



**Entergy**

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GNRO-2015/00059

August 13, 2015

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

**SUBJECT:** Corrected Technical Specification Pages Regarding "Maximum Extended Load Line Limit Plus" License Amendment Request, dated 9/25/2013.  
Grand Gulf Nuclear Station, Unit 1  
Docket No. 50-416  
License No. NPF-29

**REFERENCES:** 1 Entergy Letter, "Maximum Extended Load Line Limit Analysis Plus (MELLLA+) License Amendment Request," GNRO-2013/00012, dated September 25, 2013 (ADAMS Accession No. ML13269A140).

Dear Sir or Madam:

Entergy Operations, Inc. is providing in Attachment 2 clean pages of selected Technical Specification (TS) marked-up pages previously submitted in reference 1. Attachment 1 contains the associated marked-up TS pages for comparison with the clean pages.

The proposed changes to the Grand Gulf Nuclear Station Technical Specifications are attached to this letter. TS page 3.3-2a adds revision bars for J, K and L. TS page 3.3-5b adds the word "deleted" to the blank box at the bottom. TS page 3.3-6 adds revision bars to 2d and 2f. TS page 3.3-6a adds colons and converts double revision bars to single revision bars. TS page 3.4-1 removes a revision bar. TS page 5.0-16 converts double revision bars to single revision bars. TS page 5.0-18 converts a double revision bar to a single revision bar. TS page 5.0-21a removes an indented title for 5.6.7 and adds revision bars.

This letter contains no new commitments.

If you have any questions or require additional information, please contact Mr. James Nadeau at 601-437-2103.

I declare under penalty of perjury that the foregoing is true and correct; executed on August 13, 2015.

Sincerely,



KJM/ras

Attachments: 1. Marked-Up Technical Specification Pages

2. Clean Technical Specification Pages

cc: with Attachments

U.S. Nuclear Regulatory Commission  
ATTN: Mr. Marc L. Dapas  
Regional Administrator, Region IV  
1600 East Lamar Boulevard  
Arlington, TX 76011-4511

U.S. Nuclear Regulatory Commission  
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NRC Senior Resident Inspector  
Grand Gulf Nuclear Station  
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State Health Officer  
Mississippi Department of Health  
P. O. Box 1700  
Jackson, MS 39215-1700

Attachment 1

Grand Gulf Nuclear Station

GNRO-2015/00059

Marked-Up Technical Specification Pages

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
I. As required by Required Action D.1 and referenced in Table 3.3.1.1-1.	I.1 Initiate action to fully insert all insertable control rods in core cells containing one or more fuel assemblies.	Immediately
J. As required by Required Action D.1 and referenced in Table 3.3.1.1-1.	<p>J.1 Initiate alternate method to detect and suppress thermal hydraulic instability oscillations.</p> <p><u>AND</u></p> <p>J.2 ----- NOTE ----- LCO 3.0.4 is not applicable.</p> <p>Restore required channels to OPERABLE.</p>	<p>12 hours</p> <p>120 days</p>
K. Required Action and associated Completion Time of Condition J not met.	K.1 Reduce THERMAL POWER to < 21% RTP.	4 hours

Replace with INSERT TS-1.

**INSERT TS-1**

J. As required by Required Action D.1 and referenced in Table 3.3.1.1-1.	<p>J.1 Initiate action to implement the Manual BSP Regions defined in the COLR.</p> <p><u>AND</u></p> <p>J.2 Implement the Automated BSP Scram Region using the modified APRM Flow Biased Simulated Thermal Power – High trip function setpoints defined in the COLR.</p> <p><u>AND</u></p> <p>J.3 Initiate action to submit an OPRM report in accordance with Specification 5.6.7.</p>	<p>Immediately</p> <p>12 hours</p> <p>90 days</p>
K. Required Action and associated Completion Time of Condition J not met.	<p>K.1 Initiate action to implement the Manual BSP Regions defined in the COLR.</p> <p><u>AND</u></p> <p>K.2 Reduce operation to below the BSP Boundary defined in the COLR.</p> <p><u>AND</u></p> <p>K.3 ----- NOTE ----- LCO 3.0.4 is not applicable. ----- Restore required channels to OPERABLE.</p>	<p>Immediately</p> <p>12 hours</p> <p>120 days</p>
L. Required Action and associated Completion Time of Condition K not met.	<p>L.1 Reduce THERMAL POWER to &lt; 16.8% RTP.</p>	<p>4 hours</p>

