



Entergy Operations, Inc.  
River Bend Station  
5485 U.S. Highway 61N  
St. Francisville, LA 70775  
Tel 225-381-4374

Eric Olson  
Site Vice President

RBG-47557

April 23, 2015

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

SUBJECT: Response to Request for Additional Information on Application for TSTF-523,  
"Generic Letter 2008-01, Managing Gas Accumulation"  
River Bend Station, Unit 1  
Docket No. 50-458  
License No. NPF-47

- Reference
- 1.) Entergy Letter; Application for Technical Specification Changes  
Technical Specification Task Force (TSTF) Improved Standard Technical  
Specification Change Traveler, TSTF-523, "Generic Letter 2008-01,  
Managing Gas Accumulation" (RBG-47497) Dated September 2, 2014
  - 2.) NRC email; River Bend Station, Unit 1, Request for Additional  
Information Regarding TSTF – 523 (TAC No. MF4782), Dated March 27,  
2015

Dear Sir or Madam:

In Reference 1 Entergy Operations, Inc. (Entergy) submitted a request for an amendment to the Technical Specifications (TS) for River Bend Station (RBS), Unit 1. The proposed amendment modifies the existing Surveillance Requirements (SRs) related to gas accumulation for the Emergency Core Cooling Systems (ECCS). This request was based upon Technical Specification Changes Technical Specification Task Force (TSTF) Improved Standard Technical Specification Change Traveler, TSTF-523, "Generic Letter 2008-01, Managing Gas Accumulation."

In Reference 2 the NRC Staff requested additional information (RAI) in support of this request.

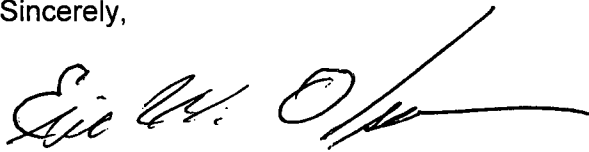
A134  
NRR

Attachment 1 provides responses to the RAI with Attachment 2 providing revised TS pages. Attachment 3 includes regulatory commitments to be implemented in support of this change.

If you have any questions or require additional information, please contact Mr. J. A. Clark at (225) 381-4177.

I declare under penalty of perjury that the foregoing is true and correct, executed on April 23, 2015.

Sincerely,



EO/JAC/bmb

Attachments:

1. Response to Request For Information
2. Proposed Technical Specification Changes (mark-up)
3. List of Regulatory Commitments

cc: Regional Administrator  
U. S. Nuclear Regulatory Commission, Region IV  
1600 East Lamar Blvd.  
Arlington, TX 76011-4511

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

U. S. Nuclear Regulatory Commission  
Attn: Mr. Alan Wang  
MS O-8B1  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852

Department of Environmental Quality  
Office of Environmental Compliance  
Radiological Emergency Planning and Response Section  
Ji Young Wiley  
P.O. Box 4312  
Baton Rouge, LA 70821-4312

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Public Utility Commission of Texas  
Attn: PUC Filing Clerk  
1701 N. Congress Avenue  
P. O. Box 13326  
Austin, TX 78711-3326

RBF1-15-0051

LAR 2014-04

**Attachment 1**

**RBG-47557**

**Response to Request for Information**

By letter dated September 2, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14261A092), Entergy Operations, Inc. (Entergy, the licensee) submitted a license amendment request (LAR) to adopt Technical Specification Task Force Traveler TSTF-523, Revision 2, "Generic Letter 2008-01, Managing Gas Accumulation." The US Nuclear Regulatory Commission (NRC) staff has reviewed the Entergy submittals, regarding changes to adopt TSTF-523 and has determined that the following additional information is required to complete its review of the amendment request:

### **Requests for Additional Information**

1. TSTF-523, Revision 2, has been approved by the Commission, and the licensee stated in Attachment 1 of their submittal that the proposed amendment was consistent with TSTF-523, Revision 2. In Attachment 2 of the submittal, Note 2 associated with Surveillance Requirement (SR) 3.5.2.4 refers to "system flow paths" versus the approved TSTF-523 wording, "system vent flow paths...." The "vent" adjective represents verbiage approved in the TSTF.

