



November 26, 2014

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

SUBJECT: Request for Approval of Pilgrim Relief Request (PRR)-26, Proposed Alternative in Accordance With 10 CFR 50.55a(a)(3)(i) to Maintain ISI Related Activities on the 2001E through 2003A ASME Section XI Code

Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
Docket No. 50-293
License No. DPR-35

REFERENCE: 1. NRC Safety Evaluation Letter "Relief Request ISI-2008-1, Use of Later Edition and Addenda of ASME Code, Section XI for Repair and Replacement, Pressure Testing, and Non-Destructive Testing Activities – Pilgrim Nuclear Power Station (TAC No. ME0238), dated April 30, 2009 (ML091130456)

LETTER NUMBER: 2.14.081

Dear Sir or Madam:

Pursuant to 10 CFR 50.55a(a)(3)(i), Entergy hereby requests an alternative to specific portions of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, "Rules for In-service Inspection of Nuclear Power Plant Components," on the basis that the proposed alternative provides an acceptable level of quality and safety. Specifically, this proposed alternative (ref. Attachment 1) requests authorization for the continued use of the 2001 Edition through the 2003 Addenda of the ASME Section XI code for the performance of ISI-related repair/replacement (R&R), pressure testing (PT), and nondestructive testing (NDE) activities during the 5th inspection interval subject to the conditions contained in 10 CFR 55.55a.

Pilgrim is currently approved to use the 2001 Edition through the 2003 Addenda of the ASME Section XI code during the 4th interval for the performance of ISI-related repair/replacement (R&R), pressure testing (PT), and nondestructive testing (NDE) activities via NRC-approved Relief Request ISI-2008-1 (Reference 1).

Pilgrim is currently in the 4th ISI interval which began on July 1, 2005 and ends on June 30, 2015. The ISI Code of Record for the 4th interval is ASME Section XI, 1998 Edition through 2000 Addenda.

Entergy requests NRC Staff review and approval of this Request for Alternative prior to the start of the Pilgrim fifth inspection interval which is scheduled to begin on July 1, 2015.

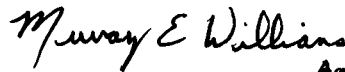
There are no new commitments included in this document.

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NRC



If you have any questions concerning this letter, please contact me at 508-830-8323.

Sincerely,


Acting for
Everett P. Perkins, Jr.
Manager, Regulatory Assurance

Attachment: 1. Pilgrim Nuclear Power Station 10 CFR 50.55a Request No. PRR-26, "Proposed Alternative in Accordance With 10 CFR 50.55a(a)(3)(i) Maintaining ISI Related Activities on the 2001E through 2003A ASME Section XI Code"

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USNRC Senior Resident Inspector
Pilgrim Nuclear Power Station

ATTACHMENT 1

TO

LETTER 2.14.081

**Pilgrim Nuclear Power Station 10 CFR 50.55a Request No. PRR-26, "Proposed Alternative
in Accordance With 10 CFR 50.55a(a)(3)(i) Maintaining ISI Related Activities on the
2001E through 2003A ASME Section XI Code"**

(5 Pages)

ATTACHMENT 1
Pilgrim Nuclear Power Station
10 CFR 50.55a Request No. PRR-26,
“Proposed Alternative in Accordance With 10 CFR 50.55a(a)(3)(i)
Maintaining ISI Related Activities on the 2001E through 2003A ASME Section XI Code”

1. ASME Code Component(s) Affected

Code Class: ASME Code Class 1, 2, 3, and MC components and component supports

Component Numbers: Various

Code References: ASME Section XI, 2007 Edition with 2008 Addenda
ASME Section XI, 2001 Edition with 2003 Addenda

Examination Category: Various

Item Number(s): Various

Unit/Inspection Interval Pilgrim / Fifth 10-year interval
July 1, 2015 – June 30, 2025

2. Applicable ASME Code Requirements

Entergy is required to update the Pilgrim Nuclear Power Station (PNPS) 120-month Inservice Inspection (ISI) Program to the latest Edition and Addenda of the ASME B&PV Code, Section XI, as approved by the NRC in 10 CFR 50.55a(b)(2), for the fifth interval.

Pursuant to 10 CFR 50.55a(b)(2), references to Section XI refer to Section XI, Division 1, of the ASME Boiler and Pressure Vessel Code, and include the 1970 Edition through the 1976 Winter Addenda, and the 1977 Edition through the 2007 Edition with the 2008 Addenda, subject to the following conditions.

Pursuant to 10 CFR 50.55a(g)(4), “Throughout the service life of a boiling or pressurized water-cooled nuclear power facility, components (including supports) which are classified as ASME Code Class 1, Class 2, and Class 3 must meet the requirements, except design and access provisions and preservice examination requirements, set forth in Section XI of editions and addenda of the ASME B&PV Code (or ASME OM Code for snubber examination and testing) that become effective subsequent to editions specified in paragraphs (g)(2) and (g)(3) of this section and that are incorporated by reference in paragraph (b) of this section, to the extent practical within the limitations of design, geometry and materials of construction of the components.”

According to the 10 CFR 50.55a(g)(4)(ii), “Inservice examination of components and system pressure tests conducted during successive 120-month inspection intervals must comply with the requirements of the latest edition and addenda of the Code incorporated by reference in paragraph (b) of this section 12 months before the start of the 120-month inspection interval (or the optional ASME Code cases listed in NRC Regulatory Guide 1.147, Revision 16, when using Section XI; or Regulatory Guide 1.192 when using the OM Code, that are incorporated by reference in paragraph (b) of this section), subject to the conditions listed in paragraph (b) of this section. However, a licensee whose inservice inspection interval commences during the 12 through 18-month period after July 21, 2011 may delay the update of their Appendix VIII program by up to 18 months after July 21, 2011.”

