

Mr. John R. McGaha,  
 Vice President - Operations  
 Entergy Operations, Inc.  
 River Bend Station  
 P. O. Box 220  
 St. Francisville, LA 70775

July 2, 1995

SUBJECT: RIVER BEND STATION, UNIT 1 - AMENDMENT NO. 82 TO FACILITY  
 OPERATING LICENSE NO. NPF-47 (TAC NO. M86470)

Dear Mr. McGaha:

The Commission has issued the enclosed Amendment No. 82 to Facility Operating License No. NPF-47 for the River Bend Station, Unit 1. The amendment consists of changes to the license conditions Attachment 3 in response to your application dated May 13, 1993, as supplemented by letter dated January 31, 1995.

The amendment revises Attachment 3 to the Operating License No. NPF-47 to remove certain license conditions pertaining to the Division I and II Transamerica Delaval, Inc. (TDI) emergency diesel generators.

A copy of our related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

ORIGINAL SIGNED BY:  
 David L. Wigginton, Senior Project Manager  
 Project Directorate IV-1  
 Division of Reactor Projects III/IV  
 Office of Nuclear Reactor Regulation

Docket No. 50-458

Enclosures: 1. Amendment No. 82 to NPF-47  
 2. Safety Evaluation

cc w/encls: See next page

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COPY	YES/NO	YES/NO	YES/NO	YES/NO

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*cp*



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

July 25, 1995

Mr. John R. McGaha, Jr.  
Vice President - Operations  
Entergy Operations, Inc.  
River Bend Station  
P. O. Box 220  
St. Francisville, LA 70775

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A copy of our related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Wigginton".

David L. Wigginton, Senior Project Manager  
Project Directorate IV-1  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Docket No. 50-458

Enclosures: 1. Amendment No. 82 to NPF-47  
2. Safety Evaluation

cc w/encls: See next page

Mr. John R. McGaha  
Entergy Operations, Inc.

River Bend Station

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

GULF STATES UTILITIES COMPANY\*\*  
CAJUN ELECTRIC POWER COOPERATIVE AND  
ENTERGY OPERATIONS, INC.  
DOCKET NO. 50-458  
RIVER BEND STATION, UNIT 1  
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 82  
License No. NPF-47

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Gulf States Utilities\* (the licensee) dated May 13, 1993, as supplemented by letter dated January 31, 1995, 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, as amended, 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 license amendment will not be inimical to the common defense and security or to the health and safety of the public; and

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\* EOI is authorized to act as agent for Gulf States Utilities Company, which has been authorized to act as agent for Cajun Electric Power Cooperative, and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

\*\*Gulf States Utilities Company, which owns a 70 percent undivided interest in River Bend, has merged with a wholly owned subsidiary of Entergy Corporation. Gulf States Utilities Company was the surviving company in the merger.

- 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 Attachment 3 entitled, "TDI Diesel Engine Requirements," as indicated in the attachment to this license amendment.
  3. The license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



David L. Wigginton, Senior Project Manager  
Project Directorate IV-1  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Attachment: Changes to Attachment 3  
to NPF-47

Date of Issuance: July 25, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 82

FACILITY OPERATING LICENSE NO. NPF-47

DOCKET NO. 50-458

Replace the following pages of the Attachment 3 to the license with the attached page. The revised page is identified by Amendment number and contains marginal lines indicating the areas of change.

REMOVE

INSERT

Attachment 3, Pages 1 - 4

Attachment 3, Page 1

ATTACHMENT 3  
TO NPF-47  
TDI DIESEL ENGINES REQUIREMENTS

EOI shall comply with the following requirements related to the TDI diesel engines.

1. If cracks are found during inspections of crankshafts, this condition shall be reported promptly to the NRC staff and the affected engine shall be considered inoperable. The engine shall not be restored to "operable status" until the proposed disposition and/or corrective actions have been approved by the NRC staff.
2. The following actions are required if SD 1A or SD 1B is operated in excess of 3130 KW<sup>(1)</sup>:
  - a) For indicated engine loads in the range of 3130 KW to 3200 KW for a period less than two hours<sup>(2)</sup>, no additional action shall be required.
  - b) For indicated engine loads in the range of 3130 KW to 3200 KW for a period equal to or exceeding two hours<sup>(2)</sup>, a crankshaft inspection pursuant to Item d below shall be performed at the next refueling outage.
  - c) For indicated engine loads in the range of 3200 KW to 3500 KW for a period less than 1 hour<sup>(2)</sup>, a crankshaft inspection pursuant to item d below shall be performed for the affected engine at the next refueling outage.
  - d) for indicated engine loads in the range of 3200 KW to 3500 KW for periods equal to or exceeding one hour<sup>(2)</sup> and for engine loads exceeding 3500 KW for any period of time, (1) the engine shall be removed from service as soon as safely possible, (2) the engine shall be declared inoperable, and (3) the crankshaft shall be inspected. The crankshaft inspection shall include crankpin journal numbers 5, 6, and 7 (the most heavily loaded) and the two main journals in between using florescent liquid penetrant and eddy current as appropriate.

