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CNRO-2007-00033

August 22, 2007

U. S. Nuclear Regulatory Commission
Attn.: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Request ISI-2007-1
Use of Later ASME Section XI Code Edition and Addenda for Repair
and Replacement; Pressure Testing, and Non Destructive Examination
Activities

Arkansas Nuclear One, Unit 2
Docket No. 50-368
License No. NPF-6

Dear Sir or Madam:

Pursuant to 10 CFR 50.55a(g)(4)(iv), Entergy Operations, Inc. (Entergy) requests permission to use the 2001 Edition/2003 Addenda of ASME Section XI for the performance of ISI related activities associated with repair/replacements, pressure testing, and NDE. The NRC has approved these editions and addenda of Section XI as documented in 10 CFR 50.55a(b)(2). Regarding performance demonstration of ultrasonic examinations, Entergy requests permission to use the 2001 Edition of ASME Section XI as specified in 10 CFR 50.55a(b)(2)(xxiv). This request, ISI-2007-1, is applicable to Arkansas Nuclear One - Unit 2 (ANO-2) and is provided in the enclosure to this letter.

Entergy is seeking approval of ISI-2007-1 in order to maintain a standard program among its southern facilities for repair/replacement, pressure testing, and NDE activities.

Entergy is providing this request in accordance with NRC Regulatory Issue Summary 2004-16, *Use of Later Editions and Addenda to ASME Code Section XI for Repair/Replacement Activities*.

Entergy requests approval of this request on or before January 31, 2008. Should you have any questions regarding this submittal, please contact Bill Brice at (601) 368-5076.

A047

NR2

This letter contains no commitments.

Very truly yours,



JFM/GHD/ghd

Enclosure: Request ISI-2007-1

cc: Mr. O. Limpas (ECH)
Mr. T. Mitchell (ANO)

Dr. Bruce S. Mallett
Regional Administrator, Region IV
U. S. Nuclear Regulatory Commission
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U. S. Nuclear Regulatory Commission
Attn: Mr. A. B. Wang (ANO)
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ENCLOSURE

CNRO-2007-00033

ISI-2007-1

**REQUEST IN ACCORDANCE WITH
10 CFR 50.55a(g)(4)(iv) FOR INSERVICE INSPECTION ITEMS**

ENTERGY OPERATIONS, INC.**10 CFR 50.55a Request ISI-2007-1****REQUEST IN ACCORDANCE WITH
10 CFR 50.55a(g)(4)(iv) FOR INSERVICE INSPECTION ITEMS****1. ASME Code Components Affected**

All Class 1, 2, 3, MC, and CC components, component supports, and welds in the ASME Section XI pressure boundary at Arkansas Nuclear One, Unit 2 (ANO-2).

2. Applicable Code Edition and Addenda

Inservice inspection (ISI) related activities such as repair/replacements, pressure testing, and non-destructive examination (NDE) are currently performed at ANO-2 in accordance with the 1992 Edition of ASME Section XI with the exceptions listed below.

- Pressure testing is performed in accordance with the 1992 Edition with portions of the 1993 Addenda. (*Ref: NRC SER dated December 12, 1996 – TAC No. M94471*)
- Ultrasonic examinations are performed in accordance with the 1995 Edition, 1996 Addenda. (*Ref: NRC SER dated January 5, 2006 – TAC No. MC8046*)
- ISI of Class MC (including metallic liners) and Class CC containments are performed in accordance with the 1992 Edition/1992 Addenda with portions of the 1998 Edition/2000 Addenda. (*Ref: NRC SER dated December 21, 2004 – TAC No. MC5026*)

The above information is detailed in a tabular format in Attachment 1. The start date of the next 10-Year ISI interval for ANO-2 is March 26, 2010.

3. Proposed Subsequent Code Edition and Addenda (or Portion)**A. Background**

ASME Section XI activities at Arkansas Nuclear One, Unit 1 (ANO-1) and Unit 2 (ANO-2), Grand Gulf Nuclear Station (GGNS), River Bend Station (RBS), and Waterford Steam Electric Station, Unit 3 (WF3) are currently performed in accordance with the Editions/Addenda of ASME Section XI identified in Section 2.0, above.

However, as of May 31, 2008, ANO-1, GGNS, RBS, and WF3 will update to the 2001 Edition/2003 Addenda of Section XI in accordance with the 10-year update requirements of 10 CFR 50.55a(g)(4)(ii). Also, to comply with the NRC restriction in paragraph (xxiv) of 10 CFR 50.55a(b)(2), performance demonstration of ultrasonic examinations will be in accordance with the 2001 Edition (no addenda) of Appendix VIII. Because ANO-2 is only in the eighth year of its third 10-Year ISI interval, it is not scheduled to update until March 26, 2010.

