



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

October 14, 1983

NUCLEAR PRODUCTION DEPARTMENT

Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
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
License No. NPF-13
File 0260/L-860.0
Request for Additional
Information
AECM-83/0667

In response to an NRC informal request for additional information received on October 4, 1983, Mississippi Power & Light Company (MP&L) is providing the enclosed information addressing the following issues:

- 1) Fuel Assembly Liftoff
- 2) Schedule for Implementing Mitigating Measures for Intergranular Stress Corrosion Cracking (IGSCC)
- 3) Dynamic Qualification of Equipment

Attachment 1 contains plant specific information. This information represents a change to the Grand Gulf FSAR and will be incorporated in the FSAR update scheduled for June, 1984.

Please contact this office if additional information is required.

Yours truly,

L. F. Dale
Manager of Nuclear Services

JHS/JGC:lm

Attachments: 1) Fuel Assembly Liftoff
2) IGSCC
3) Dynamic Qualification of Equipment

cc: (See Next Page)

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MISSISSIPPI POWER & LIGHT COMPANY

cc: Mr. J. B. Richard (w/o)
Mr. R. B. McGehee (w/o)
Mr. T. B. Conner (w/o)
Mr. G. B. Taylor (w/o)

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)
U.S. Nuclear Regulatory Commission
Region II
101 Marietta St., N.W., Suite 2900
Atlanta, Georgia 30303

ISSUE: Provide the plant specific values determined using the methodology contained in NEDE-21175-3-P for the fuel assembly acceleration due to seismic loadings. (Reference: GGNS License Condition, 2.C(13).)

RESPONSE: In letter AECM-82/371, dated August 30, 1982, MP&L submitted information endorsing the General Electric Licensing Topical Report NEDE-21175-3-P. The plant specific fuel assembly values were determined using this topical report and are provided in the attached table. This table represents new information to be provided in the FSAR and will be included in the FSAR update scheduled for June, 1984.

GG
FSAR
TABLE 3.9-2b (Cont.)
(vi) FUEL ASSEMBLY (INCLUDING CHANNEL)

<u>Acceptance Criteria</u>	<u>Loading</u>	<u>Primary Load Type</u>	<u>Calculated Peak Acceleration</u>	<u>Evaluation Basis Acceleration</u>
Acceleration Envelope	Horizontal Direction:	Horizontal Acceleration Profile	1.5 G	(1)
	1. Peak Pressure 2. Safe Shutdown Earthquake 3. Annulus Pressurization			
	Vertical Direction:	Vertical Accelerations	2.3 ⁽⁴⁾	(1)
	1. Peak Pressure 2. Safe Shutdown Earthquake 3. Safety Relief Valve 4. Scram			

NOTES:

- (1) Evaluation Basis Accelerations and Evaluations are contained in NEDE-21175-3-P.
- (2) The calculated maximum fuel assembly gap opening for the most limiting load combination is 0.002⁽⁴⁾ inch.
- (3) The fatigue analysis indicates that the fuel assembly has adequate fatigue capability to withstand the loads resulting from multiple SRV actuations and the OBE+SRV event.
- (4) These values are determined using the methodology contained in NEDE-21175-3-P.

ISSUE: Clarify intentions for the early implementation of mitigation techniques for those welds susceptible to intergranular stress corrosion cracking (IGSCC).

RESPONSE: In letter AECM-83/0481, dated August 17, 1983, MP&L provided information pertaining to IGSCC for Grand Gulf. This submittal included a report which identified twenty-two (22) welds in the recirculation system piping susceptible to IGSCC. In addition, further evaluation has identified two (2) additional welds in the recirculation system piping that are also susceptible to IGSCC and should be subjected to mitigation techniques.

MP&L considers that the delay in implementation of mitigation techniques on the subject welds until the first refueling outage has been adequately justified (AECM-83/0481). However, MP&L also recognizes the technical merit of implementing these techniques as early as possible in plant life and is, therefore, aggressively pursuing the necessary equipment to accomplish this. MP&L intends to implement the required mitigation techniques as soon as practicable, on a schedule consistent with the plant's startup test program. As discussed with the NRC in a meeting held October 12, 1983, MP&L anticipates that mitigation techniques will be implemented in March and April of 1984. It should be noted, however, that this schedule is subject to the uncertainties of the startup test program and should not be considered as a formal commitment by MP&L to an accelerated implementation schedule, i.e., prior to startup from the first refueling outage.

ISSUE: Provide commitment for qualification dates for outstanding fuel handling equipment and BOP/PGCC panels. (Reference: GGNS License Condition 2.C(11).)

RESPONSE: A status of these two items is provided below:

1) Fuel Handling Equipment

All fuel handling equipment involved in the qualification test program has been fully qualified with the exception of a defective fuel canister. As stated in Supplement 3 to the Grand Gulf Safety Evaluation Report (NUREG-0831), this equipment is not required for use until the first refueling outage. MP&L contends that the qualification schedule should be consistent with the need for the equipment. Therefore, as stated in AECM-82/625, dated December 22, 1982, qualification of this equipment will be completed four (4) months prior to the first refueling outage and a confirmatory report will be provided by MP&L following the completion of qualification.

2) BOP/PGCC Panels

All the devices involved in the BOP/PGCC qualification test program have been fully qualified with the exception of a Bourns Potentiometer. As committed to in AECM-82/625, testing of this device was completed prior to the beginning of Phase II operation. However, this device malfunctioned during the original test due to the accelerated aging techniques that were applied. A retest of this device is currently underway and will be completed by December 15, 1983. MP&L will submit the results of this retesting by December 31, 1983.