



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

Todd Brumfield  
Director, Regulatory & Performance  
Improvement

RBG-47605

August 20, 2015

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

SUBJECT: Application for Technical Specification Changes for Technical Specification Task Force (TSTF) Improved Standard Technical Specification Change Traveler, TSTF-523, "Generic Letter 2008-01, Managing Gas Accumulation" - Supplement  
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
  3. Entergy Letter; Response to Request for Additional Information on Application for TSTF-523, "Generic Letter 2008-01, Managing Gas Accumulation," (RBG-47557) Dated April 28, 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 Task Force (TSTF) Improved Standard Technical Specification Change Traveler, TSTF-523, "Generic Letter 2008-01, Managing Gas Accumulation."

This initial submittal contained markups of the proposed specifications which were not in final form.

A134  
NRR

In Reference 3 in a response to an NRC Staff request for additional information (RAI), RBS determined the notes to specifications SR 3.4.9.2 and SR 3.4.10.2 were no longer required. Revised markups of these pages were not included in that submittal.

Attachment 1 provides the final technical specification pages. There are no new commitments in this letter. 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 August 20, 2015.

Sincerely,



NTB/JAC/bmb

Attachments:

1. Final Technical Specification Pages

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

RBG-47605  
Page 3 of 3

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

RBF1-15-0133  
LAR 2014-04

**Attachment 1**

**RBG-47605**

**Final Technical Specification Pages**

<b>Specification</b>	<b>Page</b>
3.4.9	3.4 – 24
3.4.10	3.4 – 26
3.5.1	3.5 – 4
3.5.2	3.5 – 8
3.5.3	3.5 – 11
3.6.2.3	3.6 – 38
3.9.8	3.9 – 11
3.9.9	3.9 - 13

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.4.9.1</p> <p>-----NOTE----- Not required to be met until 2 hours after reactor steam dome pressure is less than the RHR cut in permissive pressure. -----</p> <p>Verify one RHR shutdown cooling subsystem or recirculation pump is operating.</p>	<p>12 hours</p>
<p>SR 3.4.9.2</p> <p>-----NOTE----- Not required to be performed until 12 hours after reactor steam dome pressure is less than RHR cut in permissive pressure. -----</p> <p>Verify RHR shutdown cooling subsystem locations susceptible to gas accumulation are sufficiently filled with water.</p>	<p>31 days</p>

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPELETION TIME
<p>B. No RHR shutdown cooling subsystem in operation.</p> <p><u>AND</u></p> <p>No recirculation pump in operation.</p>	<p>B.1 Verify reactor coolant circulating by an alternate method.</p> <p><u>AND</u></p> <p>B.2 Monitor reactor coolant temperature and pressure.</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>Once per hour</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.4.10.1 Verify one RHR shutdown cooling subsystem or recirculation pump is operating.</p>	<p>12 hours</p>
<p>SR 3.4.10.2 Verify RHR shutdown cooling subsystem locations susceptible to gas accumulation are sufficiently filled with water.</p>	<p>31 days</p>

**SURVEILLANCE REQUIREMENTS**

SURVEILLANCE		FREQUENCY												
SR 3.5.1.1	Verify, for each ECCS injection/spray subsystem, locations susceptible to gas accumulation are sufficiently filled with water.	31 days												
SR 3.5.1.2	<p>-----NOTE-----</p> <ol style="list-style-type: none"> <li>1. Low pressure coolant injection (LPCI) subsystems may be considered OPERABLE during alignment and operation for decay heat removal with reactor steam dome pressure less than the residual heat removal cut in permissive pressure in MODE 3, if capable of being manually realigned and not otherwise inoperable.</li> <li>2. Not required to be met for system vent flow paths opened under administrative control.</li> </ol> <p>-----</p> <p>Verify each 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												
SR 3.5.1.3	Verify ADS accumulator supply pressure is $\geq 131$ psig.	31 days												
SR 3.5.1.4	<p>Verify each ECCS pump develops the specified flow rate with the specified pump differential pressure.</p> <table border="1"> <thead> <tr> <th><u>SYSTEM</u></th> <th><u>FLOW RATE</u></th> <th><u>PUMP DIFFERENTIAL PRESSURE</u></th> </tr> </thead> <tbody> <tr> <td>LPCS</td> <td><math>\geq 5010</math> gpm</td> <td><math>\geq 282</math> psid</td> </tr> <tr> <td>LPCI</td> <td><math>\geq 5050</math> gpm</td> <td><math>\geq 102</math> psid</td> </tr> <tr> <td>HPCS</td> <td><math>\geq 5010</math> gpm</td> <td><math>\geq 415</math> psid</td> </tr> </tbody> </table>	<u>SYSTEM</u>	<u>FLOW RATE</u>	<u>PUMP DIFFERENTIAL PRESSURE</u>	LPCS	$\geq 5010$ gpm	$\geq 282$ psid	LPCI	$\geq 5050$ gpm	$\geq 102$ psid	HPCS	$\geq 5010$ gpm	$\geq 415$ psid	In accordance with the Inservice Testing Program
<u>SYSTEM</u>	<u>FLOW RATE</u>	<u>PUMP DIFFERENTIAL PRESSURE</u>												
LPCS	$\geq 5010$ gpm	$\geq 282$ psid												
LPCI	$\geq 5050$ gpm	$\geq 102$ psid												
HPCS	$\geq 5010$ gpm	$\geq 415$ psid												

(continued)

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, locations susceptible to gas accumulation are sufficiently filled with water.</p>	31 days
SR 3.5.2.4	<p>-----NOTE-----</p> <ul style="list-style-type: none"> <li>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.</li> <li>2. Not required to be met for system vent flow paths opened under administrative control.</li> </ul> <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
SR 3.5.3.1	Verify the RCIC System locations susceptible to gas accumulation are sufficiently filled with water.	31 days
SR 3.5.3.2	<p>-----NOTE----- Not required to be met for system vent flow paths opened under administrative control. -----</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>	31 days
SR 3.5.3.3	<p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</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>	92 days
SR 3.5.3.4	<p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</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>	24 months

(continued)

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.2.3.1	Verify each RHR suppression pool cooling 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 or can be aligned to the correct position.	31 days
SR 3.6.2.3.2	Verify RHR suppression pool cooling subsystem locations susceptible to gas accumulation are sufficiently filled with water.	31 days
SR 3.6.2.3.3	Verify each RHR pump develops a flow rate $\geq 5050$ gpm through the associated heat exchangers to the suppression pool.	In accordance with the Inservice Testing Program

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	<p>B.3</p> <p>-----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</p> <p>Verify reactor coolant circulation by an alternate method.</p> <p><u>AND</u></p> <p>C.2</p> <p>Monitor reactor coolant temperature.</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>Once per hour</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.9.8.1      Verify one RHR shutdown cooling subsystem is operating.	12 hours
SR 3.9.8.2      Verify required RHR shutdown cooling subsystem locations susceptible to gas accumulation are sufficiently filled with water.	31 days

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><u>AND</u></p> <p>C.2 Monitor reactor coolant temperature.</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>Once per hour</p>

SURVEILLANCE REQUIREMENTS

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