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.3.1.1.20 -----NOTE-----</p> <ol style="list-style-type: none"> <li>1. For Function 2.a, not required to be performed when entering MODE 2 from MODE 1 until 12 hours after entering MODE 2.</li> <li>2. For Functions 2.a, 2.b, and 2.c, the APRM/OPRM channels and the 2-Out-Of-4 Voter channels are included in the CHANNEL FUNCTIONAL TEST.</li> <li>3. For Functions 2.d and 2.f, the APRM/OPRM channels and the 2-Out-Of-4 Voter channels plus the flow input function, excluding the flow transmitters, are included in the CHANNEL FUNCTIONAL TEST.</li> </ol> <p>-----</p> <p>Perform CHANNEL FUNCTIONAL TEST.</p>	<p>184 days</p>
<p>SR 3.3.1.1.21 Perform LOGIC SYSTEM FUNCTIONAL TEST.</p>	<p>24 months</p>
<p>SR 3.3.1.1.22 -----NOTE-----</p> <p>For Function 2.e, "n" equals 8 channels for the purpose of determining the STAGGERED TEST BASIS Frequency. Testing APRM and OPRM outputs shall alternate.</p> <p>-----</p> <p>Verify the RPS RESPONSE TIME is within limits.</p>	<p>24 months on a STAGGERED TEST BASIS</p>
<p><del>SR 3.3.1.1.23 Verify OPRM is not bypassed when APRM Simulated Thermal Power is greater than or equal to 26% RTP and recirculation drive flow is less than 60% of rated recirculation drive flow.</del></p>	<p><del>24 months</del></p>

Table 3.3.1.1-1 (page 1 of 4)  
Reactor Protection System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Intermediate Range Monitors					
a. Neutron Flux - High	2	3	H	SR 3.3.1.1.1 SR 3.3.1.1.3 SR 3.3.1.1.12 SR 3.3.1.1.13	≤ 122/125 divisions of full scale
	5(a)	3	I	SR 3.3.1.1.1 SR 3.3.1.1.4 SR 3.3.1.1.12 SR 3.3.1.1.13	≤ 122/125 divisions of full scale
b. Inop	2	3	H	SR 3.3.1.1.3 SR 3.3.1.1.13	NA
	5(a)	3	I	SR 3.3.1.1.4 SR 3.3.1.1.13	NA
2. Average Power Range Monitors					
a. Neutron Flux - High, Setdown	2	3(c)	H	SR 3.3.1.1.7 SR 3.3.1.1.10(d) (e) SR 3.3.1.1.19 SR 3.3.1.1.20	≤ 20% RTP
b. Fixed Neutron Flux - High	1	3(c)	G	SR 3.3.1.1.2 SR 3.3.1.1.7 SR 3.3.1.1.10(d) (e) SR 3.3.1.1.19 SR 3.3.1.1.20	≤ 119.3% RTP
c. Inop	1,2	3(c)	H	SR 3.3.1.1.20	NA
d. Flow Biased Simulated Thermal Power - High	1	3(c)	G	SR 3.3.1.1.2 SR 3.3.1.1.7 SR 3.3.1.1.10(d) (e) SR 3.3.1.1.17 SR 3.3.1.1.19 SR 3.3.1.1.20	(b) (g)
e. 2-Out-Of-4 Voter	1,2	2	H	SR 3.3.1.1.19 SR 3.3.1.1.20 SR 3.3.1.1.21 SR 3.3.1.1.22	NA
f. OPRM Upscale	≥ 21%	3(c)	J	SR 3.3.1.1.7 SR 3.3.1.1.10(d) (e) SR 3.3.1.1.19 SR 3.3.1.1.20 <del>SR 3.3.1.1.23</del>	(f)

(continued)

16.8% RTP

Table 3.3.1.1-1 (page 2 of 4)  
Reactor Protection System Instrumentation

0.64W + 61.8%

- (a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.
- (b) Two-Loop Operation ~~0.58W + 59.1% RTP~~ and  $\leq 113\%$  RTP  
Single-Loop Operation 0.58W + 37.4% RTP
- (c) Each channel provides inputs to both trip systems.
- (d) If the as-found channel setpoint is outside its pre-defined as-found tolerance, then the channel shall be evaluated to verify that it is functioning as required before returning the channel to service.
- (e) The instrument channel setpoint shall be reset to a value that is within the as-left tolerance around the Nominal Trip Setpoint (NTSP) at the completion of the surveillance; otherwise, the channel shall be declared inoperable. Setpoints more conservative than the NTSP are acceptable provided tolerances apply to the actual setpoint implemented to confirm channel performance. The NTSP and the as-found and as-left tolerances are specified in the Technical Requirements Manual.
- (f) The setpoint for the OPRM Upscale ~~Period Based Detection algorithm~~ is specified in the COLR.

