

February 28, 2008

Vice President, Operations
Entergy Operations, Inc.
River Bend Station
5485 US Highway 61N
St. Francisville, LA 70775

SUBJECT: RIVER BEND STATION, UNIT 1 - ISSUANCE OF AMENDMENT RE: REVISION
OF REQUIRED WATTAGE IN TS 5.5.7, VENTILATION FILTER TESTING
PROGRAM FOR CONTROL ROOM FRESH AIR SYSTEM HEATER
(TAC NO. MD4961)

Dear Sir or Madam:

The Commission has issued the enclosed Amendment No. 159 to Facility Operating License No. NPF-47 for the River Bend Station, Unit 1 (RBS). The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated March 28, 2007, as supplemented by letter dated October 24, 2007.

The amendment revises the required wattage specified in the RBS TS 5.5.7.e, Ventilation Filter Testing Program, for the Control Room Fresh Air System (CRFAS) heater for testing and an administrative change to update "ANSI N510-1989" to "ASME N510-1989." The required wattage for testing the CRFAS heater was revised from 23 ± 2.3 kilowatt (kW) to " ≥ 15 kW," and "ANSI N510-1989" was updated to "ASME N510-1989."

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,

/RA/

Bhalchandra Vaidya, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-458

Enclosures: 1. Amendment No. 159 to NPF-47
2. Safety Evaluation

cc w/encls: See next page

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ADAMS Accession Nos.: Pkg ML080160598; Amdt. ML080160549, License/TS ML080280230 NRR-058

(*) no substantial change to SE input memo

(**) See previous concurrence

OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	NRR/SCVB/BC	OGC – No legal objection	NRR/LPL4/BC
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DATE	2/28/08	2/28/08	11/08/07	2/19/08	2/28/08

OFFICIAL RECORD COPY

River Bend Station

(2/25/2008)

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ENERGY GULF STATES LOUISIANA, LLC*

AND

ENERGY OPERATIONS, INC.*

DOCKET NO. 50-458

RIVER BEND STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 159
License No. NPF-47

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Operations, Inc.* (the licensee), dated March 8, 2007, as supplemented by letter dated October 24, 2007, 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
 - 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.

* By Amendment No. 158, issued on December 31, 2007, the Facility Operating License was transferred from Entergy Gulf States, Inc., to Entergy Gulf States Louisiana, LLC. On the date the instant license amendment request was filed, Entergy Operations, Inc. was authorized to act as agent for Entergy Gulf States, Inc., and had exclusive responsibility and control over the physical construction, operation and maintenance of the facility. As a result of the license transfer, 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.

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. 159 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 from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas G. Hiltz, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility
Operating License
No. NPF-47 and
Technical Specifications

Date of Issuance: February 28, 2008

ATTACHMENT TO LICENSE AMENDMENT NO. 159

FACILITY OPERATING LICENSE NO. NPF-47

DOCKET NO. 50-458

Replace the following pages of the Facility Operating License No. NPF-47 and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Facility Operating License

<u>Remove</u>	<u>Insert</u>
3	3

Technical Specifications

<u>Remove</u>	<u>Insert</u>
5.0-13	5.0-13

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 159 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 March 8, 2007 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML070930338), as supplemented by letter dated October 24, 2007 (ADAMS Accession No. ML072990062), Entergy Operations, Inc.* (the licensee), requested changes to the Technical Specifications (TSs) for the River Bend Station, Unit 1 (RBS). The supplement dated October 24, 2007, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on May 8, 2007 (72 FR 26175)

The proposed change would revise the required wattage specified in the RBS TS 5.5.7.e, Ventilation Filter Testing Program, for the Control Room Fresh Air System (CRFAS) heater for testing. The proposed required wattage for testing the CRFAS heater would be revised from 23 ± 2.3 kilowatt (kW) to " ≥ 15 kW" and "ANSI N510-1989" would be updated to "ASME N510-1989."

2.0 REGULATORY EVALUATION

Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Section 50.36 is the Commission's regulatory requirement that TSs are needed and that TSs are required to include items in five specific categories related to facility operation. Pursuant to 10 CFR 50.36, TSs are required to include items in the following five specific categories related to station operation: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. In this regard, the Ventilation Filter Testing Program is an administrative control for RBS.

* By Amendment No. 158, issued on December 31, 2007, the Facility Operating License was transferred from Entergy Gulf States, Inc., to Entergy Gulf States Louisiana, LLC. On the date the instant license amendment request was filed, Entergy Operations, Inc. was authorized to act as agent for Entergy Gulf States, Inc., and had exclusive responsibility and control over the physical construction, operation and maintenance of the facility. As a result of the license transfer, 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.

