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2CAN011109

January 31, 2011

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

**SUBJECT:** Response to the Request for Additional Clarifications Regarding  
License Amendment Request Technical Specification Change to  
Extend the Type A Test Frequency to 15 Years  
Arkansas Nuclear One, Unit 2  
Docket No. 50-368  
License No. NPF-6

- REFERENCES:**
1. Entergy letter dated June 17, 2010, "License Amendment Request Technical Specification Change to Extend the Type A Test Frequency to 15 Years" (2CAN061003)
  2. Entergy letter dated January 17, 2011, "Response to the Request for Additional Information Regarding License Amendment Request Technical Specification Change to Extend the Type A Test Frequency to 15 Years" (2CAN011102)
  3. Entergy letter dated June 29, 2000, "Request for Exemption from 10 CFR 50, Appendix J" (2CAN060011)
  4. NRC letter dated October 12, 2000, "Arkansas Nuclear One Unit 2 One-Time Exemption from the Requirements of 10 CFR Part 50, Appendix J, Option B (TAC MA9350)" (2CNA100002)
  5. NRC email dated November 18, 2010, "Request for Additional Information (RAI) on License Amendment Request dated June 17, 2010, Technical Specification Change to Extend the Type A Test Frequency to 15 years – REVISION 1" (TAC No. ME4090)

Dear Sir or Madam:

Entergy Operations, Inc. (Entergy) proposed a change to the Arkansas Nuclear One, Unit 2 (ANO-2) Technical Specifications (TS) via Reference 1. Specifically, the change would allow for the extension of the ten-year frequency of the ANO-2 Type A or Integrated Leak Rate Test (ILRT) required by TS 6.5.16 to 15 years on a permanent basis.

In an email dated January 21, 2011, the NRC noted an apparent contradiction in the containment test pressure quoted in the Reference 1 application for the TS change and the responses to the Request for Additional Information (RAIs) provided in Reference 2. Reference 1 states the November 30, 2000, test was “performed at the new higher design pressure of 58 psig.” Note 2 of Table 2.2-1 in Reference 2 provided the ILRT test results as “percent of containment air weight per day at Structural Integrity Test pressure (68 psig).”

In addition, it was noted that the NRC email referenced in Entergy’s letter dated January 17, 2011 (Reference 2 of this submittal) is dated November 23, 2010. The NRC believes it should be an email dated November 18, 2010 (Reference 5 of this submittal). The NRC requested Entergy to review these potential contradictions and submit a supplement correcting these as necessary. This submittal provides the requested supplement.

Both of these apparent discrepancies are clarified below.

### Test Pressure

10 CFR 50, Appendix J, Option B, Section III.A, for Type A tests states, “Type A tests to measure the containment system overall integrated leakage rate must be conducted under conditions representing design basis loss-of-coolant accident containment peak pressure.” The original design basis loss-of-coolant accident (LOCA) containment peak pressure for the ANO-2 containment was 54 psig.

The steam generators were replaced during the fall of 2000. This replacement required an access opening to be cut in the containment building structure. Upon closure of the containment structure, a Type A test was required (e.g., performed November 30, 2000). This test was performed at a higher pressure to encompass the new LOCA containment peak pressure required by the new steam generators. The new LOCA containment peak pressure was determined to be 58 psig with a design pressure of 59 psig.

As a result of this increase, a Structural Integrity Test (SIT) was performed to evaluate the ANO-2 containment structure for the change in design pressure. The purpose of this test was to verify that the containment structure could safely carry design loads and that the structural behavior was similar to that predicted by analysis. The test was performed at 68 psig (1.15 times the revised design pressure).

Entergy desired to perform the Type A test concurrently with the SIT, at the SIT test pressure. Entergy submitted an exemption request (Reference 3) to perform the Type A test at this higher pressure. Reference 4 provided the NRC’s approval of the one-time exemption to perform the Type A test at 68 psig. The results of this test are noted in Reference 2.

Based on the above, the discrepancy was that 58 psig was denoted as the new design pressure for the Type A test when it is actually the new design basis LOCA containment peak pressure at which the Type A test would normally be performed. The last Type A test performed to date was the one on November 30, 2000. It was performed at the SIT pressure of 68 psig.

Request for Additional Information

Reference 5 provided the original formal request for additional information related to the subject TS change. Based upon a review of the requests, it was believed that one of the requests (RAI 2.1(d)) should have been deleted from the formal RAIs based on previous discussions with the Staff. This was noted in Reference 2. This deletion was confirmed in a separate follow-up email. This follow-up email was the one (dated November 23, 2010) cited in Reference 2, not the original request (dated November 18, 2010), since it provided the clarification. Entergy concurs with the NRC with regard to the correct reference that should have been cited.

There are no new commitments in this letter.

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 January 31, 2011.

Sincerely,

***Original signed by Christopher J. Schwarz***

CJS/rwc

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