Confirmation Density Algorithm (CDA)

- (g) With the OPRM Upscale trip function (Function 2.f) inoperable, reset the APRM Flow Biased Simulated Thermal Power - High trip function (Function 2.d) setpoints to the values defined by the COLR to implement the Automated BSP Scram Region in accordance with Action J of this specification.



### 3.4 REACTOR COOLANT SYSTEM (RCS)

#### 3.4.1 Recirculation Loops Operating

LCO 3.4.1 Two recirculation loops with matched flows shall be in operation.

OR

~~One recirculation loop shall be in operation with the required limits modified for single loop operation as specified in the COLR.~~

-----NOTE-----  
Required limit modifications for single recirculation loop operation may be delayed for up to 12 hours after transition from two recirculation loop operation to single recirculation loop operation.  
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APPLICABILITY: MODES 1 and 2.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Recirculation loop jet pump flow mismatch not within limits.	A.1 Shutdown one recirculation loop.	2 hours

(continued)

One recirculation loop shall be in operation provided the plant is not operating in the MELLLA+ domain defined in the COLR and provided the required limits are modified for single loop operation as specified in the COLR.

5.5 Programs and Manuals (continued)

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5.5.11 Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

- a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.
- b. Licensees may make changes to Bases without prior NRC approval provided the changes do not require either of the following:
  1. A change in the TS incorporated in the license; or
  2. A change to the updated FSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.
- c. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the UFSAR.
- d. Proposed changes that do not meet the criteria of either Specification 5.5.11.b.1 or Specification 5.5.11.b.2 above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

5.5.12 10 CFR 50, Appendix J, Testing Program

This program establishes the leakage rate testing program of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be implemented in accordance with the Safety Evaluation issued by the Office of Nuclear Reactor Regulation dated April 26, 1995 (GNRI-95/00087) as modified by the Safety Evaluation issued for Amendment No. 135 to the Operating License, except that the next Type A test performed after the November 24, 1993 Type A test shall be performed no later than November 23, 2008. Consistent with standard scheduling practices for Technical Specifications required surveillances, intervals for the recommended surveillance frequency for Type A, B and C testing may be extended by up to 25 percent of the test interval, not to exceed 15 months. The calculated peak containment internal pressure for the design basis loss of coolant accident, Pa, is ~~14.8~~ psig.



## 5.6 Reporting Requirements

### 5.6.2 Annual Radiological Environmental Operating Report (continued)

results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

### 5.6.3 Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the unit during the previous calendar year shall be submitted by May 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be consistent with the objectives outlined in the ODCM and process control program and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

### 5.6.4 Deleted

### 5.6.5 Core Operating Limits Report (COLR)

a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:

- 1) LCO 3.2.1, Average Planar Linear Heat Generation Rate (APLHGR),
- 2) LCO 3.2.2, Minimum Critical Power Ratio (MCPR),
- 3) LCO 3.2.3, Linear Heat Generation Rate (LHGR),
- 4) Deleted
- 5) LCO 3.3.1.1, RPS Instrumentation, Table 3.3.1.1-1 APRM Function 2.f
- 6) Deleted

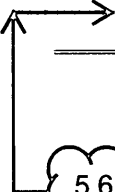
(continued)

The Manual Backup Stability Protection (BSP) Scram Region (Region I), the Manual BSP Controlled Entry Region (Region II), the modified APRM Flow Biased Simulated Thermal Power - High trip function (Function 2.d) setpoints used in the OPRM Automated BSP Scram Region, and the BSP Boundary for Specification 3.3.1.1.