ASME Section XI activities at ANO-1, ANO-2, GGNS, RBS, and WF3 are standardized and corporately administered by Entergy. While ISI Program Plans – based on IWB-,

IWC-, IWD-, IWE-, IWF-, and IWL-2500 – are contained in site specific ISI documents, the repair/replacement, pressure testing, and NDE programs are contained in common programs that are corporately implemented at all five of the subject Entergy facilities. Therefore, if ANO-2 continues to perform repair/replacement, pressure testing, and NDE activities in accordance with its current code of record after implementing the update at ANO-1, GGNS, RBS, and WF3, then Entergy will be required to maintain two different repair/replacement, pressure testing, and NDE programs for its southern fleet. Furthermore, ANO personnel will have to implement two versions of each of these programs at their site (i.e. updated programs at ANO-1 and existing programs ANO-2).

B. Proposed Subsequent Code Edition and Addenda

Pursuant to 10 CFR 50.55a(g)(4)(iv), Entergy requests permission to utilize the 2001 Edition/2003 Addenda of ASME Section XI at ANO-2 for the performance of repair/replacements, pressure testing, and NDE. To comply with the NRC restriction in paragraph (xxiv) of 10 CFR 50.55a(b)(2), the 2001 Edition/No Addenda of Appendix VIII will be used for performance demonstration of ultrasonic examinations. It is important to note that this request does not apply to the selection, planning, or scheduling of ISI examinations and tests as defined in IWB-, IWC-, IWD-, IWE-, IWF-, and IWL-2500. ISI examinations and tests at ANO-2 will continue to be selected, planned, and scheduled in accordance with its present code of record as described in Section 2.0, above. See Attachment 2 for specific details regarding this proposal.

In implementing this proposal, Entergy will also comply with all NRC conditions, limitations, and restrictions specified in 10 CFR 50.55a.

4. Related Requirements

Entergy is requesting permission to use the 2001 Edition/2003 Addenda of ASME Section XI for the performance of repair/replacements, pressure testing, and NDE and the 2001 Edition of Appendix VIII for performance demonstration of ultrasonic examinations. In making this request, Entergy will comply with all related requirements in ASME Section XI as described below:

- Entergy has proposed to utilize all “Articles” (e.g. IWA-1000, IWA-2000, etc) from every “Subsection” (e.g. IWA, IWB, etc.) of the 2001 Edition/2003 Addenda that could be used or referenced for the performance of repair/replacement, pressure testing, and NDE activities. Entergy has also stated that it will comply with all “Mandatory Appendices” of the 2001 Edition/2003 Addenda.
- Entergy will only use Appendix VIII from the 2001 Edition of ASME Section XI in accordance with the NRC restriction in paragraph (xxiv) of 10 CFR 50.55a(b)(2). However, this appendix includes all pertinent requirements for performance demonstration of ultrasonic examination systems.
- With regard to the performance of ISI examinations and tests, Entergy will continue to select, plan, and schedule these ISI inspection activities – as specified in IWA-, IWB-, IWC-, IWD-, IWE-, IWF-, and IWL-2500 – in accordance with its current code of record. To ensure that all related requirements are met, ANO-2 will also continue to comply with applicable portions of IWA-2000 and all provisions of IWB-, IWC-, IWD, IWE-, IWF-, and IWL-1000 and 2000 from its original code of record. See Attachment 2 for more details.

5. Duration of Proposed Request

The duration of this request will be from approval by the NRC staff until the end of the third (3rd) ISI interval for ANO-2, which is scheduled to end on or about March 25, 2010.

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REQUEST ISI-2007-1

ATTACHMENT 1

PRESENT ASME SECTION XI CODE OF RECORD AT ANO-2

PRESENT ASME SECTION XI CODE OF RECORD AT ANO-2

ASME Section XI Code Provision		Applicable Edition and Addenda of ASME Section XI				
Sub section	Article	1992 Edition/ No Addenda	1992 Edition/ With Portions of 1993 Addenda	1992 Edition/ 1992 Addenda	1992 Edition/1992 Add. With Portions of 1998 Edition/2000 Add	1995 Edition/ 1996 Addenda
IWA-General Requirements	IWA-1000	X ¹		X ²		
	IWA-2000	X ¹		X ²		
	IWA-3000	X ¹		X ²		
	IWA-4000	X ¹		X ²		
	IWA-5000		X ¹	X ²		
	IWA-6000	X ¹		X ²		
	IWA-9000	X ¹		X ²		
IWB-Req'ts for Class 1 Components	IWB-1000	X ¹				
	IWB-2000		X ¹			
	IWB-3000	X ¹				
	IWB-4000	X ¹				
	IWB-5000		X ¹			
	IWB-7000	X ¹				
IWC-Req'ts for Class 2 Components	IWC-1000	X ¹				
	IWC-2000		X ¹			
	IWC-3000	X ¹				
	IWC-4000	X ¹				
	IWC-5000		X ¹			
	IWC-7000	X ¹				
IWD-Req'ts for Class 3 Components	IWD-1000	X ¹				
	IWD-2000		X ¹			
	IWD-3000	X ¹				
	IWD-4000	X ¹				
	IWD-5000		X ¹			
	IWD-7000	X ¹				
IWE-Req'ts for Class MC Components	IWE-1000				X ²	
	IWE-2000				X ²	
	IWE-3000				X ²	
	IWE-4000			X ²		
	IWE-5000			X ²		
	IWE-7000			X ²		
IWF-Req'ts for Class 1, 2, 3, and MC Supports	IWF-1000	X ¹				
	IWF-2000	X ¹				
	IWF-3000	X ¹				
	IWF-4000	X ¹				
	IWF-5000	X ¹				
	IWF-7000	X ¹				
IWL-Req'ts for Class CC Components	IWL-1000			X ²		
	IWL-2000				X ²	
	IWL-3000				X ²	
	IWL-4000				X ²	
	IWL-5000				X ²	
	IWL-7000			X ²		
Mandatory Appendices	I					X ³
	II	X ¹		X ²		
	III					X ³
	IV	X ¹		X ²		
	V	X ¹		X ²		
	VI	X ¹		X ²		
	VII					X ³
	VIII					X ³

