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**Jerry C. Roberts**  
Director, Nuclear Safety Assurance

RBG-46985

December 8, 2009

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

**Subject:** Supplement to License Amendment Request (LAR)  
River Bend Station – Unit 1  
Docket No. 50-458  
License No. NPF-47

**Reference:** LAR 2009-05, dated August 10, 2009 (Letter No. RBG-46932)  
24-Month Fuel Cycles

**File No.:** G9.5  
RBF1-09-0169

Dear Sir or Madam:

On August 10, 2009, Entergy Operations, Inc. submitted a request to amend the Operating License for River Bend Station as described in the referenced letter (LAR 2009-05). During subsequent development of implementation actions, it was determined that the list of affected Technical Specification Bases pages (Attachment 3 of RBG-46932) was not complete. Specifically, five pages had been inadvertently omitted.

A marked up copy of the original page no. 1 of Attachment 3, as well as those Bases pages which should have been included, are attached to this letter. These Bases pages are being provided for information only. This supplement does not affect the scope of changes to the Technical Specification pages found in Attachment 2 of the original application. This letter contains no new commitments. If you have any questions, please contact David Lorring at 225-381-4157.

I declare under penalty of perjury that the foregoing is true and correct. Executed on December 8, 2009.

Sincerely,

  
Jerry C. Roberts  
Director – Nuclear Safety Assurance

ADD 1  
NLR

Supplement to License Amendment Request  
RBG-46985  
December 8, 2009  
Page 2 of 2

Attachments:

1. Markup of page 1 of 69 in Att. 3 to RBG-46932
2. Additional affected Technical Specification Bases pages

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

NRC Senior Resident Inspector  
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Mr. Alan B. Wang, Project Manager  
U. S. Nuclear Regulatory Commission  
One White Flint North,  
Mail Stop 8 G14  
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Rockville, MD 20852-2738

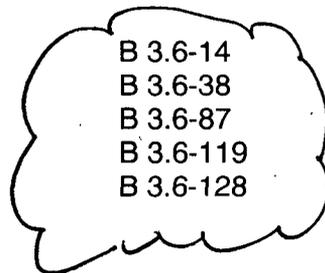
Mr. Jeffrey P. Meyers  
Louisiana Dept. of Environmental Quality  
Attn: OEC-ERSD  
P. O. Box 4312  
Baton Rouge, LA 70821-4312

Attachment 1  
RBG-46985

Markup of page 1 of 69 in Att. 3 to RBG-46932

List of affected Technical Specification Bases pages:

- |           |           |
|-----------|-----------|
| B 3.1-37  | B 3.6-26  |
| B 3.1-38  | B 3.6-42  |
| B 3.1-43  | B 3.6-49  |
| B 3.1-44  | B 3.6-76  |
| B 3.1-49  | B 3.6-77  |
|           | B 3.6-82  |
| B 3.3-28  | B 3.6-94  |
| B 3.3-29  | B 3.6-99  |
| B 3.3-30  | B 3.6-100 |
| B 3.3-31  | B 3.6-115 |
| B 3.3-39  | B 3.6-116 |
| B 3.3-47  | B 3.6-135 |
| B 3.3-59  |           |
| B 3.3-64  | B 3.7-8   |
| B 3.3-73  | B 3.7-15  |
| B 3.3-74  | B 3.7-21  |
| B 3.3-84  | B 3.7-27  |
| B 3.3-120 | B 3.7-28  |
| B 3.3-133 |           |
| B 3.3-167 | B 3.8-8   |
| B 3.3-168 | B 3.8-18  |
| B 3.3-180 | B 3.8-19  |
| B 3.3-190 | B 3.8-20  |
| B 3.3-196 | B 3.8-21  |
| B 3.3-207 | B 3.8-23  |
| B 3.3-215 | B 3.8-24  |
| B 3.3-221 | B 3.8-25  |
| B 3.3-222 | B 3.8-26  |
|           | B 3.8-27  |
| B 3.4-11  | B 3.8-28  |
| B 3.4-12  | B 3.8-29  |
| B 3.4-20  | B 3.8-30  |
| B 3.4-37  | B 3.8-55  |
|           | B 3.8-56  |
| B 3.5-11  |           |
| B 3.5-12  | B 3.6-14  |
| B 3.5-13a | B 3.6-38  |
| B 3.5-24  | B 3.6-87  |
| B 3.5-25  | B 3.6-119 |
|           | B 3.6-128 |



ADDED BY THIS  
SUPPLEMENT

**Attachment 2  
RBG-46985**

**Additional affected Technical Specification Bases pages**

BASES

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SURVEILLANCE  
REQUIREMENTS  
(continued)

SR 3.6.1.2.3

The air lock interlock mechanism is designed to prevent simultaneous opening of both doors in the air lock. Since both the inner and outer doors of an air lock are designed to withstand the maximum expected post accident primary containment pressure (Ref. 3), closure of either door will support primary containment OPERABILITY. Thus, the interlock feature supports primary containment OPERABILITY while the air lock is being used for personnel transit in and out of the containment. Periodic testing of this interlock demonstrates that the interlock will function as designed and that simultaneous inner and outer door opening will not inadvertently occur. Due to the nature of this interlock, and given that the interlock mechanism is only challenged when the primary containment airlock door is opened, this test is only required to be performed upon entering or exiting a primary containment air lock, but is not required more frequently than once per 184 days. The 184 day Frequency is based on engineering judgment and is considered adequate in view of other administrative controls.

SR 3.6.1.2.4

A seal pneumatic system test to ensure that pressure does not decay at a rate equivalent to > 1.50 psig for a period of 24 hours from an initial pressure of 90 psig is an effective leakage rate test to verify system performance.

