



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

April 26, 1982

NUCLEAR PRODUCTION DEPARTMENT

U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Washington, D.C. 20555

Attention: Mr. Harold R. Denton, Director

Dear Mr. Denton:



SUBJECT: Grand Gulf Nuclear Station
Units 1 and 2
Docket Nos. 50-416 and 50-417
File 0260/L-334.0/L-350.0
Additional Information
Pertaining to FSAR
AECM-82/180

Attached are responses or clarifications to issues discussed in the Grand Gulf Final Safety Analysis Report (FSAR).

The proposed FSAR changes outlined in the attachment represent information requested by members of the Procedure Test and Review Branch. This information clarifies data in and should be used in harmony with tables referenced in Sections 14.2.12.3.14 and 14.2.12.3.29 of FSAR Amendment 55, April 1982.

This information represents revisions to the Grand Gulf FSAR which will be made in a forthcoming amendment pending the receipt of further guidance requested informally from the NRC in regard to post-operating license FSAR amendments.

Should you have any questions or require additional information, please contact this office.

Yours truly,

L. F. Dale
Manager of Nuclear Services

Boo!
1/1

RFP/JGC/JDR:lm

- Attachments:
1. Question and Response 423.45
 2. Tables I and II as referenced in FSAR Section 14.2.12.3.14
 3. Tables III and IV as referenced in FSAR Section 14.2.12.3.29

cc: (See Next Page)

A
AE2T1

8204280272

Member Middle South Utilities System

cc: Mr. N. L. Stampley (w/a)
Mr. G. B. Taylor (w/a)
Mr. R. B. McGehee (w/a)
Mr. T. B. Conner (w/a)

Mr. Richard C. DeYoung, Director (w/a)
Office of Inspection & Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. J. P. O'Reilly, Regional Administrator (w/a)
Office of Inspection & Enforcement
U.S. Nuclear Regulatory Commission
Region II
101 Marietta St., N.W., Suite 3100
Atlanta, Georgia 30303

GG
FSAR

423.45 Certain data that was to be provided in the FSAR Chapter 14 has not been made available. Supply the missing information described below:

- a. p. 14.2-138 Section 14.2.12.3.14.d

Tolerance data that was to be provided in June 1980 is not given.

- b. p. 14.2-169, 170 Section 14.2.12.3.29.d

Criteria and allowable movement information that was to be provided in June 1980 is not given.

RESPONSE

The values for Tables I and II of subsection 14.2.12.3.14 and of Tables III and IV of subsection 14.2.12.3.29 have been revised. This information is included in the startup test procedures.

GG
FSAR

TABLE I
THERMAL EXPANSION DISPLACEMENT CRITERIA

<u>Pipeline Description</u>	<u>Sensor Identification</u>	<u>Level 1 Range (inches)</u>	
Steam Line A	SA2-MX	-2.310	-1.610
	SA6-MX	-0.99	-3.12
	SA6-MY	1.08	-0.04
	SA6-MZ	1.78	0.33
	SA7-MY	2.75	1.58
	SA8-MY	1.42	0.66
	SA9-MX	-1.64	-2.44
Steam Line B	SB-MX	-1.65	-2.35
	SB6-MX	-1.48	-3.48
	SB6-MY	1.86	-0.15
	SB6-MZ	-0.55	-2.56
Steam Line C	SC2-MX	-1.65	-2.35
	SC6-MX	-1.53	-3.53
	SC6-MY	1.93	-0.07
	SC6-MZ	2.56	0.55

NOTES:

1. The listed limits are for Loop B; X and Z limits sign must be changed to obtain the Loop A, X and Z Limits.
2. The listed limits are for operating conditions with the vessel and steam lines at 550°F and recirculation lines at 530°F.

