

January 14, 1996

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

SUBJECT: RIVER BEND STATION, UNIT 1 - AMENDMENT NO. 90 TO FACILITY  
OPERATING LICENSE NO. NPF-47 (TAC NO. M97184)

Dear Mr. McGaha:

The Commission has issued the enclosed Amendment No. 90 to Facility Operating License No. NPF-47 for the River Bend Station, Unit 1. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated October 24, 1996.

The amendment removes the requirements from the TSs for accelerated testing of the standby diesel generators. This action is in response to Generic Letter 94-01, "Removal of Accelerated Testing and Special Reporting Requirements for Emergency Diesel Generators", dated May 31, 1994.

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. 90 to NPF-47  
2. Safety Evaluation

cc w/encls: See next page

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Document Name: RB97184.AMD

\*See previous concurrence

OFC	PM/PD4-1	(A)LA/PD4-1	OGC*	HQMB*	EELB*	D/PD4-1
NAME	DWigginton/cf	CHawes <i>cmh</i>	NLO	SBlack	JCalvo	Beckner
DATE	1/16/96	1/16/96	12/11/96	11/26/96	11/20/96	1/19/96
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

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Sincerely,

A handwritten signature in cursive script, 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

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2. Safety Evaluation

cc w/encs: See next page

Mr. John R. McGaha  
Entergy Operations, Inc.

River Bend Station

cc:

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

ENERGY GULF STATES, INC. \*\*

CAJUN ELECTRIC POWER COOPERATIVE AND

ENERGY OPERATIONS, INC.

DOCKET NO. 50-458

RIVER BEND STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 90  
License No. NPF-47

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Entergy Gulf States, Inc.\* (the licensee) dated October 24, 1996, 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

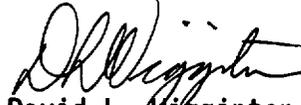
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\* EOI is authorized to act as agent for Entergy Gulf States, Inc, which has been authorized to act as agent for Cajun Electric Power Cooperative, and has exclusive responsibility and control over the physical construction, operation and maintenance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

\*\*Entergy Gulf States, Inc., which owns a 70 percent undivided interest in River Bend, has merged with a wholly owned subsidiary of Entergy Corporation. Entergy Gulf States, Inc. 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 the Technical Specifications as indicated in the attachment to this license amendment; and Paragraph 2.C.(2) of Facility Operating License No. NPF-47 is hereby amended to read as follows:
- (2) Technical Specifications and Environmental Protection Plan
- The Technical Specifications contained in Appendix A, as revised through Amendment No. 90 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. EOI shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
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 the Technical  
Specifications

Date of Issuance: January 14, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 90

FACILITY OPERATING LICENSE NO. NPF-47

DOCKET NO. 50-458

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain marginal lines indicating the areas of change.

REMOVE

3.8-5  
3.8-6  
3.8-16  
B 3.8-15  
B 3.8-32  
B 3.8-33

INSERT

3.8-5  
3.8-6  
3.8-16  
B 3.8-15  
B 3.8-32  
B 3.8-33

**SURVEILLANCE REQUIREMENTS**

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.1    Verify correct breaker alignment and indicated power availability for each required offsite circuit.</p>	<p>7 days</p>
<p>SR 3.8.1.2    -----NOTE-----  All DG starts may be preceded by an engine prelube period and followed by a warmup period prior to loading.  -----</p> <p>Verify each DG starts from standby conditions and achieves:</p> <p>a.    For DG 1A and DG 1B, steady state voltage <math>\geq 3740</math> V and <math>\leq 4580</math> V and frequency <math>\geq 58.8</math> Hz and <math>\leq 61.2</math> Hz, in <math>\leq 10</math> seconds.</p> <p>b.    For DG 1C:</p> <p>1.    Maximum of 5400 V, and 66.75 Hz, and</p> <p>2.    Steady state voltage <math>\geq 3740</math> V and <math>\leq 4580</math> V and frequency <math>\geq 58.8</math> Hz and <math>\leq 61.2</math> Hz, in <math>\leq 13</math> seconds.</p>	<p>31 days</p>

(continued)

**SURVEILLANCE REQUIREMENTS (continued)**

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.3</p> <p style="text-align: center;">-----NOTES-----</p> <ol style="list-style-type: none"> <li>1. DG loadings may include gradual loading as recommended by the manufacturer.</li> <li>2. Momentary transients outside the load range do not invalidate this test.</li> <li>3. This Surveillance shall be conducted on only one DG at a time.</li> <li>4. This SR shall be preceded by, and immediately follow, without shutdown, a successful performance of SR 3.8.1.2.</li> </ol> <p style="text-align: center;">-----</p> <p>Verify each DG operates for <math>\geq 60</math> minutes at a load <math>\geq 3000</math> kW and <math>\leq 3100</math> kW for DG 1A and DG 1B, and <math>\geq 2500</math> kW and <math>\leq 2600</math> kW for DG 1C.</p>	<p>31 days</p>
<p>SR 3.8.1.4</p> <p>Verify each day tank contains <math>\geq 316.3</math> gal of fuel oil.</p>	<p>31 days</p>
<p>SR 3.8.1.5</p> <p>Check for and remove accumulated water from each day tank.</p>	<p>31 days</p>
<p>SR 3.8.1.6</p> <p>Verify the fuel oil transfer system operates to automatically transfer fuel oil from the storage tank to the day tank.</p>	<p>31 days</p>

(continued)

Table 3.8.1-1 has been deleted

BASES

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SURVEILLANCE  
REQUIREMENTS

SR 3.8.1.2 (continued)

The normal 31 day Frequency for SR 3.8.1.2 is consistent with the industry guidelines for assessment of diesel generator performance (Refs. 14 and 15). This Frequency provides adequate assurance of DG OPERABILITY, while minimizing degradation resulting from testing.

