

Docket No. 50-416

August 10, 1992

Mr. William T. Cottle  
 Vice President, Operations GGNS  
 Entergy Operations, Inc.  
 Post Office Box 756  
 Port Gibson, Mississippi 39150

Dear Mr. Cottle:

SUBJECT: ISSUANCE OF AMENDMENT NO. 101 TO FACILITY OPERATING LICENSE  
 NO. NPF-29 - GRAND GULF NUCLEAR STATION, UNIT 1 (TAC NO. M83289)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 101 to Facility Operating License No. NPF-29 for the Grand Gulf Nuclear Station (GGNS), Unit 1. This amendment revises the Technical Specifications (TS) in response to your application dated April 30, 1992.

The amendment revises the GGNS TS by adding new surveillance requirements for the Reactor Protection System and Control Rod Block Instrumentation and by making clarifying editorial changes to the Source Range Monitor (SRM) TS.

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

Sincerely,

ORIGINAL SIGNED BY

Paul W. O'Connor, Senior Project Manager  
 Project Directorate IV-1  
 Division of Reactor Projects III/IV/V  
 Office of Nuclear Reactor Regulation

## Enclosures:

1. Amendment No. 101 to NPF-29
2. Safety Evaluation

cc w/enclosures:

See next page

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

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

Sincerely,

A handwritten signature in black ink, reading "Paul W. O'Connor".

Paul W. O'Connor, Senior Project Manager  
Project Directorate IV-1  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 101 to NPF-29
2. Safety Evaluation

cc w/enclosures:  
See next page

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Grand Gulf Nuclear Station

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

ENTERGY OPERATIONS, INC.

SYSTEM ENERGY RESOURCES, INC.

SOUTH MISSISSIPPI ELECTRIC POWER ASSOCIATION

MISSISSIPPI POWER AND LIGHT COMPANY

DOCKET NO. 50-416

GRAND GULF NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 101  
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 April 30, 1992, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

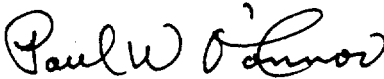
2. Accordingly, the license is amended by changes to the Technical Specifications, as indicated in the attachment to this license amendment; and paragraph 2.C.(2) of Facility Operating License No. NPF-29 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 101, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

  
for John T. Larkins, Director  
Project Directorate IV-1  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical Specifications

Date of Issuance: August 10, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 101

FACILITY OPERATING LICENSE NO. NPF-29

DOCKET NO. 50-416

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

REMOVE PAGES

3/4 3-1

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### 3/4.3 INSTRUMENTATION

#### 3/4.3.1 REACTOR PROTECTION SYSTEM INSTRUMENTATION

##### LIMITING CONDITION FOR OPERATION

3.3.1 As a minimum, the reactor protection system instrumentation channels shown in Table 3.3.1-1 shall be OPERABLE with the REACTOR PROTECTION SYSTEM RESPONSE TIME as shown in Table 3.3.1-2.

APPLICABILITY: As shown in Table 3.3.1-1.

##### ACTION:

- a. With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement for one trip system, place the inoperable channel and/or that trip system in the tripped condition\* within twelve hours.
- b. With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement for both trip systems, place at least one trip system\*\* in the tripped condition within one hour and take the ACTION required by Table 3.3.1-1.

##### SURVEILLANCE REQUIREMENTS

4.3.1.1 Each reactor protection system instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.1.1-1.

4.3.1.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.

4.3.1.3 The REACTOR PROTECTION SYSTEM RESPONSE TIME of each reactor trip functional unit shown in Table 3.3.1-2 shall be demonstrated to be within its limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific reactor trip system.

4.3.1.4 The provisions of Specification 4.0.4 are not applicable to the Channel Functional Test surveillance for the Intermediate Range Monitors for entry into the applicable OPERATIONAL CONDITIONS (as specified in Table 4.3.1.1-1) from OPERATIONAL CONDITION 1, provided the surveillances are performed within 12 hours after such entry.

\*An inoperable channel need not be placed in the tripped condition where this would cause the Trip Function to occur. In these cases, the inoperable channel shall be restored to OPERABLE status within 6 hours or the ACTION required by Table 3.3.1-1 for that Trip Function shall be taken.