GG
FSAR

TABLE I (Continued)

<u>Pipeline Description</u>	<u>Sensor Identification</u>	<u>Level 1 Range (inches)</u>	
Steam Line D	SD2-MX	-1.61	-2.31
	SD6-MX	-0.99	-3.12
	SD6-MY	1.29	0.16
	SD6-MZ	1.78	0.33
Recirc Loops ¹	RA1-MY/RB1-MY	0.56	0.02
A and B	RA2-MZ/RB2-MZ	-0.65	-1.15
	RA3-MX/RB3-MX	0.19	-1.01
	RA3-MZ/RB3-MZ	0.0/	-1.13
	RA5-MX/RB5-MX	1.15	-0.37
	RA5-MY/RB5-MY	-0.94	-2.94
	RA5-MZ/RB5-MZ	0.84	-0.72
	RA6-MZ/RB6-MZ	1.95	0.01

NOTES:

1. The listed limits are for Loop B; X and Z limits sign must be changed to obtain the Loop A, X and Z limits.
2. The listed limits are for operating conditions with the vessel and steam lines at 550°F and recirculation lines at 530°F.

GG
FSAR

TABLE II
THERMAL EXPANSION DISPLACEMENT CRITERIA

<u>Pipeline Description</u>	<u>Sensor Identification</u>	<u>Level 2 Range (inches)</u>	
Steam Line A	SA2-MX	-1.69	-2.24
	SA6-MX	-1.70	-2.35
	SA6-MY	0.79	0.41
	SA6-MZ	1.18	0.93
	SA7-MY	2.26	2.21
	SA8-MY	1.17	0.91
	SA9-MX	-1.90	-2.19
Steam Line B	SB2-MX	-1.79	-2.22
	SB6-MX	-2.36	-2.59
	SB6-MY	1.05	0.66
	SB6-MZ	-1.70	-1.41
Steam Line C	SC2-MX	-1.79	-2.22
	SC6-MX	-2.43	-2.65
	SC6-MY	1.12	0.74
	SC6-MZ	1.70	1.41

NOTES:

1. The listed limits are for Loop B; X and Z limits sign must be changed to obtain the Loop A, X and Z limits.
2. The listed limits are for operating conditions with the vessel and steam lines at 550°F and recirculation lines at 530°F.

GG
FSAR

TABLE II (Continued)

<u>Pipeline Description</u>	<u>Sensor Identification</u>	<u>Level 2 Range (inches)</u>	
Steam Line D	SD2-MX	-1.69	-2.24
	SD6-MX	-1.70	-2.35
	SD6-MY	0.79	0.41
	SD6-MZ	1.18	0.93
Recirc Loops ¹	RA1-MY/RB1-MY	0.39	0.20
A and B	RA2-MZ/RB2-MZ	-0.78	-1.02
	RA3-MX/RB3-MX	-0.31	-0.52
	RA3-MZ/RB3-MZ	-0.41	-0.65
	RA5-MX/RB5-MX	0.50	0.28
	RA5-MY/RB5-MY	-1.84	-2.03
	RA5-MZ/RB5-MZ	0.24	-0.11
	RA6-MZ/RB6-MZ	1.08	0.88

NOTES:

1. The listed limits are for Loop B; X and Z limits sign must be changed to obtain the Loop A, X and Z limits.
2. The listed limits are for operating conditions with the vessel and steam lines at 550°F and recirculation lines at 530°F.

GG
FSAR

TABLE III
TRANSIENT VIBRATION CRITERIA

<u>Pipeline Description</u>	<u>Sensor Identification</u>	<u>Level 2 Peak-to-Peak Amplitude (inches)</u>	<u>Level 1 Peak-to-Peak Amplitude (inches)</u>
Steam Line A	SA6-DX	0.10	0.14
	SA6-DY	0.08	0.11
	SA6-DZ	0.07	0.10
Steam Lines B and C	SB6-DX/SC6-DX	0.12	0.20
	SB6-DY/SC6-DY	0.09	0.14
	SB-DZ/SC6-DZ	0.08	0.12
Steam Line D	SD6-DX	0.10	0.14
	SD6-DY	0.08	0.11
	SD6-DZ	0.07	0.10
Recirc Loops A and B	RA3-DX/RB3-DX	0.060	0.082
	RA3-DZ/RB3-DZ	0.060	0.082
	RA5-DX/RB5-DX	0.060	0.107
	RA5-DY/RB5-DY	0.060	0.101
	RA5-DZ/RB5-DZ	0.060	0.086