SR 3.8.1.3

This Surveillance demonstrates that the DGs are capable of synchronizing and accepting greater than or equal to the equivalent of the maximum expected accident loads. A minimum run time of 60 minutes is required to stabilize engine temperatures, while minimizing the time that the DG is connected to the offsite source.

Although no power factor requirements are established by this SR, the DG is normally operated at a power factor between 0.8 lagging and 1.0. The 0.8 value is the design rating of the machine, while 1.0 is an operational limitation to ensure circulating currents are minimized. The load band is provided to avoid routine overloading of the DG. Routine overloading may result in more frequent teardown inspections in accordance with vendor recommendations in order to maintain DG OPERABILITY.

The 31 day Frequency for this Surveillance is consistent with the industry guidelines for assessment of diesel generator performance (Ref. 14 and 15).

Note 1 modifies this Surveillance to indicate that diesel engine runs for this Surveillance may include gradual loading, as recommended by the manufacturer, so that mechanical stress and wear on the diesel engine are minimized.

Note 2 modifies this Surveillance by stating that momentary transients because of changing bus loads do not invalidate this test.

(continued)

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**BASES**

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**REFERENCES**

1. 10 CFR 50, Appendix A, GDC 17.
  2. USAR, Chapter 8.
  3. Regulatory Guide 1.9.
  4. USAR, Chapter 6.
  5. USAR, Chapter 15.
  6. Regulatory Guide 1.93.
  7. Generic Letter 84-15, July 2, 1984.
  8. 10 CFR 50, Appendix A, GDC 18.
  9. Regulatory Guide 1.108.
  10. Regulatory Guide 1.137.
  11. ANSI C84.1, 1982.
  12. ASME, Boiler and Pressure Vessel Code, Section XI.
  13. IEEE Standard 308.
  14. 10 CFR 50.65.
  15. Regulatory Guide 1.160.
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**BASES**

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(continued)



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 90 TO FACILITY OPERATING LICENSE NO. NPF-47

ENTERGY OPERATIONS, INC.

RIVER BEND STATION, UNIT 1

DOCKET NO. 50-458

1.0 INTRODUCTION

By application dated October 24, 1996, Entergy Operations, Inc. (the licensee) requested changes to the Technical Specifications (Appendix A to Facility Operating License No. NPF-47) for the River Bend Station, Unit 1. The proposed changes would revise Technical Specification (TS) 3.8.1 by replacing Table 3.8.1-1, "Diesel Generator Test Schedule", with a single surveillance interval of at least once per 31 days. The NRC provided guidance on the proposed TS changes in Generic Letter (GL) 94-01, "Removal of Accelerated Testing and Special Reporting Requirements for Emergency Diesel Generators," dated May 31, 1994.

2.0 EVALUATION

The surveillance interval for testing of emergency diesel generators (EDGs) is currently governed by TS 3.8.1, which gives a diesel generator test schedule based on the number of EDG failures experienced in the last 25 tests. This practice of increasing the testing frequency with the number of failures is commonly referred to as accelerated testing. Accelerated testing is begun when an EDG experiences four or more failures in the last 25 valid tests. This increased test frequency continues until seven consecutive failure free tests have been performed.

As stated in GL 94-01, the staff has concluded that implementing the provisions of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants" (the maintenance rule), including the applicable regulatory guidance, will assure reliable EDG performance. Measures to be implemented in accordance with the maintenance rule include performance of detailed root cause analysis of individual EDG failures, effective corrective actions to individual EDG failures, and implementation of EDG preventive maintenance. The staff has determined that the implementation of these measures will justify removing the accelerated testing requirements.

In its application dated October 24, 1996, the licensee committed to comply with the guidelines as set forth in GL 94-01; the licensee noted that they were already in compliance with the provisions of 10 CFR 50.65 by implementation of the Maintenance Rule on July 10, 1996, and are maintaining EDG performance in accordance with rule and Regulatory Guide (RG) 1.160,

"Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." In addition, the bases of the technical specifications are being changed to include reference to 10 CFR 50.65 and RG 1.160. On the basis of the licensee's implementation of the maintenance rule and RG 1.160, the staff finds acceptable the proposed changes to (1) TS 3.8.1 to remove reference to TS Table 3.8.1-1 for test intervals and (2) to remove accelerated testing requirements for EDGs. The corresponding changes to the bases to reflect the proposed changes to the TS and the addition of references to 10 CFR 50.56 and RG 1.106 are acceptable.

The GL 94-01 also addressed the deletion of reporting requirements from the TS for EDG failures on the basis that existing reporting requirements, such as those of 10 CFR 50.73, adequately ensure that the Nuclear Regulatory Commission (NRC) learns of significant problems with EDG performance. The licensee has adopted the Improved Technical Specifications which relocated the EDG reporting requirements to the Technical Requirements Manual. Subsequent to the issuance of this amendment, the licensee will examine the removal of those requirements by the 10 CFR 50.59 change process. Therefore, no action is required here on deletion of EDG reporting requirements as addressed by GL 94-01.

### 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 effluent 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 (61 FR 64384). 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: D. Wigginton

Date: January 14, 1997