

January, 1995

Mr. C. Randy Hutchinson
Vice President, Operations GGNS
Entergy Operations, Inc.
Post Office Box 756
Port Gibson, Mississippi 39150

SUBJECT: ISSUANCE OF AMENDMENT NO. 114 TO FACILITY OPERATING LICENSE
NO. NPF-29 - GRAND GULF NUCLEAR STATION, UNIT 1 (TAC NO. M89761)

Dear Mr. Hutchinson:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 114 to Facility Operating License No. NPF-29 for the Grand Gulf Nuclear Station, Unit 1. This amendment revises the Technical Specifications (TSs) in response to your application dated June 17, 1994, as supplemented by letter dated August 17, 1994.

The amendment removes License Condition 2.C.(25)(b) and Attachment 2 to Facility Operating License No. NPF-29, "Transamerica Delaval Inc. (TDI) Diesel Generator Maintenance and Surveillance Requirements (NUREG-1216, August 1985)."

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
Office of Nuclear Reactor Regulation

Docket No. 50-416

Enclosures: 1. Amendment No. 114 to NPF-29
2. Safety Evaluation

cc w/encls: See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 4, 1995

Mr. C. Randy Hutchinson
Vice President, Operations GGNS
Entergy Operations, Inc.
Post Office Box 756
Port Gibson, Mississippi 39150

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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 cursive script that reads "Paul W O'Connor".

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

Docket No. 50-416

Enclosures: 1. Amendment No. 114 to NPF-29
2. Safety Evaluation

cc w/encls: See next page

Mr. C. Randy Hutchinson
Entergy Operations, Inc.

Grand Gulf Nuclear Station

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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. 114
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 June 17, 1994, as supplemented by letter dated August 17, 1994, 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.

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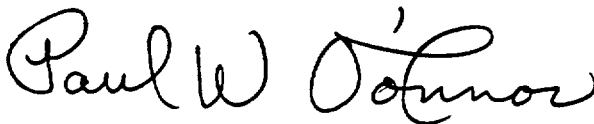
2. Accordingly, the license is amended by changes to paragraph 2.C.(25) of Facility Operating License No. NPF-29 is hereby amended to read as follows:

(25) Reliability of Diesel-Generators (Sections 8.3.1, 9.6.3 through 9.6.7, SER, SSER #2, SSER #4, SSER #6)

- (a) Prior to startup following the first refueling outage, a heavy duty turbocharger gear drive assembly shall be installed on all EMD diesel-generators.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



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

Attachment: Changes to the License

Date of Issuance: January 4, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 114

FACILITY OPERATING LICENSE NO. NPF-29

DOCKET NO. 50-416

Replace the following page of the License with the attached page and remove Attachment 2 to Facility Operating License No. NPF-27. The revised page is identified by amendment number and contains a vertical line indicating the area of change.

REMOVE

10
Attachment 2

INSERT

10
--

- (24) Interplant Communication Systems (Section 9.6.1.2, SER, SSER #2, SSER #4, SSER #5)

Tests of the communication systems used to mitigate the consequences of an event and attain a safe plant shutdown shall be completed during preoperational and startup tests. An evaluation of the test results shall be provided for NRC review within 90 days after test completion. Any system modifications found necessary as a result of NRC review shall be completed prior to startup following the first refueling outage.

- (25) Reliability of Diesel-Generators (Sections 8.3.1, 9.6.3 through 9.6.7, SER, SSER #2, SSER #4, SSER #6)

- (a) Prior to startup following the first refueling outage, a heavy duty turbocharger gear drive assembly shall be installed on all EMD diesel-generators.

- (26) Turbine Disc Integrity (Section 10.2.1, SER, SSER #1)

EOI shall ultrasonically inspect the bores and keyways of the low pressure turbine discs for indications of cracking prior to exceeding 50,000 hours of operation. All unacceptable indications and their dispositions shall be reported prior to startup for the next cycle of operation. These inspections shall continue on a 50,000 hour interval until the potential for turbine disc cracking has been assessed and an acceptable alternate inspection schedule has been established.

- (27) Circulating Water System (Section 10.4.5, SER)

EOI shall not fill the Unit 2 circulating water system (including the natural draft cooling tower basin) until Unit 1 flooding concerns related to this system are resolved to the satisfaction of the NRC staff.

