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Michael Perito  
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RBG-46690

July 28, 2008

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

SUBJECT: License Amendment Request  
Application for Technical Specification Changes Using the Consolidated  
Line Item Improvement Process (CLIP)  
River Bend Station, Unit 1  
Docket No. 50-458  
License No. NPF-47

REFERENCE: Federal Register Notice 72 FR 63935, published November 13, 2007

Dear Sir or Madam:

In accordance with the provisions of 10 CFR 50.90 Entergy Operations, Inc. (Entergy) is submitting a request for an amendment to the technical specifications (TS) for River Bend Station, Unit 1 (RBS). The proposed amendment would: (1) revise the TS surveillance requirement (SR) frequency in TS 3.1.3, "Control Rod OPERABILITY", (2) clarify the requirement to fully insert all insertable control rods for the limiting condition for operation (LCO) in TS 3.3.1.2, required Action E.2, "Source Range Monitoring Instrumentation," and (3) revise Example 1.4-3 in Section 1.4 "Frequency" to clarify the applicability of the 1.25 surveillance test interval extension.

Attachment 1 provides a description of the proposed change, the requested confirmation of applicability, and plant-specific verifications. Attachment 2 provides the existing TS pages marked up to show the proposed change. Attachment 3 provides the associated TS Bases changes. The proposed change includes one new commitment as summarized in Attachment 4.

The proposed change has been evaluated in accordance with 10 CFR 50.91(a)(1) using criteria in 10CFR50.92(c) and it has been determined that this change involves no significant hazards consideration. The bases for these determinations are included in the attached submittal.

Entergy requests approval of the proposed amendment as soon as practical. Once approved, the amendment shall be implemented within 60 days. Although this request is neither exigent nor emergency, your prompt review is requested.

ADD!

NRR

If you have any questions or require additional information, please contact David Lorfing at (225) 381-4157.

I declare under penalty of perjury that the foregoing is true and correct. Executed on July 28, 2008.

Sincerely,



Vice President, Operations  
River Bend Station - Unit 1

JCR/DNL/bmb

Attachments:

1. Analysis of Proposed Technical Specification Change
2. Proposed Technical Specification Changes (mark-up)
3. Changes to Technical Specification Bases Pages – For Information Only
4. List of Regulatory Commitments

cc: Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region IV  
612 E. Lamar Blvd., Suite 400  
Arlington, TX 76011-4125

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

U.S. Nuclear Regulatory Commission  
Attn: Mr. Jack Donohew Jr. OWFN MS 8 G14  
Washington, DC 20555-0001

Mr. Jeffrey P. Meyers  
Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Attn: OEC - ERSD  
P. O. Box 4312  
Baton Rouge, LA 70821-4312

**Attachment 1**

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**Analysis of Proposed Technical Specification Change**

## 1.0 DESCRIPTION

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

The proposed amendment would:

(1) Delete SR 3.1.3.2 and revise SR 3.1.3.3, notch testing of withdrawn control rods, from "Insert each partially withdrawn control rod at least one notch" to "Insert each withdrawn control rod at least one notch." This change results in "A.2" of TS 3.1.3 being revised from "Perform SR 3.1.3.2 and SR 3.1.3.3 for each withdrawn OPERABLE control rod" to "Perform SR 3.1.3.3 for each withdrawn OPERABLE control rod." The note in SR 3.1.3.3 is also revised to limit the time period until the SR is to be performed from "38 days 18 hours after the control rod is withdrawn" to "31 days after the control rod is withdrawn,"

(2) Add the word "fully" to LCO 3.3.1.2 Required Action E.2 to clarify the requirement to fully insert all insertable control rods in core cells containing one or more fuel assemblies when the associated Source Range Monitor (SRM) instrument is inoperable, and

(3) Revise Example 1.4-3 in Section 1.4 "Frequency" to clarify that the 1.25 surveillance test interval extension in SR 3.0.2 is applicable to time periods discussed in NOTES in the "SURVEILLANCE" column in addition to the time periods in the "FREQUENCY" column.

The changes are consistent with Nuclear Regulatory Commission (NRC) approved Industry/Technical Specification Task Force (TSTF) change traveler TSTF-475, Revision 1. The Federal Register notice published on November 13, 2007, announced the availability of this TS improvement through the consolidated line item improvement process (CLIIP).