PRESENT ASME SECTION XI CODE OF RECORD AT ANO-2**Notes:**

1. This note is intended to identify the Edition/Addenda of ASME Section XI applicable to ISI related activities such as inservice examinations/tests, repair/replacements, pressure testing, and NDE. However, it does not identify the Edition/Addenda of ASME Section XI applicable to ISI of Class MC or Class CC components.
2. This note is intended to identify the Edition/Addenda of ASME Section XI applicable to the Class MC or Class CC components.
3. This note is intended to identify the Edition/Addenda of ASME Section XI that are used to perform ultrasonic examinations at ANO-2.

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REQUEST ISI-2007-1

ATTACHMENT 2

PROPOSED ASME SECTION XI CODE OF RECORD FOR ANO-2

PROPOSED ASME SECTION XI CODE OF RECORD FOR ANO-2

ASME Section XI Code Provision		Applicable Edition and Addenda of ASME Section XI ⁹					
Sub-section	Article	1992 Edition/ No Addenda	1992 Edition/ With Portions of 1993 Addenda	1992 Edition/ 1992 Addenda	1992 Edition/1992 Add. With Portions of 1998 Edition/2000 Add.	2001 Edition/ No Addenda	2001 Edition/ 2003 Addenda
IWA-General Requirements	IWA-1000						X
	IWA-2000	X ²					X ²
	IWA-3000						X
	IWA-4000						X
	IWA-5000						X
	IWA-6000						X
	IWA-9000						X
IWB-Req'ts for Class 1 Components	IWB-1000	X ¹					
	IWB-2000		X ¹				
	IWB-3000						X
	IWB-4000 ³						
	IWB-5000						X
	IWB-7000 ³						
IWC-Req'ts for Class 2 Components	IWC-1000	X ¹					
	IWC-2000		X ¹				
	IWC-3000						X
	IWC-4000 ³						
	IWC-5000						X
	IWC-7000 ³						
IWD-Req'ts for Class 3 Components	IWD-1000	X ¹					
	IWD-2000		X ¹				
	IWD-3000						X
	IWD-4000 ³						
	IWD-5000						X
	IWD-7000 ³						
IWE-Req'ts for Class MC Components	IWE-1000				X ¹		
	IWE-2000				X ¹		
	IWE-3000				X ¹		
	IWE-4000 ³						
	IWE-5000						X
	IWE-7000 ³						
IWF-Req'ts for Class 1, 2, 3, and MC Supports	IWF-1000	X ¹					
	IWF-2000	X ¹					
	IWF-3000						X
	IWF-4000 ³						
	IWF-5000						X
	IWF-7000 ³						
IWL-Req'ts for Class CC Components	IWL-1000			X ¹			
	IWL-2000				X ¹		
	IWL-3000						X
	IWL-4000						X
	IWL-5000						X
	IWL-7000 ⁴						
Mandatory Appendices	I						X
	II						X
	III						X
	IV						X
	V						X
	VI						X
	VII						X
	VIII					X	
	IX						X

PROPOSED ASME SECTION XI CODE OF RECORD FOR ANO-2**Notes:**

- (1) These ASME Section XI *articles* (e.g. IWB-1000 and 2000) apply to the selection, planning, and scheduling of ISI examinations and tests and have not been changed by this request. Therefore, as shown above, Entergy will continue to comply with its original code of record when using these ASME Section XI articles.
- (2) Entergy is only proposing to use IWA-2100, 2200, and 2300 from the 2001 Edition, 2003 Addenda. However, Entergy will continue to comply with its original code of record when using IWA-2400, 2500, 2600 for the selection, planning, and scheduling of ISI examinations and tests.
- (3) All repair/replacement rules were consolidated into IWA-4000. Therefore, as of the 1992 Edition/1994 Addenda, the following articles were deleted from ASME Section XI: IWB-4000, IWB-7000, IWC-4000, IWC-7000, IWD-4000, IWD-7000, IWE-4000, IWE-7000, IWF-4000, and IWF-7000.
- (4) As of the 1995 Edition/ 1995 Addenda, IWL-7000 was consolidated into IWL-4000 and deleted.
- (5) When implementing the various Editions/Addenda of ASME Section XI as shown in the table, Entergy will also comply with all NRC conditions, limitations, and restrictions specified in 10 CFR 50.55a.