Please provide a justification for deviating from the approved TSTF-523 wording or resubmit Attachment 2 so that the language is in consistent with the approved TSTF.

### **Response**

The wording was intended to comply with the standard TSTF-523 wording. This is an editorial issue. The revised Technical Specification (TS) markup is included in Attachment 2.

2. In Attachment 1 of the submittal two different revisions of TSTF-523 (i.e., Revisions 1 and 2) were referenced. Currently, Revision 2 of TSTF-523 is the approved version, but Revision 1 is referenced on page 3.

Please clarify the revision of TSTF-523 that was adopted and, if necessary, provide justification for the adoption of the previous revision (i.e., Revision 1), which was not approved by the NRC staff.

### **Response**

This is an administrative issue with no change in intent or scope, TSTF-523, Rev. 2, was used for development of the submittal.

3. TSTF-523, Revision 2, has been approved by the Commission, and the licensee stated in Attachment 1 of their submittal that the proposed amendment was consistent with TSTF-523, Revision 2. In Attachment 2 of the submittal, SR 3.5.3.1 uses the phrase "sufficiently full with water" versus the approved TSTF verbiage, "sufficiently filled with water." The wording in the submittal is inconsistent with TSTF-523, other similar SRs that were part of the submittal, and the Technical Specification (TS) bases description for this specific SR in Attachment 3 of the submittal.

Please revise the submittal to be consistent with the approved TSTF-523 language or provide a technical justification for the deviation.

### **Response**

The wording was intended to comply with the standard TSTF-523 wording. This is an editorial issue. The revised TS markup is included in Attachment 2.

4. TSTF-523, Revision 2, has been approved by the NRC, and the licensee stated in Attachment 1 of their submittal that the proposed amendment was consistent with TSTF-523, Revision 2. In Attachment 2 of the submittal, SR 3.9.9.2 uses the phrase "Verify required RHR shutdown cooling subsystem" versus the approved TSTF verbiage, "Verify RHR shutdown cooling subsystem." The wording in the submittal is inconsistent with TSTF-523 and LCO 3.9.9, which specifies that two trains of RHR shutdown cooling subsystems are required to be OPERABLE.

Please revise the submittal to use language that is consistent with the approved traveler and LCO 3.9.9 or provide a technical justification for the deviation.

### **Response**

The wording was intended to comply with the standard TSTF-523 wording. This is an editorial issue. The revised TS markup included is in Attachment 2.

5. The following administrative issues were identified in the TS bases that were submitted in Attachment 3 and are being provided for informational purposes.
  - i) The TS bases wording for SR 3.4.9.2 (page 3 of 25) does not correspond to the TS wording in Attachment 2. Specifically, the bases wording states "SR is not required to be performed until 12 hours reactor steam dome pressure" versus the TS wording "SR is not required to be performed until 12 hours after reactor steam dome pressure...." Specifically the word "after" is missing from the bases submittal version.
  - ii) In Attachment 3 (page 7 of 25), the statement "Management of gas voids is important to ECCS injection/spray subsystem OPERABILITY," which was added to the LCO 3.5.1 bases, is grammatically out of place.
  - iii) In Attachment 3 (page 6 of 25), a left bracket symbol was mistakenly added to the bases description for SR 3.4.10.2.

### **Response**

Question 5 identifies editorial issues with the markup of the BASES, no intended change in scope. Entergy will address these items during implementation in accordance with the BASES control program in TS Section 5.5.11.

6. As part of the licensee's submittal, two new SRs (i.e., SR 3.4.9.2 and SR 3.4.10.2) were proposed to be implemented after refueling outage 19.

Please provide a justification for delaying the implementation of these SRs relative to the other new SRs that are a part of this submittal.

### **Response**

After further review of the RBS's Gas Management Site Program Document the Shutdown Cooling legs of Residual Heat Removal (RHR) are within its scope and sufficient information is available to determine needed vent locations. As a result additional walk-downs are not required and therefore, the requested delayed implementation of these SRs is not required.

