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0CAN090702

September 27, 2007

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

SUBJECT: Request ANO-CISI-001
Proposed Alternative for Containment Inspection Interval
Arkansas Nuclear One, Units 1 and 2
Docket Nos. 50-313 and 50-368
License Nos. DPR-51 and NPF-6

Dear Sir or Madam:

Pursuant to 10 CFR 50.55a(a)(3)(i), Entergy Operations, Inc. (Entergy) hereby requests approval of a proposed alternative to the Arkansas Nuclear One, Unit 1 (ANO-1) and Unit 2 (ANO-2) Containment Inservice Inspection (CISI) interval. The ASME Boiler and Pressure Vessel Code (1992 Edition with 1992 Addenda and 2001 Edition with 2003 Addenda), Section XI, Subsection IWL-2421(b) permits an alternate inspection interval for containment building structures at sites having more than one containment building, provided certain conditions are met. One condition, stated in Subsection IWL-2421(a), requires the post-tensioning operations for the two (or more) containment buildings at a single site to be completed not more than two years apart.

The post-tensioning operations of the ANO-1 and ANO-2 containment buildings were completed just less than 37 months apart (March 1973 and 1976, ANO-1 and ANO-2, respectively). This exceeds the two-year requirement stated within Subsection IWL-2421(a). All other conditions described in Subsection IWL-2421(a) are met, as described in Attachment 1 of this submittal.

The two-year requirement was established to ensure, to the extent practical, that when using the IWL-2421 rules, the two containments on a two-plant site would be essentially identical. Both ANO-1 and ANO-2 share essentially the same containment design, were under construction during the same time period in a sequential manner, and were exposed to virtually identical environmental conditions. Therefore, exceeding the post tensioning operations required time by 13 months does not present any safety or technical concerns because the two structures are essentially identical and the age difference (as established by the post tensioning date) is insignificant given the life of the structures.

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Based on the above, Entergy proposes to implement the examination requirements of Subsection IWL-2421(b) without meeting the specific two-year (24 month) criteria of Subsection IWL-2421(a). The ANO Containment Inspection Program will continue to be performed in accordance with 10 CFR 50.55a and applicable Sections of the ASME Code, notwithstanding other relief or deviations previously approved by the NRC.

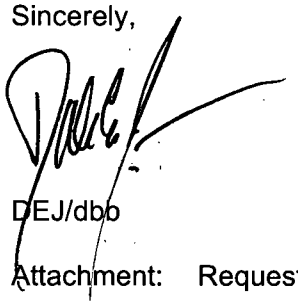
In accordance with 10 CFR 50.55a(a)(3)(i), proposed alternatives to the aforementioned requirements may be approved by the NRC provided an acceptable level of quality and safety are maintained. Entergy believes the proposed alternative meets this requirement.

There are no new commitments contained in this letter.

Entergy requests approval of the proposed amendment by September 1, 2008 in order to support the fall 2008 refueling outage. Although this request is neither exigent nor emergency, your prompt review is requested.

If you have any questions or require additional information, please contact David Bice at 479-858-5338.

Sincerely,



DEJ/dbb

Attachment: Request for Alternative ANO-CISI-001

cc: Mr. Elmo E. Collins
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U. S. Nuclear Regulatory Commission
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NRC Senior Resident Inspector
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U. S. Nuclear Regulatory Commission
Attn: Mr. Alan B. Wang
MS O-7 D1
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Mr. Bernard R. Bevill
Director Division of Radiation
Control and Emergency Management
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P.O. Box 1437
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Attachment 1

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Request for Alternative ANO-CISI-001

ENTERGY OPERATIONS, INC.
Arkansas Nuclear One, Units 1 and 2

REQUEST FOR ALTERNATIVE
ANO-CISI-001

Proposed Alternative in Accordance with 10 CFR 50.55a(a)(3)(i)
--Alternative Provides Acceptable Level of Quality and Safety--

1. ASME Code Components Affected

Components:	Arkansas Nuclear One, Unit 1 (ANO-1) and Unit 2 (ANO-2)
Code Class:	CC
References:	ASME Section XI, 1992 Edition with 1992 Addenda (ANO-2) and 2001 Edition with 2003 Addenda (ANO-1)
Examination Category:	Category L-B
Item Numbers	L2.10 and L2.20
Description:	Tendon Force and Elongation Measurements; Tendon Wire and Strand Sample Examination and Testing
Unit / Inspection Interval Applicability:	ANO-1 Fourth (4th) 10-year Interval and Subsequent Intervals ANO-2 Third (3rd) 10 year Interval and Subsequent Intervals

2. Applicable Code Edition and Addenda

The code of record for both ANO-1 and ANO-2 for the third Containment Inservice Inspection (CISI) interval is the 1992 Edition with 1992 Addenda ASME Boiler and Pressure Vessel Code (Code), Section XI, and portions of the 1998 Edition with 2000 Addenda as endorsed by the NRC. ANO-1 is currently performing a 10-year update in accordance with 10 CFR 50.55a. Subsequently, the code of record for the fourth CISI interval at ANO-1 will be the 2001 Edition with 2003 Addenda. While the CISI program at ANO is maintained as a separate program from the Inservice Inspection (ISI) program associated with the other portions of ASME Section XI, the CISI Intervals at ANO are sequenced to correspond to the ISI intervals.

3. Applicable Code Requirement

For both the 1992 Edition with 1992 Addenda and the 2001 Edition with 2003 Addenda of ASME Code, Section XI, Division 1, in order to use the scheduling requirements of IWL-2421(b) in lieu of the requirements specified in IWL-2420(a), IWL-2421(a) requires, in part, that the post-tensioning operations for each subsequent containment constructed at the site to be completed not more than 2 years apart.