\*\*The trip system need not be placed in the tripped condition if this would cause the Trip Function to occur. When a trip system can be placed in the tripped condition without causing the Trip Function to occur, place the trip system with the most inoperable channels in the tripped condition; if both systems have the same number of inoperable channels, place either trip system in the tripped condition.

TABLE 3.3.1-1  
REACTOR PROTECTION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM (a)</u>	<u>ACTION</u>
1. Intermediate Range Monitors:			
a. Neutron Flux - High	2 3, 4 5(b)	3 3 3	1 2 3
b. Inoperative	2 3, 4 5	3 3 3	1 2 3
2. Average Power Range Monitor (c):			
a. Neutron Flux - High, Setdown	2 3 5(b)	3 3 3	1 2 3
b. Flow Biased Simulated Thermal Power - High	1	3	4
c. Neutron Flux - High	1	3	4
d. Inoperative	1, 2 3 5	3 3 3	1 2 3
3. Reactor Vessel Steam Dome Pressure - High	1, 2(d)	2	1
4. Reactor Vessel Water Level - Low, Level 3	1, 2	2	1
5. Reactor Vessel Water Level-High, Level 8	1(e)	2	4
6. Main Steam Line Isolation Valve - Closure	1(e)	4	4
7. Main Steam Line Radiation - High	1, 2(d)	2	5
8. Drywell Pressure - High	1, 2(f)	2	1



TABLE 4.3.5.1-1

REACTOR CORE ISOLATION COOLING SYSTEM ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNITS</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>
a. Reactor Vessel Water Level - Low Low, Level 2	S	M	R <sup>(a)</sup>
b. Reactor Vessel Water Level - High, Level 8	S	M	R
c. Condensate Storage Tank Level - Low	S	M	R
d. Suppression Pool Water Level - High	S	M	R
e. Manual Initiation	NA	M <sup>(b)</sup>	NA

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(a) Calibrate trip unit at least once per 31 days.

(b) Manual initiation switches shall be tested at least once per 18 months during shutdown. All other circuitry associated with manual initiation shall receive a CHANNEL FUNCTIONAL TEST at least once per 31 days as a part of circuitry required to be tested for automatic system actuation.

## INSTRUMENTATION

### 3/4.3.6 CONTROL ROD BLOCK INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

---

3.3.6. The control rod block instrumentation channels shown in Table 3.3.6-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.6-2.

APPLICABILITY: As shown in Table 3.3.6-1.

#### ACTION:

- a. With a control rod block instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3.6-2, declare the channel inoperable until the channel is restored to OPERABLE status with its trip setpoint adjusted consistent with the Trip Setpoint value.
- b. With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip Function requirement, take the ACTION required by Table 3.3.6-1.

#### SURVEILLANCE REQUIREMENTS

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4.3.6.1 Each of the above required control rod block trip systems and instrumentation channels shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.6-1.

4.3.6.2 The provisions of Specification 4.0.4 are not applicable to the Channel Functional test surveillances for the Intermediate Range Monitors and Source Range monitors for entry into their applicable OPERATIONAL CONDITIONS (as specified in Table 4.3.6-1) from OPERATIONAL CONDITION 1, provided the surveillances are performed within 12 hours after such entry.

TABLE 3.3.6-1

CONTROL ROD BLOCK INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>MINIMUM OPERABLE CHANNELS PER TRIP FUNCTION</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
1. <u>ROD PATTERN CONTROL SYSTEM</u>			
a. Low Power Setpoint	2	1, 2	60
b. High Power Setpoint	2	1#	60
2. <u>APRM</u>			
a. Flow Biased Neutron Flux- Upscale	6	1	61
b. Inoperative	6	1, 2, 5	61
c. Downscale	6	1	61
d. Neutron Flux - Upscale, Startup	6	2, 5	61
3. <u>SOURCE RANGE MONITORS</u>			
a. Detector not full in <sup>(a)</sup>	4	2##	61
	2**	5	62
b. Upscale <sup>(b)</sup>	4	2##	61
	2**	5	62
c. Inoperative <sup>(b)</sup>	4	2##	61
	2**	5	62
d. Downscale <sup>(c)</sup>	4	2##	61
	2**	5	62
4. <u>INTERMEDIATE RANGE MONITORS</u>			
a. Detector not full in	6	2, 5	61
b. Upscale	6	2, 5	61
c. Inoperative <sup>(d)</sup>	6	2, 5	61
d. Downscale	6	2, 5	61
5. <u>SCRAM DISCHARGE VOLUME</u>			
a. Water Level-High	2	1, 2, 5*	62
6. <u>REACTOR COOLANT SYSTEM RECIRCULATION FLOW</u>			
a. Upscale	3	1	62
7. <u>REACTOR MODE SWITCH SHUTDOWN POSITION</u>	2	3, 4	63

