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October 24, 2007

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

SUBJECT: Revision to License Amendment Request  
Application for Technical Specification (TS) Change Regarding Ventilation  
Filter Testing Program (VFTP), TS 5.5.7, Control Room Fresh Air System  
(CRFAS) Heater Wattage  
River Bend Station, Unit 1  
Docket No. 50-458  
License No. NPF-47

REFERENCE: Letter RBG-46669 , "Application for Technical Specification (TS) Change  
Regarding Ventilation Filter Testing Program (VFTP), TS 5.5.7, Control Room  
Fresh Air System (CRFAS) Heater Wattage Request from Joseph E. Venable  
of Entergy to USNRC dated March 28, 2007 (ADAMS Accession No. ML4961)

RBG-46754  
RBF1-07-0195

Dear Sir or Madam:

Entergy Operations, Inc. (Entergy) is providing the attached administrative revisions to several pages of a previously submitted amendment for River Bend Station, Unit 1 (RBS). Entergy had requested a modification of the River Bend Technical Specifications (TS) to revise the Control Room Fresh Air System (CRFAS) heater wattage (kW) requirement shown in Technical Specification 5.5.7 Ventilation Filter Testing Program, subsection TS 5.5.7.e. The revised pages update the titles of the referenced Regulatory Guide and ASME standard in the original submittal. The revisions do not affect any of the technical information in the request. The revisions do not affect the original no significant hazards consideration.

ADD

NRR

The proposed change does not include any new commitments.

If you have any questions or require additional information, please contact Bill Brice at 601-437-5076.

I declare under penalty of perjury that the foregoing is true and correct. Executed on October 24, 2007.

Sincerely,



Eric W. Olson  
Vice President, Operations (Acting)  
River Bend Station, Unit 1

EWOWBB

Attachment: Revised Pages

cc: Mr. Elmo E. Collins, Jr.  
U. S. Nuclear Regulatory Commission  
Region IV  
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Arlington, TX 76011

NRC Senior Resident Inspector  
P. O. Box 1050  
St. Francisville, LA 70775

U.S. Nuclear Regulatory Commission  
Attn: Mr. Bhalchandra K. Vaidya MS O-7D1  
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Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Attn: Mr. Jeff Meyers  
Surveillance Division  
P. O. Box 4312  
Baton Rouge, LA 70821-4312

**Attachment 1**

**RBG-46754**

**Revised Pages for  
Entergy letter  
RBG-46669**

## 1.0 DESCRIPTION

This letter is a request to amend Operating License NPF-47 for River Bend Station, Unit 1 (RBS).

The proposed change will revise the Operating License to revise the Control Room Fresh Air System (CRFAS) heater wattage (kW) testing requirement shown in Technical Specification 5.5.7 Ventilation Filter Testing Program, subsection TS 5.5.7.e.

## 2.0 PROPOSED CHANGE

Technical Specification 5.5.7.e., Ventilation Filter Testing Program, specifies the required power (in kW) for the 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 absorber components when tested in accordance with ASME N510-1989 "Testing Of Nuclear Air Treatment Systems." Entergy proposes to revise the CRFAS heater wattage testing requirement from  $23 \pm 2.3$  kW, to a new value of  $\geq 15$  kW.

There are no associated Technical Specification Bases changes.

## 3.0 BACKGROUND

Removal of radioiodines from the main Control Room ventilation outside air supply during a Design Bases Accident (DBA) is accomplished through use of charcoal filter trains. To comply with the Control Room radiation protection requirements of 10 CFR 50.67, "Accident Source Term" two 100-percent capacity redundant charcoal filter trains are provided. The main Control Room charcoal filter trains are designed in accordance with requirements of Regulatory Guide 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" (with the exceptions noted in Updated Safety Analysis Report (USAR) Table 6.5-1). Both filter trains and associated air handling equipment are designed to Seismic Category I and are located within the main Control Room pressure boundary.

Each Control Room charcoal filter 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-LOCA conditions. The charcoal filter train air heater is automatically energized if neither the high filter air temperature cutout nor the low filter air flow cutout have been activated.