## 2.0 ASSESSMENT

### *2.1 Applicability of Published Safety Evaluation*

Entergy has reviewed the safety evaluation dated November 13, 2007, as part of the CLIIP. This review included a review of the NRC staff's evaluation, as well as the supporting information provided to support TSTF-475, Revision 1.

Entergy has concluded that the justifications presented in the TSTF proposal and the safety evaluation prepared by the NRC staff are applicable to River Bend Station, Unit 1 and justify this amendment for the incorporation of the changes to the River Bend Station, Unit 1 TS.

## *2.2 Optional Changes and Variations*

Entergy is not proposing any variations or deviations from the applicable TS changes described in the modified TSTF-475, Revision 1 and the NRC staff's model safety evaluation dated November 13, 2007.

Example 1.4-3 is revised by the TSTF to clarify the application of the surveillance interval extension allowance.

## 3.0 REGULATORY ANALYSIS

### *3.1 No Significant Hazards Consideration Determination*

Entergy has reviewed the proposed no significant hazards consideration determination (NSHCD) published in the Federal Register as part of the CLIIP. Entergy has concluded that the proposed NSHCD presented in the Federal Register notice is applicable to River Bend Station, Unit 1 and is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

### *3.2 Verification and Commitments*

As discussed in the notice of availability published in the Federal Register on November 13, 2007, for this TS improvement, Entergy verifies the applicability of TSTF-475 to River Bend Station, Unit 1, and commits to establishing TS Bases consistent with TSTF-475, Revision 1 as indicated in Attachment 4.

These changes are based on TSTF change traveler TSTF-475 Revision 1 that proposes revisions to the Standard Technical Specifications (STS) by: (1) Deleting SR 3.1.3.2 and revising SR 3.1.3.3, notch testing of withdrawn control rods, from "Insert each partially withdrawn control rod at least one notch" to "Insert each withdrawn control rod at least one notch." This change also revises "A.2" of TS 3.1.3 from "Perform SR 3.1.3.2 and SR 3.1.3.3 for each withdrawn OPERABLE control rod" to "Perform SR 3.1.3.3 for each withdrawn OPERABLE control rod." The note in SR 3.1.3.3 is also revised to limit the time period until the SR is to be performed from "38 days 18 hours after the control rod is withdrawn" to "31 days after the control rod is withdrawn," (2) Adding the word "fully" to LCO 3.3.1.2 Required Action E.2 to clarify the requirement to fully insert all insertable control rods in core cells containing one or more fuel assemblies when the associated Source Range Monitor (SRM) instrument is inoperable, and (3) Revising Example 1.4-3 in Section 1.4 "Frequency" to clarify that the 1.25 surveillance test interval extension in SR 3.0.2 is applicable to time periods discussed in NOTES in the "SURVEILLANCE" column in addition to the time periods in the "FREQUENCY" column.

## 4.0 Environmental Evaluation

Entergy has reviewed the environmental evaluation included in the model safety evaluation dated November 13, 2007, as part of the CLIIP. Entergy has concluded that the staff's findings presented in that evaluation are applicable to River Bend Station, Unit 1 and the evaluation is hereby incorporated by reference for this application.

**Attachment 2**

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**Proposed Technical Specification Changes (mark-up)**

1.4 Frequency

EXAMPLES

EXAMPLE 1.4-2 (continued)

"Thereafter" indicates future performances must be established per SR 3.0.2, but only after a specified condition is first met (i.e., the "once" performance in this example). If reactor power decreases to < 23.8% RTP, the measurement of both intervals stops. New intervals start upon reactor power reaching 23.8% RTP.

EXAMPLE 1.4-3

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>-----NOTE-----            Not required to be performed until 12 hours after            ≥ 23.8% RTP.</p>	
<p>Perform channel adjustment.</p>	<p>7 days</p>

The interval continues whether or not the unit operation is < 23.8% RTP between performances.

As the Note modifies the required performance of the Surveillance, it is construed to be part of the "specified Frequency." Should the 7 day interval be exceeded while operation is < 23.8% RTP, this Note allows 12 hours after power reaches ≥ 23.8% RTP to perform the Surveillance. The Surveillance is still considered to be within the "specified Frequency." Therefore, if the Surveillance were not performed within the 7 day interval (plus the extension allowed by SR 3.0.2), but operation was < 23.8% RTP, it would not constitute a failure of the SR or failure to meet the LCO. Also, no violation of SR 3.0.4 occurs when changing MODES, even with the 7 day Frequency not met, provided operation does not exceed 12 hours with power ≥ 23.8% RTP.

