



Entergy Operations, Inc.  
1448 S.R. 333  
Russellville, AR 72802  
Tel 479-858-3110

**Jeremy G. Browning**  
Vice President - Operations  
Arkansas Nuclear One

1CAN031401

March 11, 2014

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

SUBJECT: License Amendment Request – Revised Pages  
Extend the Type A Test Frequency to 15 Years  
Arkansas Nuclear One, Unit 1  
Docket No. 50-313  
License No. DPR-51

REFERENCE: Entergy letter dated December 20, 2013, "License Amendment Request  
Technical Specification Change to Extend the Type A Test Frequency to  
15 Years" (1CAN121302) (ML13358A195)

Dear Sir or Madam:

Entergy Operations, Inc. (Entergy) submitted a request for an amendment to Arkansas Nuclear One, Unit 1 (ANO-1) Technical Specifications (TS) to allow for the extension of the current the ten-year frequency of the ANO-1 Type A or Integrated Leak Rate Test (ILRT) that is required by TS 5.5.16 to be extended to 15 years on a permanent basis (Reference above). During the acceptance review, the NRC noted that the marked up and clean pages of TS did not include all the proposed changes that were identified in Attachment 1 of the reference document. Specifically, the date of the last performed ILRT was not revised. In addition, the Staff requested a clarification to the words "except that" currently in the TS. The words "except that" give the appearance that the extension of the Type A Test is an exception to the requirements of NEI 94-01, Revision 3-A. NEI 94-01, Revision 3-A provides the justification to extend the frequency for this test. Entergy is not requesting any exceptions to NEI 94-01, Revision 3-A for ANO-1. The words "except that" are deleted and the remaining sentence is divided into two sentences.

Attachment 1 provides the revised markup pages of existing TS to show the proposed change. Attachment 2 provides revised (clean) TS pages.

These changes do not alter the no significant hazards consideration (NSHC) determination that was provided in the reference document.

In addition, it was noted that Section 4.4 of Attachment 1 of the reference document referenced NEI 94-01, Revision 2. This is in error. It should have referenced NEI 94-01, Revision 3. This error does not impact the technical discussions provided previously.

In accordance with 10 CFR 50.91(b)(1), a copy of this submittal is being provided to the designated Arkansas state official.

If you have any questions or require additional information, please contact Stephenie Pyle at 479-858-4704.

I declare under penalty of perjury that the foregoing is true and correct.  
Executed on March 11, 2014.

Sincerely,

***Original Signed by Jeremy G. Browning***

JGB/rwc

Attachments:

1. Proposed Technical Specification Changes (mark-up)
2. Revised (clean) Technical Specification Pages

cc: Mr. Marc L. Dapas  
Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region IV  
1600 East Lamar Boulevard  
Arlington, TX 76011-4511

NRC Senior Resident Inspector  
Arkansas Nuclear One  
P. O. Box 310  
London, AR 72847

U. S. Nuclear Regulatory Commission  
Attn: Mr. Michael Orenak  
MS O-8G9A  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852

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

Mr. Bernard R. Bevill  
Arkansas Department of Health  
Radiation Control Section  
4815 West Markham Street  
Slot #30  
Little Rock, AR 72205

**Attachment 1 to**

**1CAN031401**

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

5.0 ADMINISTRATIVE CONTROLS

5.5 Programs and Manuals

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5.5.16 Reactor Building Leakage Rate Testing Program

A program shall be established to implement the leakage rate testing of the reactor building as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in ~~Regulatory Guide 1.163, "Performance-Based Containment Leak Test Program," dated September 1995~~ NEI 94-01, Revision 3-A, "Industry Guideline for Implementing Performance-Based Option of 10 CFR 50, Appendix J," dated July 2012., ~~except that~~ The next Type A test performed after the ~~December 16, 2005~~ April 16, 1992 Type A test shall be performed no later than ~~December 16, 2020~~ April 15, 2007.

In addition, the reactor building purge supply and exhaust isolation valves shall be leakage rate tested once prior to entering MODE 4 from MODE 5 if not performed within the previous 92 days.

The peak calculated reactor building internal pressure for the design basis loss of coolant accident,  $P_a$ , is 54 psig.

The maximum allowable reactor building leakage rate,  $L_a$ , shall be 0.20% of containment air weight per day at  $P_a$ .

Leakage rate acceptance criteria are:

- a. Reactor Building leakage rate acceptance criteria is  $\leq 1.0 L_a$ . During the first unit startup following each test performed in accordance with this program, the leakage rate acceptance criteria are  $< 0.60 L_a$  for the Type B and Type C tests and  $< 0.75 L_a$  for Type A tests.
- b. Air lock testing acceptance criteria are:
  1. Overall air lock leakage rate is  $\leq 0.05 L_a$  when tested at  $\geq P_a$ ;
  2. For each door, leakage rate is  $\leq 0.01 L_a$  when tested at  $\geq 10$  psig.

The provisions of SR 3.0.2 do not apply to the test frequencies specified in the Reactor Building Leakage Rate Testing Program.

The provisions of SR 3.0.3 are applicable to the Reactor Building Leakage Rate Testing Program.

**Attachment 2 to**

**1CAN031401**

**Revised (clean) Technical Specification Pages**

## 5.0 ADMINISTRATIVE CONTROLS

### 5.5 Programs and Manuals

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#### 5.5.16 Reactor Building Leakage Rate Testing Program

A program shall be established to implement the leakage rate testing of the reactor building as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in NEI 94-01, Revision 3-A, "Industry Guideline for Implementing Performance-Based Option of 10 CFR 50, Appendix J," dated July 2012. The next Type A test performed after the December 16, 2005 Type A test shall be performed no later than December 16, 2020.

In addition, the reactor building purge supply and exhaust isolation valves shall be leakage rate tested once prior to entering MODE 4 from MODE 5 if not performed within the previous 92 days.

The peak calculated reactor building internal pressure for the design basis loss of coolant accident,  $P_a$ , is 54 psig.

The maximum allowable reactor building leakage rate,  $L_a$ , shall be 0.20% of containment air weight per day at  $P_a$ .

Leakage rate acceptance criteria are:

- a. Reactor Building leakage rate acceptance criteria is  $\leq 1.0 L_a$ . During the first unit startup following each test performed in accordance with this program, the leakage rate acceptance criteria are  $< 0.60 L_a$  for the Type B and Type C tests and  $< 0.75 L_a$  for Type A tests.
- b. Air lock testing acceptance criteria are:
  1. Overall air lock leakage rate is  $\leq 0.05 L_a$  when tested at  $\geq P_a$ ;
  2. For each door, leakage rate is  $\leq 0.01 L_a$  when tested at  $\geq 10$  psig.

The provisions of SR 3.0.2 do not apply to the test frequencies specified in the Reactor Building Leakage Rate Testing Program.

The provisions of SR 3.0.3 are applicable to the Reactor Building Leakage Rate Testing Program.