## 5.6 Reporting Requirements

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

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



### 5.6.7 Oscillation Power Range Monitor (OPRM) Report

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

Attachment 2

Grand Gulf Nuclear Station

GNRO-2015/00059

Clean Technical Specification Pages

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
I. As required by Required Action D.1 and referenced in Table 3.3.1.1-1.	I.1 Initiate action to fully insert all insertable control rods in core cells containing one or more fuel assemblies.	Immediately
J. As required by Required Action D.1 and referenced in Table 3.3.1.1-1.	J.1 Initiate action to implement the Manual BSP Regions defined in the COLR.  <u>AND</u>  J.2 Implement the Automated BSP Scram Region using the modified APRM Flow Biased Simulated Thermal Power - High trip function setpoints defined in the COLR.  <u>AND</u>  J.3 Initiate action to submit an OPRM report in accordance with Specification 5.6.7.	Immediately   12 hours      Immediately
K. Required Action and associated Completion Time of Condition J not met.	K.1 Initiate action to implement the Manual BSP Regions defined in the COLR.  <u>AND</u>  K.2 Reduce operation to below the BSP Boundary defined in the COLR.  <u>AND</u>  K.3 ----- NOTE ----- LCO 3.0.4 is not applicable. ----- Restore required channels to OPERABLE.	Immediately   12 hours      120 days
L. Required Action and associated Completion Time of Condition K not met.	L.1 Reduce THERMAL POWER to < 16.8% RTP.	4 hours

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.3.1.1.20 -----NOTE-----</p> <ol style="list-style-type: none"> <li>1. For Function 2.a, not required to be performed when entering MODE 2 from MODE 1 until 12 hours after entering MODE 2.</li> <li>2. For Functions 2.a, 2.b, and 2.c, the APRM/OPRM channels and the 2-Out-Of-4 Voter channels are included in the CHANNEL FUNCTIONAL TEST.</li> <li>3. For Functions 2.d and 2.f, the APRM/OPRM channels and the 2-Out-Of-4 Voter channels plus the flow input function, excluding the flow transmitters, are included in the CHANNEL FUNCTIONAL TEST.</li> </ol> <p>-----</p> <p>Perform CHANNEL FUNCTIONAL TEST.</p>	<p>184 days</p>
<p>SR 3.3.1.1.21 Perform LOGIC SYSTEM FUNCTIONAL TEST.</p>	<p>24 months</p>
<p>SR 3.3.1.1.22 -----NOTE-----</p> <p>For Function 2.e, "n" equals 8 channels for the purpose of determining the STAGGERED TEST BASIS Frequency. Testing APRM and OPRM outputs shall alternate.</p> <p>-----</p> <p>Verify the RPS RESPONSE TIME is within limits.</p>	<p>24 months on a STAGGERED TEST BASIS</p>
<p>DELETED</p>	<p>DELETED</p>

Table 3.3.1.1-1 (page 1 of 4)  
Reactor Protection System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Intermediate Range Monitors					
a. Neutron Flux - High	2	3	H	SR 3.3.1.1.1 SR 3.3.1.1.3 SR 3.3.1.1.12 SR 3.3.1.1.13	≤ 122/125 divisions of full scale
	5 (a)	3	I	SR 3.3.1.1.1 SR 3.3.1.1.4 SR 3.3.1.1.12 SR 3.3.1.1.13	≤ 122/125 divisions of full scale
b. Inop	2	3	H	SR 3.3.1.1.3 SR 3.3.1.1.13	NA
	5 (a)	3	I	SR 3.3.1.1.4 SR 3.3.1.1.13	NA
2. Average Power Range Monitors					
a. Neutron Flux - High, Setdown	2	3 (c)	H	SR 3.3.1.1.7 SR 3.3.1.1.10 (d) (e) SR 3.3.1.1.19 SR 3.3.1.1.20	≤ 20% RTP
b. Fixed Neutron Flux - High	1	3 (c)	G	SR 3.3.1.1.2 SR 3.3.1.1.7 SR 3.3.1.1.10 (d) (e) SR 3.3.1.1.19 SR 3.3.1.1.20	≤ 119.3% RTP
c. Inop	1,2	3 (c)	H	SR 3.3.1.1.20	NA
d. Flow Biased Simulated Thermal Power - High	1	3 (c)	G	SR 3.3.1.1.2 SR 3.3.1.1.7 SR 3.3.1.1.10 (d) (e) SR 3.3.1.1.17 SR 3.3.1.1.19 SR 3.3.1.1.20	(b) (g)
e. 2-Out-Of-4 Voter	1,2	2	H	SR 3.3.1.1.19 SR 3.3.1.1.20 SR 3.3.1.1.21 SR 3.3.1.1.22	NA
f. OPRM Upscale	≥ 16.8% RTP	3 (c)	J	SR 3.3.1.1.7 SR 3.3.1.1.10 (d) (e) SR 3.3.1.1.19 SR 3.3.1.1.20	(f)

(continued)