*(Plus the extension allowed by  
 SR 3.0.2)  
 (continued)*

1.4 Frequency

EXAMPLES

EXAMPLE 1.4-3 (continued)

Once the unit reaches 23.8% RTP, 12 hours would be allowed for completing the Surveillance. If the Surveillance were not performed within this 12 hour interval, there would then be a failure to perform a Surveillance within the specified Frequency, and the provisions of SR 3.0.3 would apply.

*(plus the extension allowed by SR 3.0.2)*

EXAMPLE 1.4-4

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>-----NOTE-----            Only required to be met in MODE 1.            -----</p>	
<p>Verify leakage rates are within limits.</p>	<p>24 hours</p>

Example 1.4-4 specifies that the requirements of this Surveillance do not have to be met until the unit is in MODE 1. The interval measurement for the Frequency of this Surveillance continues at all times, as described in Example 1.4-1. However, the Note constitutes an "otherwise stated" exception to the Applicability of this Surveillance. Therefore, if the Surveillance were not performed within the 24 hour (plus the extension allowed by SR 3.0.2) interval, but the unit was not in MODE 1, there would be no failure of the SR nor failure to meet the LCO. Therefore, no violation of SR 3.0.4 occurs when changing MODES, even with the 24 hour Frequency exceeded, provided the MODE change was not made into MODE 1. Prior to entering MODE 1 (assuming again that the 24 hour Frequency were not met), SR 3.0.4 would require satisfying the SR.

Control Rod OPERABILITY  
 3.1.3

ACTIONS		
CONDITION	REQUIRED ACTION	COMPLETION TIME
A. (continued)	A.2 Perform <del>SR 3.1.3.2 and</del> SR 3.1.3.3 for each withdrawn OPERABLE control rod.	24 hours from discovery of Condition A concurrent with THERMAL POWER greater than the low power setpoint (LPSP) of the Rod Pattern Control System (RPCS)
	<u>AND</u> A.2 Perform SR 3.1.1.1.	72 hours
B. Two or more withdrawn control rods stuck.	B.1 Be in MODE 3.	12 hours
C. One or more control rods inoperable for reasons other than Condition A or B.	C.1 -----NOTE----- Inoperable control rods may be bypassed in RACS in accordance with SR 3.3.2.1.9, if required, to allow insertion of inoperable control rod and continued operation. -----	3 hours  (continued)
	Fully insert inoperable control rod.  <u>AND</u>	

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.1.3.1	Determine the position of each control rod.	24 hours
SR 3.1.3.2	<p>NOTE</p> <p>Not required to be performed until 8 days 18 hours after the control rod is fully withdrawn and THERMAL POWER is greater than the LPSP of the RPCS.</p> <p>Insert each fully withdrawn control rod at least one notch.</p>	7 days
SR 3.1.3.3	<p>NOTE</p> <p>Not required to be performed until 31 days <del>18 hours</del> after the control rod is withdrawn and THERMAL POWER is greater than the LPSP of the RPCS.</p> <p>Insert each <del>partially</del> withdrawn control rod at least one notch.</p>	31 days
SR 3.1.3.4	Verify each control rod scram time from fully withdrawn to notch position 13 is $\leq 7$ seconds.	In accordance with SR 3.1.4.1, SR 3.1.4.2, SR 3.1.4.3, and SR 3.1.4.4

INSERT  
 "DELETED"

31

(continued)

ACTIONS		
CONDITION	REQUIRED ACTION	COMPLETION TIME
D. (continued)	D.2 Place reactor mode switch in the shutdown position.	1 hour
E. One or more required SRMs inoperable in MODE 5.	E.1 Suspend CORE ALTERATIONS except for control rod insertion.	Immediately
	AND E.2 Initiate action to <sup>Fully</sup> insert all insertable control rods in core cells containing one or more fuel assemblies.	Immediately

**Attachment 3**

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**Changes to Technical Specification Bases Pages**

**For Information Only**

BASES

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ACTIONS

A.1, A.2, and A.3 (continued)

control rod can be isolated from scram by isolating the hydraulic control unit from scram and normal drive pressure, yet still maintain cooling water to the CRD.

