DOCKET FILE

Docket No. 50-416 February 25, 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. 91 TO FACILITY OPERATING LICENSE NO. NPF-29 - GRAND GULF NUCLEAR STATION, UNIT 1, REGARDING (TAC NO. M81916)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 91 to Facility Operating License No. NPF-29 for the Grand Gulf Nuclear Station, Unit 1. This amendment consists of changes to the Technical Specifications (TS) in response to your application dated October 18, 1991.

The amendment deletes a TS requirement to perform a daily surveillance verifying the measured recirculation system drive flow to be less than or equal to the established drive flow for a given flow control valve position.

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. 91 to NPF-29
2. Safety Evaluation

cc w/enclosures:
See next page

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NAME: PNoonan	PO'Connor/vmw		JLarkins
DATE: 2/5/92	2/5/92	2/10/92	2/25/92

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

February 25, 1992

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Office of Nuclear Reactor Regulation

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See next page

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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. 91
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 October 18, 1991, 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. 91, 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

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: February 25, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 91

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	INSERT PAGES
3/4 3-7	3/4 3-7
3/4 3-8	3/4 3-8

TABLE 4.3.1.1-1

REACTOR PROTECTION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION[a]	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
1. Intermediate Range Monitors:				
a. Neutron Flux - High	S/U,S,[b] S	S/U, W W	R R	2 3, 4, 5
b. Inoperative	NA	W	NA	2, 3, 4, 5
2. Average Power Range Monitor:[f]				
a. Neutron Flux - High, Setdown	S/U,S,[b] S	S/U, W W	SA SA	2 3, 5
b. Flow Biased Simulated Thermal Power - High	S	Q	W[d][e], SA, R[i]	1
c. Neutron Flux - High	S	Q	W[d], SA	1
d. Inoperative	NA	Q	NA	1, 2, 3, 5
3. Reactor Vessel Steam Dome Pressure - High	S	Q	R[g]	1, 2[j]
4. Reactor Vessel Water Level - Low, Level 3	S	Q	R[g]	1, 2
5. Reactor Vessel Water Level - High, Level 8	S	Q	R[g]	1
6. Main Steam Line Isolation Valve - Closure	NA	Q	R	1
7. Main Steam Line Radiation - High	S	Q	R	1, 2[j]
8. Drywell Pressure - High	S	Q	R[g]	1, 2[k]

TABLE 4.3.1.1-1 (Continued)

REACTOR PROTECTION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
9. Scram Discharge Volume Water Level - High				
a. Transmitter/Trip Unit	S	Q	R(g)	1, 2, 5(1)
b. Float Switch	NA	Q	R	1, 2, 5(1)
10. Turbine Stop Valve - Closure	S	Q	R(g)	1
11. Turbine Control Valve Fast Closure Valve Trip System Oil Pressure - Low	S	Q	R(g)	1
12. Reactor Mode Switch Shutdown Position	NA	R	NA	1, 2, 3, 4, 5
13. Manual Scram	NA	W	NA	1, 2, 3, 4, 5

(a) Neutron detectors may be excluded from CHANNEL CALIBRATION.
(b) The IRM and SRM channels shall be determined to overlap for at least 1/2 decade during each startup after entering OPERATIONAL CONDITION 2 and the IRM and APRM channels shall be determined to overlap for at least 1/2 decade during each controlled shutdown, if not performed within the previous 7 days.
(c) [DELETED]
(d) This calibration shall consist of the adjustment of the APRM channel to conform to the power values

TABLE 4.3.1.1-1 (Continued)

REACTOR PROTECTION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
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(c) [DELETED]
(d) This calibration shall consist of the adjustment of the APRM channel to conform to the power values

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 91 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 October 18, 1991, the licensee (Entergy Operations, Inc.), submitted a request for changes to the Grand Gulf Nuclear Station (GGNS) Unit 1, Technical Specifications (TS). The requested changes would delete a TS requirement to perform a daily surveillance verifying the measured recirculation system drive flow to be less than or equal to the established drive flow for a given flow control valve position.

2.0 EVALUATION

The proposed change to the GGNS TS would delete the requirement to perform Note (h) daily for the Average Power Range Monitor - Flow Biased Simulated Thermal Power (APRM-FBSTP)-High scram function identified as item 2.b in Table 4.3.1.1.1. The loss of feedwater heater (LFWH) analysis is central to the issues surrounding the requested change to the simulated thermal power (STP) trip surveillance requirement because historically it is the only safety analysis for which STP trip credit has been taken. The analysis methodology for this event changed significantly during Cycle 1. As originally licensed for Cycle 1, the LFWH analysis credited the STP trip to minimize the calculated severity of the transient. An improved analytic methodology, first employed during the Maximum Extended Operating Domain (MEOD) analysis during Cycle 1 and then repeated for each reload, assumes no STP trip. The LFWH analysis provided by Grand Gulf for MEOD and each cycle reload allow reactor power to reach a new, higher steady state level and demonstrate acceptable critical power ratio (CPR) results. This approach is equivalent to considering the complete failure of the STP (and any other) trip. The GGNS reload safety analysis, therefore, does not take credit for the APRM-FBSTP scram function in ensuring that the safety limit of minimum critical power ratio (MCPR) is not exceeded. Also, it further demonstrates that any increase in the simulated thermal power scram setpoint is well analyzed for the LFWH event (i.e., no scram is assumed).
The GGNS has identified the deletion of this surveillance as a TS change beneficial to safety through reduction of operator burden. While the proposed change, in and of itself, may not provide a major reduction in operator burden, the licensee believe that the cumulative effect of this and similar changes planned for the future will be a positive safety improvement.

Based on the above evaluation of this TS change request, the staff finds that it is acceptable.

After evaluating the TS change request to delete the surveillance requirement for the flow based STP trip instrumentation, the removal of this surveillance is considered acceptable. The justification for this modification to the TS is based on the fact that the STP trip signal is no longer credited by the licensee in any of its safety analysis.

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 (56 FR 57696). 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.

Principal Contributor: M. Razzaque
P. W. O'Connor

Date: February 25, 1992