## INSTRUMENTATION

TABLE 3.3.6-1 (Continued)

### CONTROL ROD BLOCK INSTRUMENTATION

#### ACTION

- ACTION 60 - Declare the RPCS inoperable and take the ACTION required by Specification 3.1.4.2.
- ACTION 61 - With the number of OPERABLE Channels:
- a. One less than required by the Minimum OPERABLE Channels per Trip Function requirement, restore the inoperable channel to OPERABLE status within 7 days or place the inoperable channel in the tripped condition within the next hour.
  - b. Two or more less than required by the Minimum OPERABLE Channels per Trip Function requirement, place at least one inoperable channel in the tripped condition within one hour.
- ACTION 62 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip Function requirement, place the inoperable channel in the tripped condition within one hour.
- ACTION 63 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip Function requirement, initiate a rod block.

#### NOTES

- \* With more than one control rod withdrawn. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.
- \*\* OPERABLE channels must be associated with SRMs required OPERABLE per Specification 3.9.2.
- # With THERMAL POWER greater than the Low Power Setpoint.
- ## Whenever the related function is not bypassed as specified in notes (a) through (c).
- (a) This function shall be automatically bypassed if detector count rate is > 100 cps or the IRM channels are on range 3 or higher.
  - (b) This function shall be automatically bypassed when the associated IRM channels are on range 8 or higher.
  - (c) This function shall be automatically bypassed when the IRM channels are on range 3 or higher.
  - (d) This function shall be automatically bypassed when the IRM channels are on range 1.

TABLE 4.3.6-1

CONTROL ROD BLOCK INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u> <sup>(a)</sup>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
1. <u>ROD PATTERN CONTROL SYSTEM</u>				
a. Low Power Setpoint	NA	S/U <sup>(b)</sup> , Q	Q	1, 2
b. High Power Setpoint	NA	S/U <sup>(b)</sup> , Q	Q	1**
2. <u>APRM</u>				
a. Flow Biased Neutron Flux-Upscale	NA	Q	W <sup>(f)</sup> (g), SA	1
b. Inoperative	NA	S/U, Q	NA	1, 2, 5
c. Downscale	NA	Q	W <sup>(h)</sup> , SA	1
d. Neutron Flux - Upscale, Startup	NA	S/U <sup>(b)</sup> , Q	Q	2, 5
3. <u>SOURCE RANGE MONITORS</u>				
a. Detector not full in	NA	S/U, W	NA	2, ## 5
b. Upscale	NA	S/U, W	Q	2, ## 5
c. Inoperative	NA	S/U, W	NA	2, ## 5
d. Downscale	NA	S/U, W	Q	2, ## 5
4. <u>INTERMEDIATE RANGE MONITORS</u>				
a. Detector not full in	NA	S/U, W	NA	2, 5
b. Upscale	NA	S/U, W	Q	2, 5
c. Inoperative	NA	S/U, W	NA	2, 5
d. Downscale	NA	S/U, W	Q	2, 5
5. <u>SCRAM DISCHARGE VOLUME</u>				
a. Water Level-High	NA	Q	R	1, 2, 5*
6. <u>REACTOR COOLANT SYSTEM RECIRCULATION FLOW</u>				
a. Upscale	NA	Q	Q	1
7. <u>REACTOR MODE SWITCH SHUTDOWN POSITION</u>	NA	R	NA	3, 4

## INSTRUMENTATION

TABLE 4.3.6-1 (Continued)