- (28) Advisor to the Vice President

MP&L shall have on its nuclear operations staff, one or more corporate management officials or advisors (who may be either permanent employees or contracted consultants) who have substantial commercial nuclear power plant operating management experience and who will advise on all decisions affecting safe operation of the plant. This requirement shall be in effect until the plant has accumulated at least 6 months at power levels above 90 percent of full power.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 114 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 June 17, 1994, as supplemented by letter dated August 17, 1994, the licensee (Entergy Operations, Inc.), submitted a request for changes to the Grand Gulf Nuclear Station, Unit 1 (GGNS) Facility Operating License No. NPF-29. The requested change would remove License Condition 2.C.(25)(b) and Attachment 2 to Facility Operating License No. NPF-29, "Transamerica Delaval Inc. (TDI) Diesel Generator Maintenance and Surveillance Requirements (NUREG-1216, August 1985)."

These licensing conditions were imposed in response to the issues discussed in Supplement 6 to the Grand Gulf Operating License Safety Evaluation Report, NUREG-0831, and in NUREG-1216, "Safety Evaluation Report Related to the Operability and Reliability of Emergency Diesel Generators Manufactured by Transamerica Delaval, Inc.," dated August 1986. These issues have been resolved as stated below and, accordingly, these license conditions are no longer warranted and may be deleted.

By letter dated August 17, 1994, the licensee incorporated by reference all of the findings and conclusions of the NRC-approved version of the Transamerica Deleval, Inc. Emergency Diesel Generators Owners Group Generic Topical Report TDI-EDG-001-A as submitted on April 28, 1994. The licensee's letter of August 17, 1994, corrected a typographical error in a reference in the June 17, 1994, submittal and did not change the scope of the June 17, 1994, application and the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

The TDI diesel generators Owners' Group (Owners' Group) submitted proposals on November 30, 1992, and December 7, 1993, on behalf of a number of plants with TDI emergency diesel generators (EDGs) including the Grand Gulf plant. The Owner's Group proposed removal of diesel generator related licensing conditions. These conditions were imposed as part of a technical resolution to address concerns regarding the reliability of the TDI EDGs following the

crankshaft failure at Shoreham in August 1983. The technical resolution involved implementation of Phase I and Phase II programs as identified in NUREG-1216. The Phase I program focused on the resolution of known engine component problems that had potential generic implications, while the Phase II program focused on the design review of a large set of important engine components to ensure their adequacy from a manufacturing standpoint, as well as operational performance. At that time, the staff concluded that these components merited special emphasis in the area of load restrictions and/or maintenance and surveillance. The 16 major components which were identified included connecting rods, crankshafts, cylinder blocks, cylinder heads, piston skirts, and turbochargers. Engine load restrictions were addressed in the plant specific Technical Specifications, license conditions, engine operating procedures and operator training, as appropriate, for five of these components. The most critical periodic maintenance/surveillance actions for these components were incorporated as license conditions.

On the basis of substantial operational data and inspection results, the Owners' Group provided information in its submittals of November 1992 and December 1993 to demonstrate that the special concerns of NUREG-1216 were no longer warranted. The Owners' Group stated that the TDI EDGs should be treated on a par with other EDGs within the nuclear industry and subjected to the same standard regulations, without the special requirements of NUREG-1216. In addition, the Owners' Group stated that this action will improve availability of the engines for service, especially during outages, while maintaining current reliability levels.

The NRC staff and its consultants at Pacific Northwest Laboratories have completed a review of the operational data and inspection results contained in the Owners' Group submittals relative to the individual components. In addition, independent opinions were obtained from three leading diesel engine experts regarding these inspection requirements. On the basis of the review, the staff concluded that there is adequate justification for removing the present component-based licensing conditions. The staff's evaluation of the Owners' Group submittals is reported in a letter to Mr. R. C. Day, TDI Diesel Generators Owners' Group Clearinghouse, dated March 17, 1994.¹

The NRC staff has reviewed the licensee's submittal of June 17, 1994, as supplemented by letter dated August 17, 1994, with respect to whether its findings from its review of the Owners' Group submittals are applicable to the Grand Gulf Nuclear Station. Appendix D of the Safety Evaluation of the Owners' Group submittals identifies the specific license condition components that may be deleted as a result of the review. These components encompass and are consistent with the conditions in the Grand Gulf operating licenses. Therefore, the NRC staff concludes that the licensee's proposal is consistent with its Safety Evaluation on the Owners' Group submittals and that License Conditions 2.C.(25)(b) and the related Attachment 2 to Facility Operating License NPF-29 may be deleted.

¹ Letter from Mr. James A. Norberg, NRC, to Mr. R. C. Day, Duke Engineering & Services, Inc., TDI Diesel Generators Owners Group Clearinghouse, dated March 17, 1994.

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 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 (59 FR 47167). 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 Contributors: P. O'Connor
J. Rajan

Date: January 4, 1995