Control Room Charcoal Filter Heaters (HVC\*FLT3AH/3BH) are powered from Division I and II standby Engineered safety System (ESF) buses respectively. USAR Tables 8.3-2a and 8.3-2b show that these heaters each have a nameplate rating of 23 kW.

The current TS is based on the name plate data and not the design requirement. This change provides a calculated value for the heater to perform its design function rather than the nameplate value. This new acceptance criterion is more representative and will provide improved operational reliability and flexibility.

$$Q_H = 4400 \cdot (60 \text{ minutes/hr}) \cdot (14.28)^{-1} \cdot (50.2 - 47.6) = 48067 \text{ Btu/hr}$$

$$Q_H = 48067 \text{ Btu/hr} \cdot (0.2931 \text{ watts per btu/hr}) = 14088 \text{ watts, or } \underline{14.088 \text{ kW}}$$

Therefore, the minimum heater size was conservatively approximated as 15 kW.

## 5.0 REGULATORY ANALYSIS

### 5.1 Applicable Regulatory Requirements/Criteria

The proposed changes have been evaluated to determine whether applicable regulations and requirements continue to be met.

Entergy has determined that the proposed changes do not require any exemptions or relief from regulatory requirements, other than the TS, and do not affect conformance with any General Design Criterion (GDC) differently than described in the Updated Final Safety Analysis Report (UFSAR.) Adequate radiation protection of the Control Room under accident conditions continues to be provided in accordance with GDC 19 with a lower heater wattage requirement.

Neither Regulatory Guide 1.52 nor ASME N510-1989 specify heater acceptance criteria.

### 5.2 No Significant Hazards Consideration

Entergy Operations, Inc. has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

This change specifies the required power (in kW) for the Control Room ventilation electric heaters to decrease relative humidity of the air to less than 70% relative humidity as required for proper operation of the charcoal absorber components based on calculated requirements. The heater will continue to perform its intended design function as designed. The heater is not an accident precursor.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The heater will continue to perform its function as designed. The heater provides humidity control for the Control Room filter unit during a design basis accident. Changing the test acceptance criteria to a calculated value has no influence on, nor does it contribute in any way to, the possibility of a new or different kind of accident or malfunction from those previously analyzed. No change has been made to the design, function or method of performing testing. No safety-related equipment or safety functions are altered as a result of this change.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

No margin of safety is changed as a result of this change. The heater will continue to perform its design function. Testing methodology has not changed. The function of the heater is unchanged. The acceptance criterion has been changed to a calculated value rather than the name plate rating to make testing more realistic. The heater will continue to operate to perform its intended design function.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, Entergy concludes that the proposed amendment present no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

### 5.3 Environmental Considerations

The proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

### 7.0 REFERENCES

1. Regulatory Guide 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"
2. ASME N510-1989 "Testing Of Nuclear Air Treatment Systems"

5.5 Programs and Manuals

5.5.7 Ventilation Filter Testing Program (VFTP) (continued)

- e. Demonstrate that the heaters for each of the ESF systems dissipate the value specified below when tested in accordance with ANSIN510-1989:

<u>ESF Ventilation System</u>	<u>Wattage</u>
SGTS	$\geq 61$ kW
FBVS	$\geq 49$ kW
CRFAS	<del><math>23 \pm 2.3</math> kW</del>

*Handwritten notes:* "ASME" in a cloud above the Wattage column; a circle around the value  $\geq 15$  with an arrow pointing to the  $23 \pm 2.3$  kW value.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

5.5.8 Explosive Gas and Storage Tank Radioactivity Monitoring Program

This program provides controls for potentially explosive gas mixtures contained in the main condenser offgas treatment system and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks.

The program shall include:

- a. The limits for concentrations of hydrogen in the main condenser offgas treatment system and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion); and
- b. A surveillance program to ensure that the quantity of radioactive material contained in any unprotected outdoor tank is limited to  $\leq 10$  curies, excluding tritium and dissolved or entrained noble gases.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

5.5.9 Diesel Fuel Oil Testing Program

A diesel fuel oil testing program to implement required testing of both new fuel oil and stored fuel oil shall be established. The

(continued)