### CONTROL ROD BLOCK INSTRUMENTATION SURVEILLANCE REQUIREMENTS

#### NOTES:

- a. Neutron detectors may be excluded from CHANNEL CALIBRATION.
- b. Within 7 days prior to startup.
- c. [Deleted]
- d. [Deleted]
- e. [Deleted]
- f. This calibration shall consist of the adjustment of the APRM channel to conform to the power values calculated by a heat balance during OPERATIONAL CONDITION 1 when THERMAL POWER is greater than or equal to 25% of RATED THERMAL POWER. Adjust the APRM channel if the absolute difference is greater than 2% of RATED THERMAL POWER.
- g. This calibration shall consist of the adjustment of the APRM flow biased channel to conform to a calibrated flow signal.
- h. This calibration shall consist of verifying the trip setpoint only.
- \* With any control rod withdrawn. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.
- \*\* With THERMAL POWER greater than the Low Power Setpoint.
- ## Whenever the related function is not bypassed as specified in Table 3.4.6-1 notes (a) through (c).

## INSTRUMENTATION

### SOURCE RANGE MONITORS

#### LIMITING CONDITION FOR OPERATION

3.3.7.6 At least the following source range monitor channels shall be OPERABLE.

- a. In OPERATIONAL CONDITION 2\*, four.
- b. In OPERATIONAL CONDITION 3 or 4, two.

APPLICABILITY: OPERATIONAL CONDITIONS 2\*, 3 and 4.

#### ACTION:

- a. In OPERATIONAL CONDITION 2\* with one of the above required source range monitor channels inoperable, restore at least 4 source range monitor channels to OPERABLE status within 4 hours or be in at least HOT SHUTDOWN within the next 12 hours.
- b. In OPERATIONAL CONDITION 3 or 4 with one or more of the above required source range monitor channels inoperable, verify all insertable control rods to be fully inserted in the core and lock the reactor mode switch in the Shutdown position within one hour.

#### SURVEILLANCE REQUIREMENTS

4.3.7.6 Each of the above required source range monitor channels shall be demonstrated OPERABLE by:

- a. Performance of a:
  1. CHANNEL CHECK at least once per:
    - a) 12 hours in OPERATIONAL CONDITION 2\*, and
    - b) 24 hours in OPERATIONAL CONDITION 3 or 4.
  2. CHANNEL CALIBRATION\*\* at least once per 18 months.
- b. Performance of a CHANNEL FUNCTIONAL TEST:
  1. Within 7 days prior to moving the reactor mode switch from the Shutdown position, and
  2. At least once per 31 days#.
- c. Verifying, prior to withdrawal of control rods, that the SRM count rate is at least 0.7 cps with the detector fully inserted.

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\*With IRM's on range 2 or below.

\*\*Neutron detectors may be excluded from CHANNEL CALIBRATION.

#The provisions of Specification 4.0.4 are not applicable to the Source Range Monitor Channel Functional test surveillances for entry into OPERATIONAL CONDITIONS 2\*, 3 or 4 from OPERATIONAL CONDITION 1, provided the surveillances are performed within 12 hours after such entry.

## INSTRUMENTATION

### TRAVERSING IN-CORE PROBE SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.3.7.7. The traversing in-core probe system shall be OPERABLE with:

- a. Five movable detectors, drives and readout equipment to map the core, and
- b. Indexing equipment to allow all five detectors to be calibrated in a common location.

APPLICABILITY: When the traversing in-core probe is used for:

- a. Recalibration of the LPRM detectors, and
- b.\* Monitoring the APLHGR, LHGR, MCPR, or MFLPD.

#### ACTION:

With the traversing in-core probe system inoperable, do not use the system for the above applicable monitoring or calibration functions. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

---

4.3.7.7 The traversing in-core probe system shall be demonstrated OPERABLE by normalizing each of the above required detector outputs within 72 hours prior to use when required for the LPRM calibration function.

\*Only the detector(s) in the location(s) of interest are required to be OPERABLE.





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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 101 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 April 30, 1992, the licensee (Entergy Operations, Inc.) submitted a request for changes to the Grand Gulf Nuclear Station, Unit 1 (GGNS) Technical Specifications (TS).