NOTES:

1. The listed limits are for operating conditions with vessel and steam lines at 550°F and recirculation lines at 530°F.

GG
FSAR

TABLE III (CONTINUED)

<u>Pipeline Description</u>	<u>Sensor Identification</u>	<u>Level 2 (in/in)</u>	<u>Level 1 (in/in)</u>
Steam Line A	SA3-S	0.257×10^{-3}	0.656×10^{-3}
	SA4-S	0.257×10^{-3}	0.656×10^{-3}
	SA11-S	0.010×10^{-3}	0.376×10^{-3}
	SA12-S	0.010×10^{-3}	0.376×10^{-3}
Steam Lines	SB3-S/SC3-S	0.274×10^{-3}	0.660×10^{-3}
B and C	SB4-S/SC4-S	0.274×10^{-3}	0.660×10^{-3}
Steam Line D	SD3-S	0.257×10^{-3}	0.656×10^{-3}
	SD4-S	0.257×10^{-3}	0.656×10^{-3}
Recirc Loop A	RA7-S	0.012×10^{-3}	0.277×10^{-3}
	RA8-S	0.012×10^{-3}	0.277×10^{-3}
	RA9-S	0.008×10^{-3}	0.277×10^{-3}
	RA10-S	0.008×10^{-3}	0.277×10^{-3}

GG
FSAR

TABLE IV
STEADY-STATE VIBRATION CRITERIA

<u>Pipeline Description</u>	<u>Sensor Identification</u>	<u>Level 2 Peak-to-Peak Amplitude (inches)</u>	<u>Level 1 Peak-to-Peak Amplitude (inches)</u>
Steam Line A	SA6-DX	0.042	0.082
	SA6-DY	0.02	0.04
	SA6-DZ	0.06	0.12
Steam Line B and C	SB6-DX/SC6-DX	0.066	0.132
	SB6-DY/SC6-DY	0.04	0.08
	SB6-DZ/SC6-DZ	0.088	0.176
Steam Line D	SD6-DX	0.042	0.084
	SD6-DY	0.02	0.04
	SD6-DZ	0.06	0.12
Recirc Loops A and B	RA3-DX/RB3-DX	0.050	0.102
	RA3-DZ/RB3-DZ	0.058	0.116
	RA5-DX/RB5-DX	0.026	0.052
	RA5-DY/RB5-DY	0.024	0.046
	RA5-DZ/RB5-DZ	0.018	0.036

NOTES:

1. The listed limits are for operating conditions with vessel and steam lines at 550°F and recirculation lines at 530°F.

GG
FSAR

TABLE IV (CONTINUED)

<u>Pipeline Description</u>	<u>Sensor Identification</u>	<u>Level 2 (in/in)</u>	<u>Level 1 (in/in)</u>
Steam Line A	SA3-S	0.059×10^{-3}	0.118×10^{-3}
	SA4-S	0.059×10^{-3}	0.118×10^{-3}
	SA11-S	0.041×10^{-3}	0.081×10^{-3}
	SA12-S	0.041×10^{-3}	0.081×10^{-3}
Steam Lines	SB3-S/SC3-S	0.087×10^{-3}	0.173×10^{-3}
B and C	SB4-S/SC4-S	0.087×10^{-3}	0.173×10^{-3}
Steam Line D	SD3-S	0.059×10^{-3}	0.118×10^{-3}
	SD4-S	0.059×10^{-3}	0.118×10^{-3}
Recirc Loop A	RA7-S	0.025×10^{-3}	0.05×10^{-3}
	RA8-S	0.025×10^{-3}	0.05×10^{-3}
	RA9-S	0.025×10^{-3}	0.05×10^{-3}
	RA10-S	0.025×10^{-3}	0.05×10^{-3}