Monitoring of the insertion capability for each withdrawn control rod must also be performed within 24 hours. ~~SR 3.1.3.2 and SR 3.1.3.3 perform~~ periodic tests of the control rod insertion capability of withdrawn control rods. Testing each withdrawn control rod ensures that a generic problem does not exist. The allowed Completion Time of 24 hours provides a reasonable time to test the control rods, considering the potential for a need to reduce power to perform the tests. Required Action A.2 has a modified time zero Completion Time. The 24 hour Completion Time for this Required Action starts when the withdrawn control rod is discovered to be stuck and THERMAL POWER is greater than the actual low power setpoint (LPSP) of the rod pattern controller (RPC), since the notch insertions may not be compatible with the requirements of rod pattern control (LCO 3.1.6) and the RPC (LCO 3.3.2.1, "Control Rod Block Instrumentation").

To allow continued operation with a withdrawn control rod stuck, an evaluation of adequate SDM is also required within 72 hours. Should a DBA or transient require a shutdown, to preserve the single failure criterion an additional control rod would have to be assumed to have failed to insert when required. Therefore, the original SDM demonstration may not be valid. The SDM must therefore be evaluated (by measurement or analysis) with the stuck control rod at its stuck position and the highest worth OPERABLE control rod assumed to be fully withdrawn.

The allowed Completion Time of 72 hours to verify SDM is adequate, considering that with a single control rod stuck in a withdrawn position, the remaining OPERABLE control rods are capable of providing the required scram and shutdown reactivity. Failure to reach MODE 4 is only likely if an additional control rod adjacent to the stuck control rod also fails to insert during a required scram. Even with the postulated additional single failure of an adjacent control rod to insert, sufficient reactivity control remains to reach and maintain MODE 3 conditions (Ref. 7).

(continued)



BASES

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ACTIONS

D.1 and D.2 (continued)

Time of 1 hour is sufficient to accomplish the Required Action, and takes into account the low probability of an event requiring the SRM occurring during this time.

E.1 and E.2

With one or more required SRMs inoperable in MODE 5, the capability to detect local reactivity changes in the core during refueling is degraded. CORE ALTERATIONS must be immediately suspended, and action must be immediately initiated to insert all insertable control rods in core cells containing one or more fuel assemblies. Suspending CORE ALTERATIONS prevents the two most probable causes of reactivity changes, fuel loading and control rod withdrawal, from occurring. Inserting all insertable control rods ensures that the reactor will be at its minimum reactivity, given that fuel is present in the core. Suspension of CORE ALTERATIONS shall not preclude completion of the movement of a component to a safe, conservative position.

Action (once required to be initiated) to insert control rods must continue until all insertable rods in core cells containing one or more fuel assemblies are inserted.

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SURVEILLANCE  
REQUIREMENTS

The SRs for each SRM Applicable MODE or other specified condition are found in the SRs column of Table 3.3.1.2-1.

SR 3.3.1.2.1 and SR 3.3.1.2.3

Performance of the CHANNEL CHECK ensures that a gross failure of instrumentation has not occurred. A CHANNEL CHECK is normally a comparison of the parameter indicated on one channel to the same parameter indicated on other similar channels. It is based on the assumption that instrument channels monitoring the same parameter should read approximately the same value. Significant deviations between the instrument channels could be an indication of excessive instrument drift in one of the channels or something even more serious. A CHANNEL CHECK will detect gross channel failure; thus, it is key to verifying the instrumentation continues to operate properly between each CHANNEL CALIBRATION.

(continued)

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**Attachment 4**

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**List of Regulatory Commitments**

### List of Regulatory Commitments

The following table identifies those actions committed to by Entergy in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

COMMITMENT	TYPE (Check one)		SCHEDULED COMPLETION DATE
	ONE- TIME ACTION	CONTINUING COMPLIANCE	
As discussed in the notice of availability published in the Federal Register on November 13, 2007 for this TS improvement, Entergy verifies the applicability of TSTF-475 to River Bend Station, Unit 1, and <u>commits to establishing TS Bases consistent with TSTF-475, Revision 1 as indicated in Attachment 4.</u>	X		Within 60 days of amendment issuance