The requested changes would revise the GGNS TS by adding new surveillance requirements for the reactor protection system (RPS) and control rod block instrumentation and by making clarifying editorial changes to the source range monitor (SRM) TS.

2.0 EVALUATION

The changes proposed by the licensee are grouped into three categories: 1) TS 4.0.4 exceptions, 2) clarification of SRM control rod block applicability, and 3) editorial changes. These categories are discussed separately below.

2.1 TS 4.0.4 Exceptions

The licensee has proposed the following exceptions to TS 4.0.4:

- (1) A new surveillance requirement (4.3.1.4) is proposed for the reactor protection system instrumentation. The proposed wording is as follows:

4.3.1.4 The provisions of Specification 4.0.4 are not applicable to the Channel Functional Test surveillances for the Intermediate Range Monitors for entry into the applicable OPERATIONAL CONDITIONS (as specified in Table 4.3.1.1-1) from OPERATIONAL CONDITION 1, provided the surveillances are performed within 12 hours after such entry.

- (2) Surveillance requirement 4.3.6 is renumbered 4.3.6.1 and a new surveillance requirement (4.3.6.2) is proposed for the control rod block instrumentation. The proposed wording is as follows:

4.3.6.2 The provisions of Specification 4.0.4 are not applicable to the Channel Functional Test surveillances for the Intermediate Range Monitors and Source Range Monitors for entry into their applicable OPERATIONAL CONDITIONS (as specified in Table 4.3.6-1) from OPERATIONAL CONDITION 1, provided the surveillances are performed within 12 hours after such entry.

- (3) A new footnote (#) is added to 4.3.7.6.b.2 to exempt the SRM channel functional test from the provisions of TS 4.0.4 for 12 hours when entering Operation Conditions 2\*, 3 or 4 from Operational Condition 1. The proposed wording for this new requirement is as follows:

The provisions of Specification 4.0.4 are not applicable to the Source Range Monitor Channel Functional test surveillances for entry into OPERATIONAL CONDITIONS 2\*, 3, or 4 from OPERATIONAL CONDITION 1, provided the surveillances are performed within 12 hours after such entry.

The licensee has justified the proposed exceptions to TS 4.0.4 on the following bases:

The licensee proposes to incorporate exceptions to the provisions of TS 4.0.4 for the intermediate range monitor (IRM) functions of the RPS (TS 3/4.3.1), the IRM and SRM functions of the control rod block instrumentation (TS 3/4.3.6), and the SRM instrumentation (TS 3/4.3.7). These exceptions to TS 4.0.4 will only be applicable during plant shutdowns following operation in Operational Condition 1.

The proposed exceptions are consistent with those suggested by the NRC Staff in Generic Letter (GL) 87-09. GL 87-09 recommends changes to TS 4.0.3 to allow up to 24 hours to complete the surveillance requirements before implementing the ACTION requirements. The GL 87-09 recommendations were granted for the GGNS TS by Amendment 69, dated August 14, 1990. In GL 87-09, the NRC staff recognized that conflicts could arise. In some cases, surveillance requirements can only be completed after entry into a mode or specified condition to which the surveillance requirements apply. In other cases, the requirements of TS 4.0.3 may not be met because the surveillance requirements have not been performed within the required surveillance interval. In these cases, the staff recognized that exceptions to TS 4.0.4 would be appropriate.

As asserted in GL 87-09, the assumption that systems and components are inoperable because the surveillance requirement has not been performed is overly conservative. The proposed TS 4.0.4 exceptions provide a method of testing the instrumentation per TS 4.0.3 to confirm operability. Note that the TS 4.0.4 exceptions proposed contain an inherent TS 3.0.4 exception for the purposes of completing the surveillance requirements. This is consistent with other TS 4.0.4 exceptions and the bases for TS 4.0.3. The proposed 12 hour limit does not apply to instrumentation known to be inoperable for reasons other than that surveillance requirements have not been met.

Based on the above justification, the staff concludes that these changes are consistent with the requirements of GL 87-09 and are acceptable.

