

March 12, 2003

Mr. Paul D. Hinnenkamp
Vice President - Operations
Entergy Operations, Inc.
River Bend Station
P. O. Box 220
St. Francisville, LA 70775

SUBJECT: RIVER BEND STATION - CHANGE IN IMPLEMENTATION DATE OF
AMENDMENT NO. 129 RE: 1.7 PERCENT INCREASE IN LICENSED POWER
LEVEL (TAC NO. MB5094)

Dear Mr. Hinnenkamp:

By letter dated January 31, 2003, the Nuclear Regulatory Commission (NRC) issued Amendment No. 129 to Facility Operating License (FOL) No. NPF-47 for the River Bend Station, Unit 1 (RBS). The amendment consists of changes to the Technical Specifications and FOL in response to your application dated May 14, 2002, as supplemented by letters dated July 9, August 2, September 16, and November 7 and 22, 2002. The amendment increases the licensed power level by approximately 1.7 percent from 3,039 megawatts thermal (MWt) to 3,091 MWt. These changes result from increased feedwater flow measurement accuracy to be achieved by utilizing high-accuracy ultrasonic flow measurement instrumentation.

In your application dated May 14, 2002, you asked that the effective date be within 60 days of startup from RBS Refueling Outage 11. However, due to NRC staff oversight of this aspect of your request, the amendment, as issued, had an implementation date of 60 days from the date of issuance. In response to this discrepancy, the Commission has re-issued Amendment No. 129 to FOL No. NPF-47 to have an implementation date of within 60 days of startup from RBS Refueling Outage 11. The staff's previous findings, as discussed in the amendment and its accompanying Safety Evaluation (SE), are not impacted by this change. A correction Notice of Issuance will be published in the *Federal Register*.

Paul D. Hinnenkamp

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In addition, the staff has noted an error in page 33 of the SE. A corrected page 33 is enclosed; please replace page 33 with the enclosed revision and dispose of the original page.

Sincerely,

/RA/

Michael K. Webb, Project Manager, Section 1
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-458

Enclosures:

1. Amendment No. 129 to NPF-47
2. Corrected SE page 33

cc w/encls: See next page

Paul D. Hinnenkamp

- 2 -

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Michael K. Webb, Project Manager, Section 1
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DISTRIBUTION:

PUBLIC

PDIV-1 Reading

RidsNrrDlpmPdiv (HBerkow)

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RidsNrrLADJohnson

RidsOgcRp

RidsAcrsAcnwMailCenter

G.Hill(2)

RidsRgn4MailCenter (AHowell)

RDennig, DRIP/RORP (RLD)

MShuaibi

ADAMS Accession No.: ML030710736 *No legal objection

OFFICE	PDIV-1/PM	PDIV-1/LA	OGC*	PDVI-1/SC	PDVI/D	DLPM/D
NAME	MWebb:sab	DJohnson	RWeisman	RGramm	HBerkow	JZwolinski
DATE	2/27/2003	2/27/03	10 March 2003	3/11/03	3/11/03	3/11/03

OFFICIAL RECORD COPY

River Bend Station

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March 2002

ENERGY GULF STATES, INC. **

AND

ENERGY OPERATIONS, INC.

DOCKET NO. 50-458

RIVER BEND STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 129
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 May 14, 2002, as supplemented by letters dated July 9, August 2, September 16, and November 7 and 22, 2002, 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

* Entergy Operations, Inc. is authorized to act as agent for Entergy Gulf States, Inc., and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

**Entergy Gulf States, Inc., 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 and the Facility Operating License 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. 129 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 and shall be implemented within 60 days of the startup from Refueling Outage 11.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA by Ledyard B. Marsh for/

John A. Zwolinski , Director
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility
Operating License and
Technical Specifications

Date of Issuance: March 12, 2003

3.9.3 Special Events

3.9.3.1 Anticipated Transient Without Scram

ATWS is defined as an AOO with failure of the reactor protection system to initiate a reactor scram to terminate the event. The requirements for ATWS are specified in 10 CFR 50.62. The regulation requires BWR facilities to have the following mitigating features for an ATWS event:

- (1) a SLC system with the capability of injecting a borated water solution with reactivity control equivalent to the control obtained by injecting 86 gpm of a 13 weight percent sodium pentaborate decahydrate solution at the natural boron-10 isotope abundance into a 251-inch inside-diameter reactor vessel
- (2) an Alternate Rod Injection (ARI) system that is designed to perform its function in a reliable manner and that is independent from sensor output to the final actuation device
- (3) equipment to trip the reactor coolant recirculation pumps automatically under conditions indicative of an ATWS

RBS meets the ATWS mitigation requirements defined in 10 CFR 50.62. RBS has an SLC system capable of boron injection equivalent to 86 gpm, and has installed an ARI system and an automatic Recirculating Pump Trip (RPT) logic.

BWR facilities are also analyzed against certain ATWS acceptance criteria to demonstrate the ability to withstand an ATWS event. These criteria include maintaining fuel integrity (the core and fuel must maintain a coolable geometry), primary system integrity (the peak reactor vessel pressure must remain below 1,500 psig), and containment integrity (the containment temperature and pressure must not exceed the design limit).

Section 5.3.5 and Appendix L of Reference 8.4 present a generic evaluation of ATWS events at BWRs after a TPO uprate. Reference 8.4 provides an ATWS acceptance criterion; if the criterion is not met, then a plant-specific ATWS containment analysis is required. RBS has a 4.7 °F suppression pool temperature margin available, based on a GE core containment analysis performed at the current licensed RTP. Based on the generic evaluation and the experience gained from the review of power uprate applications for similar BWR plants, the staff finds that the impact of the RBS mixed core on the peak suppression pool temperature for a 1.7 percent uprate is less than the current suppression pool temperature margin of 4.7 °F.

Based on the criteria and justification provided in Reference 8.4 and the analyses performed by GE, as well as the available margin for peak ATWS parameters, the staff finds the licensee's evaluation acceptable. Accordingly, the staff concludes that RBS meets the ATWS rule requirements specified in 10 CFR 50.62.

3.9.3.2 Station Blackout

The licensee performed the SBO coping capability analysis prior to the recent power uprate submittal. The containment conditions evaluated for an SBO event remain bounding for the power uprated conditions. The auxiliary building conditions during an SBO were evaluated.