(1) Momentary transients (not exceeding 5 seconds) due to changing of bus loads need not be considered as an overload.

(2) If there are multiple overload events within a given load range since the previous crankshaft inspection, then the time period criterion applies to the total accumulated time in that load range.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 82 TO FACILITY OPERATING LICENSE NO. NPF-47

ENTERGY OPERATIONS, INC., ET AL.

RIVER BEND STATION, UNIT 1

DOCKET NO. 50-458

1.0 INTRODUCTION

By letter dated May 13, 1993, as supplemented by letter dated January 31, 1995, the licensee (Entergy Operations, Inc.), submitted a request for changes to the River Bend Station, Unit 1 (RBS) Facility Operating License No. NPF-47. The requested change would change Attachment 3 to Facility Operating License No. NPF-47, "TDI (Transamerica Deleval, Inc.) Diesel Engines Requirements", by removing conditions that pertain to engine overhaul frequency, maintenance and surveillance program and inspection of crankshafts, cylinder heads, engine block, and turbochargers.

These licensing conditions were imposed in response to the issues discussed in Supplement 3 to the River Bend Operating License Safety Evaluation Report, NUREG-0989, dated August 1985. These conditions are being removed from Attachment 3 since the concerns have been resolved as stated below and, accordingly, these license conditions are no longer warranted and may be deleted.

By letter dated January 31, 1995, 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 January 31, 1995, did not change the scope of the May 13, 1993, 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 River Bend 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

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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 Safety Evaluation on the Owners' Group submittals is contained in a letter to Mr. R. C. Day, TDI Diesel Generators Owners' Group Clearinghouse, dated March 17, 1994.<sup>1</sup>

The NRC staff has reviewed the licensee's submittal of May 31, 1993, as supplemented by letter dated January 31, 1995, with respect to whether its findings from its review of the Owner's Group submittals are applicable to the River Bend Station. Appendix D of the Safety Evaluation of the Owners' Group submittals identifies the specific components and tests which may be deleted from licensee's license conditions. The River Bend license conditions, Appendix 3, contains those components and tests which may now be deleted and other conditions which may not. Appendix 3 contains a requirement in Item 1 on 10 CFR 50.59 provisions for changes to the maintenance and surveillance program which is redundant to the approved program at River Bend and may be deleted. Item 7 regarding operation beyond the first refueling has been fulfilled, is no longer applicable, and may be deleted.

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<sup>1</sup> 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.

The remaining conditions in Appendix 3 are directly related to the components or tests which may be deleted as a result of the NRC approval of the Owners Group submittals or the conditions will remain in the new Appendix 3. For those license conditions that are directly related, the staff concludes that the licensee proposal is consistent with the Safety Evaluation issued for the Owner's Group submittals contained in the March 17, 1994, letter to Mr. R. C. Day and that some conditions in Attachment 3 to Facility Operating License NPF-47 may be deleted.

Specifically, Appendix 3 is revised with the following changes to license conditions. Item 1 on the frequency of engine overhauls is deleted. The statement on 10 CFR 50.59 provisions for changes to the maintenance and surveillance program are redundant to the approved program at River Bend and are deleted. Item 2 on crankshaft inspections is deleted except for the requirement for reporting cracks found during any inspection and the NRC approval of any corrective action on the cracks; these provisions become the new Item 1. Item 3 on cylinder block inspections and Item 4 on air roll tests are deleted. Item 5 on requirements for diesels operated in excess of 3130 KW is retained and becomes the new Item 2. Item 6 on turbochargers is deleted. Item 7 regarding operation beyond the first refueling has been fulfilled and is deleted.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Louisiana 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. 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 (58 FR 41505). 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: D. Wigginton  
J. Rajan

Date: July 25, 1995