## 2.2 Clarification of SRM Control Rod Block Applicability

The licensee has proposed the following changes to clarify SRM control rod block applicability:

- (1) A new footnote (##) is added to Table 3.3.6-1 clarifying the specified conditions for SRM operability: "## Whenever the related function is not bypassed as specified in notes (a) through (c)." This footnote references the conditions specified in notes (a) through (c), which describe when each function is bypassed. Operational Condition "2" in Table 3.3.6-1 is changed to "2##" for items 3a-d.
- (2) A new footnote (##) is added to Table 4.3.6-1 clarifying the specified conditions for performing SRM channel functional test and channel calibration surveillances: "## Whenever the related function is not bypassed as specified in Table 3.3.6-1 notes (a) through (c)." This footnote references the conditions specified in notes (a) through (c) of Table 3.4.6-1. Operational Condition "2" in Table 4.3.6-1 is changed to "2##" for items 3a-d.

The licensee has justified the proposed clarification of SRM control rod block applicability on the following bases:

TS 3/4.7.6 requires the SRM to be operable in Operational Conditions 3 and 4 and in Operational Condition 2 when the IRMs are on range 2 or below. TS 3/4.3.6, Table 3.3.6-1, requires the SRM rod block functions to be operable in Operational Conditions 2 and 5. Table 3.3.6-1 further specifies (via notes on the various SRM trip functions) when the SRM trip functions are bypassed.

The bases for TS 3/4.3.7.6 state that the SRMs provide reactor operators with information regarding the status of the neutron level in the core at very low power levels during reactor startup and shutdown. When the IRMs are on scale, adequate neutron level information is available without the SRMs, and the SRMs can be withdrawn. In fact, to avoid unnecessary rod blocks, operators must withdraw the SRMs from the core as reactor power is increased. Withdrawing the SRMs decreases the neutron flux level to which the detector is exposed and prolongs detector life. In addition to providing operators with neutron level information, the SRM system provides the operator with period information during an approach to criticality and will initiate a control rod block, preventing control rod withdrawal under certain conditions.

When the IRMs are on range 3 or higher, adequate neutron level is available to operators via the IRMs, and the SRMs and their associated control rod block functions are no longer required. The proposed change is therefore consistent with the requirements for neutron level monitoring capability and clarifies that the SRM control rod block functions are only required operable when the associated rod block functions are not bypassed.

Based on the above justification, the staff finds that these changes are acceptable.

### 2.3 Editorial Changes

The licensee has proposed the following editorial changes to the TS:

- (1) The word "OPERATIONAL" is inserted before the word "CONDITION" in 4.3.7.6.a.1.a) and b) in accordance with the definition of the term "OPERATIONAL CONDITION" in TS 1.28.
- (2) Surveillance Requirement 4.3.7.6.b.1 is revised to eliminate potential confusion in the present wording. The present wording of 4.3.7.6.b.1 is: "Within 24 hours prior to moving the reactor mode switch from the Shutdown position, if not performed within the previous 7 days." The proposed wording for this surveillance states: "Within 7 days prior to moving the reactor mode switch from the Shutdown position." The proposed wording is equivalent while removing the source of possible confusion.

The licensee has justified the proposed editorial changes on the following bases:

The proposed changes to Surveillance Requirements 4.3.7.6.a.1a) and b) are purely editorial and make the terminology of these specifications consistent with Definition 1.28 of the GGNS TS. Therefore, these changes do not alter the technical requirements of these surveillances.

Surveillance Requirement 4.3.7.6 is clarified by removing potentially confusing wording regarding the surveillance frequency. TS 4.3.7.6 requires a channel functional test of the SRMs to be performed during the 24 hours before the reactor mode switch if moved from the shutdown position, if the test has not been performed within the previous 7 days. The wording of this specification is potentially confusing because of the 24-hour clause. This clause appears to require anticipation of the exact time the mode switch will be moved from the Shutdown position, which is not always possible. The proposed wording - "within 7 days prior to moving the reactor mode switch from the Shutdown position" - provides equivalent assurance that the SRM is operable, while removing the source of possible confusion.

These changes are justified since they will make the TS easier to implement while providing the same degree of confidence that the associated instrumentation is operable.

The staff agrees with the licensee's justification for these changes and finds that they are acceptable.

### 3.0 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.

### 4.0 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 in surveillance requirements. 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 (57 FR 22262). Accordingly, the amendment meets 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 amendment.

### 5.0 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) 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.

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