4. Reason for Request

Prior to the regulations requiring implementation of ASME Section XI, Subsection IWL (i.e., 61 FR 41303, August 8, 1996), containment structural integrity was required to be maintained in accordance with the requirements of the plant Technical Specifications (TS), which referenced the containment Tendon Surveillance Program. This program was based on NRC Regulatory Guide (RG) 1.35. RG 1.35 required that containment inspections be performed at 1, 3, and 5 years after the initial structural integrity test (SIT) and then every 5 years thereafter.

Because the ANO-1 and ANO-2 containment structures are essentially identical structures located on one site and because they were constructed by the same contractor in a continuous manner under essentially the same environmental conditions; in accordance with the TSs and the requirements of RG 1.35, Rev. 1, June 1974, all the examinations and tests were performed on ANO-1, while only the visual examination of the accessible tendons, the tendon anchorage, and the surrounding concrete was performed on ANO-2.

The Code of Federal Regulations dated August 8, 1996 required the expedited implementation of ASME Code Subsection IWL using the 1992 Edition of Section XI with the 1992 Addenda. The regulations allowed licensees to continue post tensioning system examinations in accordance with an NRC accepted program through the expedited period. Following implementation of the program under Subsection IWL, Entergy completed tendon examinations in 2004 for ANO-1 (i.e., 30-year IWL including examination of Code Items L2.10, L2.20, L2.30, L2.40, and L2.50) and in 2006 for ANO-2 (i.e., 25-year IWL including examination of Code Items L2.10, L2.20, L2.30, L2.40, and L2.50).

Entergy has determined that all but one of the conditions described in Subsection IWL-2421(a) are met for the ANO containment structures. The subject condition requires the two containment structures to have completed post-tensioning operations no more than two years (24 months) apart from one another. As described in further detail in Section 5 below, the post-tensioning operations for the ANO units were completed nearly 37 months apart. Therefore, in order to apply the allowances of Subsection IWL-2421(b), Entergy requests relief from the two-year post-tensioning requirement of IWL-2421(a).

5. Proposed Alternative and Basis for Use

ASME Code Subsection IWL-2421 provides for a reduction in the scope of alternate consecutive examinations if a site has two identical containment structures. Entergy proposes to use the examination requirements of the multiple plant rules described in IWL-2421(b) with a 37-month delta between containment post-tensioning completion dates for ANO-1 and ANO-2, in lieu of meeting the single unit rules of IWL-2420(a) examination requirements for Category L-B examinations.

For sites with two plants, IWL-2421(a) permits the use of IWL-2421(b) examination requirements if the following conditions are met:

- both containments utilize the same pre-stressing system,
- they are essentially identical in design,
- the post-tensioning operations for the two containments were completed not more than two years apart, and
- both containments are similarly exposed to or protected from the outside environment.

In the 1992 Edition with 1992 Addenda ASME Code, Subsection IWL-2421(b) specifies that when the conditions of IWL-2421(a) are met:

1. For the containment with the first Structural Integrity Test, all examinations required by IWL-2500 shall be performed at 1, 3, 10, 20 and 30 years. Only the examinations required by IWL-2524 and IWL-2525 need be performed at 5, 15, 25, and 35 years.

2. For the containment with the second Structural Integrity Test, constructed at the site, all examinations required by IWL-2500 shall be performed at 1, 5, 15, 25, and 35 years. Only the examinations required by IWL-2524 and IWL-2525 need be performed at 3, 10, 20 and 30 years.

In the 2001 Edition with 2003 Addenda ASME Code (for ANO-1), Subsection IWL-2421(b) specifies that when the conditions of IWL-2421(a) are met:

1. For the containment with the first Structural Integrity Test, all examinations required by IWL-2500 shall be performed at 1, 3, and 10 years and every 10 years thereafter. Only the examinations required by IWL-2524 and IWL-2525 need be performed at 5 and 15 years and every 10 years there after.

2. For each subsequent containment constructed at the site, all examinations required by IWL-2500 shall be performed at 1, 5, and 15 years and every 10 years thereafter. Only the examinations required by IWL-2524 and IWL-2525 need be performed at 3 and 10 years and every 10 years there after.

The requirements in the 1992 edition with 1992 addenda of IWL-2421 are essentially identical to the requirements of the 2001 edition with 2003 addenda of IWL-2421 with the exceptions that the later code contains provisions for sites with more than two units and the phrase "every 10 years there after" is used to address the potential for license renewal.

The ANO-1 containment post-tensioning operation was completed in early March 1973. The ANO-2 containment post-tensioning operation was completed in late March 1976. This exceeds the requirements of Subsection IWL-2421(a) for applying Subsection IWL-2421(b) by 13 months. Both units share essentially the same design, were under construction during the same time period in a sequential manner, and are exposed to identical environment conditions. Exceeding the post tensioning operations required time by only 13 months should not present any safety or technical concerns with regard to age-related degradation. In addition, inspection results to date have identified no meaningful differences impacting tendon lift-off forces between the two units.

Entergy has concluded that no appreciable benefit is gained by overly frequent examination of the ANO containment post-tensioning systems. In accordance with 10 CFR 50.55a(a)(3)(i), Entergy has determined that the proposed alternative will continue to provide an acceptable level of quality and safety.

6. Duration of Proposed Alternative

The proposed alternative is applicable to the fourth (4^{th}) CISI interval and subsequent intervals for ANO-1 and to the third (3^{rd}) CISI interval and subsequent intervals for ANO-2.

7. Precedents

Similar relief requests were approved by the NRC for Joseph M. Farley Nuclear Plant (Accession No. ML060830221, dated March 28, 2006) and Palo Verde Nuclear Generating Station (Accession No. ML003758134, dated October 6, 2000).