24

The ~~18~~ month Frequency is based on the fact that operating experience has shown these components usually pass the Surveillance when performed at the ~~18~~ month Frequency, which is based on the refueling cycle. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

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REFERENCES

1. USAR, Section 3.8.
  2. 10 CFR 50, Appendix J, Option B.
  3. USAR, Table 6.2-1.
  4. USAR, 15.7.4.
  5. Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995.
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BASES

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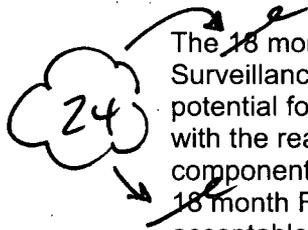
SURVEILLANCE  
REQUIREMENTS

SR 3.6.1.6.1 (continued)

frequency of the required relief-mode actuator testing was developed based on the tests required by ASME OM, Part 1, (ref. 3) as implemented by the Inservice Testing Program of Specification 5.5.6. The testing frequency required by the Inservice Testing Program is based on operating experience and valve performance. Therefore, the frequency was concluded to be acceptable from a reliability standpoint.

SR 3.6.1.6.2

The LLS designed S/RVs are required to actuate automatically upon receipt of specific initiation signals. A system functional test is performed to verify that the mechanical portions (i.e., solenoids) of the automatic LLS function operate as designed when initiated either by an actual or simulated automatic initiation signal. The LOGIC SYSTEM FUNCTIONAL TEST in SR 3.3.6.4.4 overlaps this SR to provide complete testing of the safety function.



The 18 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power. Operating experience has shown these components usually pass the Surveillance when performed at the 18 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

This SR is modified by a Note that excludes valve actuation. This prevents a reactor pressure vessel pressure blowdown.

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REFERENCES

1. GESSAR-II, Appendix 3B, Attachment A, Section 3BA.8.
  2. USAR, Section 5.2.2.
  3. ASME/ANSI OM-1987, Operation and Maintenance of Nuclear Power Plants, Part 1.
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BASES

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SURVEILLANCE  
REQUIREMENTS

SR 3.6.4.1.4 and SR 3.6.4.1.6

The SGT System exhausts the shield building annulus and auxiliary building atmosphere to the environment through appropriate treatment equipment. To ensure that all fission products are treated, SR 3.6.4.1.4 verifies that the SGT System will rapidly establish and maintain a pressure in the shield building annulus and auxiliary building that is less than the lowest postulated pressure external to the secondary containment boundary. This is confirmed by demonstrating that one SGT subsystem will draw down the shield building annulus and auxiliary building to  $\geq 0.5$  and  $\geq 0.25$  inches of vacuum water gauge in  $\leq 18.5$  and  $\leq 34.5$  seconds, respectively. This cannot be accomplished if the secondary containment boundary is not intact. SR 3.6.4.1.6 demonstrates that each SGT subsystem can maintain  $\geq 0.5$  and  $\geq 0.25$  inches of vacuum water gauge for 1 hour. The 1 hour test period allows shield building annulus and auxiliary building to be in thermal equilibrium at steady state conditions. Therefore, these two tests are used to ensure the integrity of this portion of the secondary containment boundary. Since these SRs are secondary containment tests, they need not be performed with each SGT subsystem. The SGT subsystems are tested on a STAGGERED TEST BASIS, however, to ensure that in addition to the requirements of LCO 3.6.4.3, either SGT subsystem will perform this test. Operating experience has shown these components usually pass the Surveillance when performed at the 16 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

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REFERENCES

1. USAR, Section 15.6.5.
2. USAR, Section 15.7.4.

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BASES

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ACTIONS

A.1 (continued)

drywell is inoperable is minimal. Also, the Completion Time is the same as that applied to inoperability of the primary containment in LCO 3.6.1.1, "Primary Containment-Operating."

B.1 and B.2

If the drywell cannot be restored to OPERABLE status within the required Completion Time, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 12 hours and to MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

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SURVEILLANCE  
REQUIREMENTS

SR 3.6.5.1.1

The seal air flask pressure is verified to be at  $\geq 75$  psig every 7 days to ensure that the seal system remains viable. It must be checked because it could bleed down during or following access through the personnel door. The 7 day Frequency has been shown to be acceptable through operating experience and is considered adequate in view of the other indications available to operations personnel that the seal air flask pressure is low.

SR 3.6.5.1.2

A seal pneumatic system test to ensure that pressure does not decay at a rate equivalent to  $> 20.0$  psig for a period of 24 hours from an initial pressure of 75 psig is an effective leakage rate test to verify system performance. ~~The 18 month~~ Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power. Operating experience has shown these components usually pass the Surveillance when performed at the 18 month Frequency, which is based on the refueling cycle. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

24



(continued)

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BASES (continued)

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SURVEILLANCE  
REQUIREMENTS

SR 3.6.5.2.5 (continued)

system pressure does not decay at an unacceptable rate. The air lock seal will support drywell OPERABILITY down to a pneumatic pressure of 75 psig. Since the air lock seal air flask pressure is verified in SR 3.6.5.2.2 to be  $\geq 75$  psig, a decay rate  $\leq 20.0$  psig over 24 hours is acceptable. The 24 hour interval is based on engineering judgment, considering that there is no postulated DBA where the drywell is still pressurized 24 hours after the event. The 18 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage when the air lock OPERABILITY is not required. Operating experience has shown that these components usually pass the Surveillance when performed at the 18 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

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REFERENCES

1. 10 CFR 50, Appendix J.
2. USAR, Chapters 6 and 15.

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