
	LPCS	≥ 7115 gpm		≥ 290 psid
	LPCI	≥ 7450 gpm		≥ 125 psid
HPCS	≥ 7115 gpm	≥ 445 psid		
SR 3.5.2.6	-----NOTE----- Vessel injection/spray may be excluded. -----		24 months	
	Verify each required ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal.			

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.6.1.3.3</p> <p>-----NOTES-----</p> <ol style="list-style-type: none"> <li>1. Valves and blind flanges in high radiation areas may be verified by use of administrative means.</li> <li>2. Not required to be met for PCIVs that are open under administrative controls.</li> </ol> <p>-----</p> <p>Verify each primary containment isolation manual valve and blind flange that is located inside primary containment, drywell, or steam tunnel and not locked, sealed, or otherwise secured and is required to be closed during accident conditions is closed.</p>	<p>Prior to entering MODE 2 or 3 from MODE 4, if not performed within the previous 92 days</p>
<p>SR 3.6.1.3.4</p> <p>Verify the isolation time of each power operated, automatic PCIV, except MSIVs, is within limits.</p>	<p>In accordance with the INSERVICE TESTING PROGRAM</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.1.3.6	Verify the isolation time of each MSIV is $\geq 3$ seconds and $\leq 5$ seconds.	In accordance with the INSERVICE TESTING PROGRAM
SR 3.6.1.3.7	Verify each automatic PCIV actuates to the isolation position on an actual or simulated isolation signal.	24 months
SR 3.6.1.3.8	<p>-----NOTE----- Only required to be met in MODES 1, 2, and 3. -----</p> <p>Verify leakage rate through each main steam line is <math>\leq 100</math> scfh when test at <math>\geq P_a</math>, and the total leakage rate through all four main steam lines is <math>\leq 250</math> scfh when test at <math>\geq P_a</math></p>	In accordance with 10 CFR 50, Appendix J, Testing Program
SR 3.6.1.3.9	<p>-----NOTE----- Only required to be met in MODES 1, 2, and 3. -----</p> <p>Verify combined leakage rate of 1 gpm times the total number of PCIVs through hydrostatically tested lines that penetrate the primary containment is not exceeded when these isolation valves are tested at <math>\geq 1.1 P_a</math>.</p>	In accordance with 10 CFR 50, Appendix J, Testing Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.1.7.1	<p>-----NOTE-----</p> <ol style="list-style-type: none"> <li>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.</li> <li>2. Not Required to be met for system vent flow paths opened under administrative control.</li> </ol> <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>	31 days
SR 3.6.1.7.2	Verify RHR containment spray subsystem locations susceptible to gas accumulation are sufficiently filled with water.	31 days
SR 3.6.1.7.3	Verify each RHR pump develops a flow rate of $\geq 7450$ gpm on recirculation flow through the associated heat exchanger to the suppression pool.	In accordance with the INSERVICE TESTING PROGRAM
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.	24 months
SR 3.6.1.7.5	Verify each spray nozzle is unobstructed.	At first refueling AND 10 years

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.2.3.1	Verify each RHR suppression pool cooling 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 or can be aligned to the correct position.	31 days
SR 3.6.2.3.2	Verify RHR suppression pool cooling subsystem locations susceptible to gas accumulation are sufficiently filled with water.	31 days
SR 3.6.2.3.3	Verify each RHR pump develops a flow rate $\geq 7450$ gpm through the associated heat exchangers to the suppression pool.	In accordance with the INSERVICE TESTING PROGRAM



SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.2.1	<p>-----NOTES-----</p> <ol style="list-style-type: none"> <li>1. Valves, dampers, rupture disks, and blind flanges in high radiation areas may be verified by use of administrative means.</li> <li>2. Not required to be met for SCIVs that are open under administrative controls.</li> </ol> <p>-----</p> <p>Verify each secondary containment isolation manual valve, damper, rupture disk, and blind flange that is required to be closed during accident conditions is closed.</p>	31 days
SR 3.6.4.2.2	Verify the isolation time of each power operated, automatic SCIV is within limits.	In accordance with the INSERVICE TESTING PROGRAM
SR 3.6.4.2.3	Verify each automatic SCIV actuates to the isolation position on an actual or simulated automatic isolation signal.	24 months