The U.S. Nuclear Regulatory Commission (NRC) staff's review evaluated the licensee's assessment of the impact of the proposed change to the RBS TS on design-basis analyses. The NRC staff evaluation of the licensee's application was based on the following regulatory requirements of 10 CFR, Part 50 and regulatory guides (RGs).

10 CFR, Part 50, Appendix A, "General Design Criteria (GDC) For Nuclear Power Plants," Criterion 19, "Control Room," Criterion 60, "Control of Release of Radioactive Materials to the Environment," and 10 CFR 50.67, "Accident Source Term," as supplemented by Sections 6.4 and 9.4.1 of NUREG-0800, "Standard Review Plan," and RG 1.52, "Design, Testing, and Maintenance Criteria for Post Accident Engineered-Safety-Feature Atmosphere Cleanup System Air Filtration and Adsorption Units of Light-Water-Cooled Nuclear Power Plants."

3.0 TECHNICAL EVALUATION

Removal of radioiodine from the main Control Room ventilation outside air supply during a design-basis accident (DBA) is accomplished through use of charcoal adsorber trains. In its application, as supplemented, the licensee stated that the main Control Room charcoal adsorber trains are designed in accordance with the RG 1.52, "Design, Testing, and Maintenance Criteria for Post Accident Engineered-Safety-Feature Atmosphere Cleanup System Air Filtration and Adsorption Units of Light-Water-Cooled Nuclear Power Plants." Accordingly, two 100-percent-capacity redundant charcoal adsorber trains are provided. Each Control Room charcoal adsorber train includes an electric heating coil powered from a standby bus to limit the relative humidity of the incoming air to 70 percent at design flow during post-loss-of-coolant accident (LOCA) conditions. The charcoal adsorber train air heater is automatically energized if neither the high adsorber air temperature cutout nor the low adsorber air flow cutout have been activated.

The proposed change would revise the operating license by revising the CRFAS heater wattage (in kW) testing requirement shown in TS 5.5.7, "Ventilation Filter Testing Program", subsection TS 5.5.7.e. Subsection e. specifies the required power in kW for Control Room ventilation electric heaters (HVC*FLT3AH/3BH) to decrease relative humidity of the air to less than 70 percent as required for proper operation of the charcoal adsorber components when tested in accordance with American Society of Mechanical Engineers (ASME) N510-1989, "Testing of Nuclear Air Treatment Systems." The requested amendment will revise the CRFAS heater wattage testing requirement from 23 ± 2.3 kW to a new value of ≥ 15 kW, and "ANSI N510-1989" updated to "ASME N510-1989."

By letter dated March 28, 2007, the licensee stated that the current TS is based on the nameplate data and not the design requirement; also, this change provides a calculated value for the heater to perform its design function rather than the nameplate value. The licensee also stated that this new acceptance criterion is more representative and will provide improved operational reliability and flexibility.

It is the staff's understanding that periodic in-place test of the CRFAS heaters will continue to be conducted in accordance with ASME N510-1989 as stated in TS subsection 5.5.7.e of the RBS Ventilation Filter Testing Program. This test is conducted in accordance with the guidance of RG 1.52 for the purpose of reducing the buildup of moisture on adsorbers and high-efficiency particulate air filters, thereby demonstrating compliance with the requirement of GDC 60 as it relates to the system's capability to suitably control the releases of gaseous radioactive effluents

to the environment, and GDC 19 as it relates to providing adequate protection to permit access to and occupancy of the Control Room under accident conditions.

The licensee's application, as supplemented, provided an analysis that included the required calculated Control Room charcoal adsorber unit heater capacity of 15 kW assuming the worst case conditions for moisture loading. The assumed heater capacity was based on a main Control Room ambient temperature of 75 °F. For LOCA conditions, the required heater capacity is 12 kW at a Control Room ambient temperature of 80 °F. Based upon the NRC staff's review and assessment of the licensee's calculation, the NRC staff finds the requested change the CRFAS heater wattage testing requirement from 23 ± 2.3 kW, to a new value of ≥ 15 kW acceptable because the calculations provided by the licensee demonstrate that the requirements of GDCs 19 and 60 will continue to be met. The NRC staff also finds the change to update "ANSI N510-1989" to "ASME N510-1989" acceptable because the proposed change is administrative in nature, and does not materially alter the original intent of the original TSs.

4.0 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.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change 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 amendments involve 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 amendments involve no significant hazards consideration, and there has been no public comment on such finding published in the *Federal Register* on May 8, 2007 (72 FR 26175). Accordingly, the amendments meet 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 amendments.

6.0 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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: H. Walker

Date: February 28, 2008