The commitment; For the RHR Shutdown Cooling System, TS 3.4.9 and 3.4.10, the required venting locations will be determined prior to startup from refueling outage (RF) 19 currently scheduled for early 2017, is no longer required.

**Attachment 2**

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



SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.5.2.2	<p>Verify, for the required High Pressure Core Spray (HPCS) System, the:</p> <ul style="list-style-type: none"> <li>a. Suppression pool water level is <math>\geq</math> 13 ft 3 inches; or</li> <li>b. Condensate storage tank water level is <math>\geq</math> 11 ft 1 inch.</li> </ul>	12 hours
SR 3.5.2.3	<p>Verify, for each required ECCS injection/spray subsystem, <u>locations susceptible to gas accumulation are sufficiently filled with water.</u> <del>the piping is filled with water from the pump discharge valve to the injection valve.</del></p>	31 days
SR 3.5.2.4	<p>-----NOTE-----</p> <p><u>1. One low pressure coolant injection (LPCI) subsystem may be considered OPERABLE during alignment and operation for decay heat removal, if capable of being manually realigned and not otherwise inoperable.</u></p> <p><u>2. Not required to be met for system vent flow paths opened under administrative control</u></p> <p>-----</p> <p>Verify each required ECCS injection/spray subsystem manual, power operated, and automatic valve in the flow path, that is not locked, sealed, or otherwise secured in position, is in the correct position.</p>	31 days

(continued)

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.1      Verify the RCIC System locations susceptible to gas accumulation are sufficiently filled with water. <del>pipng is filled with water from the pump discharge valve to the injection valve.</del></p>	<p>31 days</p>
<p>SR 3.5.3.2      <u>-----NOTE-----</u>            Not required to be met for system vent flow paths opened under administrative control  <u>-----</u></p> <p>Verify each RCIC System manual, power operated, and automatic valve in the flow path, that is not locked, sealed, or otherwise secured in position, is in the correct position.</p>	<p>31 days</p>
<p>SR 3.5.3.3      <u>-----NOTE-----</u>            Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test.  <u>-----</u></p> <p>Verify, with RCIC steam supply pressure <math>\leq 1075</math> psig and <math>\geq 920</math> psig, the RCIC pump can develop a flow rate <math>\geq 600</math> gpm against a system head corresponding to reactor pressure.</p>	<p>92 days</p>
<p>SR 3.5.3.4      <u>-----NOTE-----</u>            Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test.  <u>-----</u></p> <p>Verify, with RCIC steam supply pressure <math>\leq 165</math> psig and <math>\geq 150</math> psig, the RCIC pump can develop a flow rate <math>\geq 600</math> gpm against a system head corresponding to reactor pressure.</p>	<p>24 months</p>

(continued)

ACTIONS (continued)		
CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	<p>B.2 -----NOTE----- Entry and exit is permissible under administrative control. -----</p> <p>Initiate action to close one door in each primary containment air lock.</p>	Immediately
C. No RHR shutdown cooling subsystem in operation.	<p>C.1 Verify reactor coolant circulation by an alternate method.</p>	<p>1 hour from discovery of no reactor coolant circulation</p> <p><u>AND</u></p> <p>Once per 12 hours thereafter</p>
	<p><u>AND</u></p> <p>C.2 Monitor reactor coolant temperature.</p>	Once per hour

**SURVEILLANCE REQUIREMENTS**

SURVEILLANCE	FREQUENCY
SR 3.9.9.1      Verify one RHR shutdown cooling subsystem is operating.	12 hours
SR 3.9.9.2 <u>Verify RHR shutdown cooling subsystem locations susceptible to gas accumulation are sufficiently filled with water.</u>	<u>31 days</u>

**Attachment 3**

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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		SCHEDULED COMPLETION DATE
	ONE-TIME ACTION	CONTINUING COMPLIANCE	
Entergy will address these items during implementation in accordance with the BASES control program in TS Section 5.5.11.	X		Implementation