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.5.3.3	Verify the isolation time of each power operated, automatic drywell isolation valve is within limits.	In accordance with the INSERVICE TESTING PROGRAM
SR 3.6.5.3.4	Verify each automatic drywell isolation valve actuates to the isolation position on an actual or simulated isolation signal.	24 months

5.5 Programs and Manuals (continued)

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5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the cyclic and transient occurrences identified on UFSAR Table 3.9-35 to ensure that the reactor vessel is maintained within the design limits.

5.5.6 Deleted

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(continued)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 211 TO

FACILITY OPERATING LICENSE NO. NPF-29

ENTERGY OPERATIONS, INC., ET AL.

GRAND GULF NUCLEAR STATION, UNIT 1

DOCKET NO. 50-416

1.0 INTRODUCTION

By letter dated September 15, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15259A042), Entergy Operation, Inc. (the licensee), requested changes to the technical specifications (TSs) for Grand Gulf Nuclear Station Unit 1 (GGNS). Specifically, the licensee requested to adopt Technical Specifications Task Force (TSTF) Standard Technical Specifications (STS) Change Traveler TSTF-545, Revision 1, "TS Inservice Testing [IST] Program Removal & Clarify SR [Surveillance Requirement] Usage Rule Application to Section 5.5 Testing," dated March 4, 2014 (ADAMS Accession No. ML14063A334). TSTF-545, Revision 1 was revised, and by letter dated October 21, 2015 (ADAMS Accession No. ML15294A555), TSTF-545, Revision 3 (final version) was submitted for U.S. Nuclear Regulatory Commission (NRC) review and approval. Revision 3 was made available to the TSTF via NRC letter dated December 11, 2015 (ADAMS Accession No. ML15317A071), as part of the consolidated line item improvement process. Note that the proposed TS changes in TSTF-545, Revision 1 are consistent with those in TSTF-545, Revision 3. In its September 15, 2015, submission, the licensee also proposed alternative to the testing periods in the OM Code. The NRC staff found that the proposed alternatives provided reasonable assurance that the affected components would be operationally ready and authorized alternative request GG-IST-2015-1 on June 16, 2016 (ADAMS Accession No. ML16160A092).

The proposed change requests a revision to the TS to eliminate TS 5.5.6, "Inservice Testing Program." A new defined term, "INSERVICE TESTING PROGRAM," is requested to be added to TS Section 1.1, "Definitions." Also, existing uses of the term "Inservice Testing Program" in the TS are requested to be capitalized throughout the TS to indicate that it is now a defined term.

## 2.0 REGULATORY EVALUATION

### 2.1 Background

The purpose of TS 5.5.6 is to provide a table defining some of the IST frequencies and to describe the relationship between the TS and the IST requirements. Specifically, the purpose of TS 5.5.6 is to provide controls for IST of American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3 components including specific testing frequencies, and to provide exceptions to these frequencies based on SR 3.0.2 and SR 3.0.3.

On August 23, 2012, the NRC issued Regulatory Issue Summary (RIS) 2012-10, "NRC Staff Position on Applying Surveillance Requirements 3.0.2 and 3.0.3 to Administrative Controls Program Tests" (ADAMS Accession No. ML12079A393). The RIS stated that the NRC staff had determined that restructuring TS chapters during the development of the improved STS resulted in unintended consequences when SR 3.0.2 and SR 3.0.3 provisions were made applicable to the IST program. The NRC staff concluded that SR 3.0.2 and SR 3.0.3 cannot be applied to TS Section 5.5 tests that are not associated with SRs.

### 2.2 Regulatory Requirements

The TSs ensure the operational capability of structures, systems, and components that are required to protect the health and safety of the public. The Commission's regulatory requirements related to the content of the TS are contained in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36. Section 50.36(c) of 10 CFR, requires the TSs to include items in the following specific categories: (1) safety limits, limiting safety systems settings, and limiting control settings; (2) limiting conditions for operation; (3) SRs; (4) design features; and (5) administrative controls.