Table 3.3.1.1-1 (page 2 of 4)  
Reactor Protection System Instrumentation

- (a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.
- (b) Two-Loop Operation:  $0.64W + 61.8\% \text{ RTP}$  and  $\leq 113\% \text{ RTP}$   
Single-Loop Operation:  $0.58W + 37.4\% \text{ RTP}$
- (c) Each channel provides inputs to both trip systems.
- (d) If the as-found channel setpoint is outside its pre-defined as-found tolerance, then the channel shall be evaluated to verify that it is functioning as required before returning the channel to service.
- (e) The instrument channel setpoint shall be reset to a value that is within the as-left tolerance around the Nominal Trip Setpoint (NTSP) at the completion of the surveillance; otherwise, the channel shall be declared inoperable. Setpoints more conservative than the NTSP are acceptable provided the as-found and as-left tolerances apply to the actual setpoint implemented in the Surveillance procedures to confirm channel performance. The NTSP and the methodologies used to determine the as-found and as-left tolerances are specified in the Technical Requirements Manual.
- (f) The setpoint for the OPRM Upscale Confirmation Density Algorithm (CDA) is specified in the COLR.
- (g) With the OPRM Upscale trip function (Function 2.f) inoperable, reset the APRM Flow Biased Simulated Thermal Power - High trip function (Function 2.d) setpoints to the values defined by the COLR to implement the Automated BSP Scram Region in accordance with Action J of this specification.

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.1 Recirculation Loops Operating

LCO 3.4.1 Two recirculation loops with matched flows shall be in operation.

OR

One recirculation loop shall be in operation provided the plant is not operating in the MELLLA+ domain defined in the COLR and provided the required limits are modified for single loop operation as specified in the COLR.

-----NOTE-----

Required limit modifications for single recirculation loop operation may be delayed for up to 12 hours after transition from two recirculation loop operation to single recirculation loop operation.

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APPLICABILITY: MODES 1 and 2.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Recirculation loop jet pump flow mismatch not within limits	A.1 Shutdown one Recirculation loop	2 hours

(continued)

5.5 Programs and Manuals (continued)

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5.5.11 Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

- a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.
- b. Licensees may make changes to Bases without prior NRC approval provided the changes do not require either of the following:
  - 1. A change in the TS incorporated in the license; or
  - 2. A change to the updated FSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.
- c. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the UFSAR.
- d. Proposed changes that do not meet the criteria of either Specification 5.5.11.b.1 or Specification 5.5.11.b.2 above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

5.5.12 10 CFR 50, Appendix J, Testing Program

This program establishes the leakage rate testing program of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be implemented in accordance with the Safety Evaluation issued by the Office of Nuclear Reactor Regulation dated April 26, 1995 (GNRI-95/00087) as modified by the Safety Evaluation issued for Amendment No. 135 to the Operating License, except that the next Type A test performed after the November 24, 1993 Type A test shall be performed no later than November 23, 2008. Consistent with standard scheduling practices for Technical Specifications required surveillances, intervals for the recommended surveillance frequency for Type A, B and C testing may be extended by up to 25 percent of the test interval, not to exceed 15 months. The calculated peak containment internal pressure for the design basis loss of coolant accident, Pa, is 12.1 psig.

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## 5.6 Reporting Requirements

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### 5.6.2 Annual Radiological Environmental Operating Report (continued)

results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

### 5.6.3 Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the unit during the previous calendar year shall be submitted by May 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be consistent with the objectives outlined in the ODCM and process control program and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

### 5.6.4 Deleted

### 5.6.5 Core Operating Limits Report (COLR)

a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:

- 1) LCO 3.2.1, Average Planar Linear Heat Generation Rate (APLHGR),
- 2) LCO 3.2.2, Minimum Critical Power Ratio (MCPR),
- 3) LCO 3.2.3, Linear Heat Generation Rate (LHGR),
- 4) Deleted
- 5) LCO 3.3.1.1, RPS Instrumentation, Table 3.3.1.1-1 APRM Function 2.f
- 6) The Manual Backup Stability Protection (BSP) Scram Region (Region I), the Manual BSP Controlled Entry Region (Region II), the modified APRM Flow Biased Simulated Thermal Power - High trip function (Function 2.d) setpoints used in the OPRM Automated BSP Scram Region, and the BSP Boundary for Specification 3.3.1.1.

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(continued)

## 5.6 Reporting Requirements

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

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

### 5.6.7 Oscillation Power Range Monitor (OPRM) Report

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

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