The regulations at 10 CFR 50.55a(f), "Inservice testing requirements," require, in part, that systems and components of boiling and pressurized water-cooled nuclear power reactors meet the requirements of the ASME Code for Operation and Maintenance of Nuclear Power Plants (OM Code). The applicable requirements of 10 CFR 50.55a are conditions in every nuclear power reactor operating license issued under 10 CFR Part 50. The regulation at 10 CFR 50.55a(f)(5)(ii) requires that if a revised IST program for a facility conflicts with the TS, the licensee shall apply to the Commission for amendment of the TS to conform the TS to the revised IST program.

The NRC staff's guidance for review of the TSs is in Chapter 16, "Technical Specifications," of NUREG-0800, "Standard Review Plan (SRP)," Revision 3, dated March 2010 (ADAMS Accession No. ML100351425). As described therein, as part of the regulatory standardization effort, the NRC staff has prepared STS (NUREG 1430 to NUREG 1434) for each of the light-water reactor nuclear steam supply systems. Accordingly, the NRC staff's review includes consideration of whether the proposed TSs are consistent with the applicable reference TSs (i.e., the current STS), as modified by NRC-approved TSTF Travelers, such as TSTF-545.

### 3.0 TECHNICAL EVALUATION

#### 3.1 Licensee's Requested Changes

The licensee proposed to delete TS 5.5.6, "Inservice Testing Program," which currently states:

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program shall include the following:

- a. Testing frequencies specified in Section XI of the ASME Boiler and Pressure Vessel Code and Applicable Addenda as follows:

<u>ASME Boiler and Pressure Vessel Code and Applicable Addenda terminology for Inservice testing activities</u>	<u>Required Frequencies for inservice testing activities</u>
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days
Biennially or every 2 years	At least once per 731 days

- b. The provisions of SR 3.0.2 are applicable to the above required frequencies for performing inservice testing activities;
- c. The provisions of SR 3.0.3 are applicable to inservice testing activities; and
- d. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any TS.

In addition, the existing references to the IST program are requested to be revised to reference a new TS Section 1.1 defined term, "INSERVICE TESTING PROGRAM," which states: "The INSERVICE TESTING PROGRAM is the licensee program that fulfills the requirements of 10 CFR 50.55a(f)." This change, in capitalization of the term, is also requested to be made throughout the TSs as referenced.

#### 3.2 NRC Staff Evaluation

##### 3.2.1 Deletion of TS 5.5.6 "Inservice Testing Program"

###### 3.2.1.1 Deletion of TS 5.5.6.a

TS 5.5.6.a requires that testing frequencies, applicable to the ASME OM Code and the applicable addenda, be implemented in the IST Program. The regulations at 10 CFR 50.55a(f) require, in part, that a plant-specific IST program for pumps and valves be developed and

implemented by the nuclear facility owner in accordance with the applicable edition and addenda of the ASME OM Code. Therefore, the NRC staff finds that the proposed deletion of TS 5.5.6.a is acceptable on the basis that each licensee has its self-contained IST program developed and implemented in accordance with the requirements of ASME OM Code as required by 10 CFR 50.55a(f), and TS 5.5.6.a is duplicative of the requirements in the ASME OM Code.

#### 3.2.1.2 Deletion of TS 5.5.6.b

TS 5.5.6.b provides an allowance to apply SR 3.0.2 to certain IST requirements, as specified in the ASME OM Code, and with test frequencies of 2 years or less. SR 3.0.2 states that an SR is considered met within its specified frequency if the surveillance is performed within 1.25 times the interval specified. IST programs establish testing requirements and frequencies in accordance with the requirements of 10 CFR 50.55a(f) and the ASME OM Code. However, the NRC regulations and ASME OM Code did not make available test allowances similar to SR 3.0.2.

The regulation in 10 CFR 50.55a(f)(5)(ii) states, in part, that if a revised inservice test program for a facility conflicts with the TS for the facility, the licensee shall apply to the Commission for amendment of the TS to conform the TS to the revised program. Therefore, the NRC staff finds the proposed deletion of TS 5.5.6.b acceptable on the basis that the changes eliminate the conflict between TS and IST program, as required by 10 CFR 50.55a and the ASME OM Code, and are in compliance with 10 CFR 50.55a(f)(5)(ii).

#### 3.2.1.3 Deletion of TS 5.5.6.c

TS 5.5.6.c allows SR 3.0.3 to be used when IST is not performed within its required period. SR 3.0.3 states that if a surveillance requirement was not performed within its specified frequency, then compliance with the requirement to declare the limiting condition for operation not met may be delayed, from time of discovery, up to 24 hours or up to the limit of the specified frequency, whichever is greater. NRC regulations and the ASME OM Code do not make available test delays similar to SR 3.0.3. Therefore, the NRC staff finds the proposed deletion of TS 5.5.6.c acceptable on the basis that the changes eliminate an inconsistency between TSs and IST program with regard to test delays and are in conformance with 10 CFR 50.55a(f)(5)(ii). The allowance permitted by SR 3.0.3 will continue to apply to tests associated with TS SRs unless otherwise stated. Nonconformances with the regulations and the ASME Code will need to be evaluated to determine operability of TS-required SSCs.

#### 3.2.1.4 Deletion of TS 5.5.6.d

TS 5.5.6.d states that nothing in the ASME OM Code shall be construed to supersede the requirements of any TS. The statement is contrary to 10 CFR 50.55a(f)(5)(ii). The regulation at 10 CFR 50.55a(f)(5)(ii) states, in part, that if a revised inservice test program for a facility conflicts with the TSs for the facility, the licensee shall apply to the Commission for amendment of the TSs to conform the TSs to the revised program. Therefore, the NRC staff finds the proposed amendment of deleting TS 5.5.6.d acceptable on the basis that the TS cannot supersede any requirements of ASME OM Code and the changes eliminate the inconsistency between the TS and the IST program, which is in conformance with 10 CFR 50.55a(f)(5)(ii).

In summary, the NRC staff finds that the proposed deletion of TS 5.5.6 is acceptable since TS 5.5.6 is duplicative of 50.55a(f), which requires each licensee to have its own self-contained IST program developed and implemented in accordance with the requirements of ASME OM Code. In addition, the proposed changes eliminate inconsistencies between the TS and the IST program. Furthermore, the NRC staff finds that the proposed deletions are consistent with the NRC-approved TSTF-545, Revision 3 and are acceptable.

### 3.2.2 Addition of Defined Term in TS Section 1.1

A new defined term, "INSERVICE TESTING PROGRAM," is requested to be added to TS Section 1.1, "Definitions." It states, "The INSERVICE TESTING PROGRAM is the licensee program that fulfills the requirements of 10 CFR 50.55a(f)." In addition, the existing uses of the term "Inservice Testing Program" are requested to be capitalized throughout the TS to indicate that it is a defined term. The NRC staff finds the proposed addition of the defined term, "INSERVICE TESTING PROGRAM," acceptable on the basis that it is consistent with the format of the licensee's TSs. Furthermore, the NRC staff finds that the proposed addition is consistent with the NRC-approved TSTF-545, Revision 3 and is acceptable.

## 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Mississippi State official was notified of the proposed issuance of the amendment. The State official had no comments.

## 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes SRs. The NRC staff has determined that the amendment involves 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 amendment involves no significant hazards consideration, and there has been no public comment on such finding published in the *Federal Register* on March 1, 2016 (81 FR 10679). The amendment also relates to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.



## 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: J. Huang

Date: August 4, 2016

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

Sincerely,

**/RA/**

James Kim, Project Manager  
Plant Licensing IV-2 and Decommissioning  
Transition Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-416

Enclosures:

1. Amendment No. 211 to NPF-29
2. Safety Evaluation

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**\*by memo dated**

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