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3. Reason for Request

Entergy proposes an alternative to the requirements of 10 CFR 50.55a(b)(2), 10 CFR 50.55a(g)(4), and 10 CFR 50.55a(g)(4)(ii); specifically, to update the PNPS ISI program to the 2007 Edition with the 2008 Addenda while maintaining and performing ISI related activities such as repair/replacements (R&R), pressure testing (PT), and non-destructive examination (NDE) to the current ASME Section XI 2001 Edition through the 2003 Addenda requirements.

4. Proposed Alternative and Basis for Use

Proposed Alternative

Pursuant to 10 CFR 50.55a(a)(3)(i), Entergy requests authorization to maintain the current use of 2001 Edition through the 2003 Addenda for the performance of R&R, PT, and NDE subject to the conditions contained in 10 CFR 55.55a. In implementing this proposal, Entergy will continue to comply with all NRC conditions, limitations, and restrictions as specified in 10 CFR 50.55a for 2001 Edition with 2003 Addenda of ASME Section XI Code. Code Cases will also be adopted per RG 1.147 for those cases applicable to the 2001 Edition through the 2003 Addenda. However, this request does not apply to the ISI examinations and tests at PNPS.

In accordance with 10 CFR 50.55a(g)(4)(ii), the Code of Record for the ISI Program will be the 2007 Edition with 2008 Addenda with the selection, planning, and scheduling of ISI examinations and tests as defined in IWB-, IWC-, IWD-, IWE-, and IWF-2500 or NRC approved ISI alternatives being performed accordingly.

Entergy has proposed specific details in Table 1 regarding the use of or reference to "Articles" (e.g. IWA-4000, IWA-5000) from every "Subsection" (e.g. IWA, IWB, etc.) of the 2001 Edition with 2003 Addenda for the performance of R&R, PT, and NDE activities and the 2007 Edition through 2008 Addenda for the ISI Program selection, planning, and scheduling of ISI examinations and tests.

Basis for Use

On July 1, 2015, the PNPS ISI Program will be updated to the fifth ten year interval in accordance with 10 CFR 50.55a(g)(4)(ii). While the ISI related activities such as R&R, PT, and NDE would normally be included as part of the update to the 2007 Edition and 2008 Addenda of ASME Section XI, the proposed alternative is to maintain the ISI related activities in compliance with ASME Section XI 2001 Edition through the 2003 Addenda, while conforming to all conditions of 10 CFR 50.55a.

Entergy has standardized the performance of ISI related activities such as R&R, PT, and NDE across its entire nuclear fleet to the ASME Section XI 2001 Edition through the 2003 Addenda. While ISI Program plans are controlled on a site-by-site basis, the R&R, PT, and NDE programs are administered under a corporate set of procedures. With Entergy being required to update the PNPS ISI, R&R, PT, and NDE program activities to the 2007 Edition with the 2008 Addenda in accordance with 10 CFR 50.55a(b), this will require establishing and maintaining two different programs; one for PNPS and one for the other ten (10) Entergy nuclear stations.

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Although the 2007 Edition made changes to Section XI, these changes were not necessary to ensure an acceptable level of quality and safety. Nor were these changes made to address a deficiency in the Code that adversely impacted safety. In the latest revision to 10 CFR 50.55a, the NRC did not mandate that other plants that have adopted an earlier edition and addenda follow any of the new paragraphs in the 2007 Edition.

Pursuant to 10 CFR 50.55a(b)(3)(v), this relief request is not applicable to the snubber program because PNPS will use the ASME Operation and Maintenance Code for snubber inservice inspection and testing.

Entergy believes that maintaining the PNPS ISI related activities to the 2001 Edition through the 2003 Addenda standard with the other Entergy plants will improve the level of quality and safety at PNPS. This allows leveraging the knowledge from the ten other nuclear stations of ISI related activities to provide PNPS with a wealth of experience to draw on as well as minimizing the time spent on developing and maintaining procedures that are different from the rest of the Entergy fleet. Therefore, this proposed alternative provides an acceptable level of quality and safety, commensurate with the provisions of 10 CFR 50.55a(a)(3)(i).

5. Duration of Proposed Alternative

The fifth interval of ISI at PNPS begins on July 1, 2015 and ends on June 30, 2025. However, with eight nuclear operating stations starting new 10-year inservice inspection intervals between June 2015 and December 2017, Entergy proposes to maintain standardization of the corporate administered R&R, PT, and NDE programs across its entire nuclear fleet at the 2001 Edition through 2003 Addenda through December 2017. Prior to December 31, 2017, Entergy will request NRC approval to update these ASME Section XI activities to the latest ASME code edition incorporated by reference in 10 CFR 50.55a for the entire fleet. Therefore, the proposed duration of this alternative is from July 1, 2015 through December 31, 2017.

6. Precedents

This request is similar in nature to the following requests for alternatives, in that, Entergy nuclear stations were granted use of 2001 Edition through 2003 Addenda for ISI related activities such as R&R, PT, and NDE with the Code of Record for the ISI Program being a different Code edition.

- NRC Safety Evaluation Letter, "Vermont Yankee Nuclear Power Station – Relief Request ISI-05, Fifth 10-Year Inservice Inspection (ISI) Interval – Maintaining Certain ISI Related Activities On Current 2001 Edition through 2003 Addenda of ASME Code Section XI (TAC NO. MF1194)", dated August 22, 2013 [ADAMS Accession No. ML13228A197]
- "Relief Request ISI-2008-1, Use of Later Edition and Addenda of ASME Code, Section XI for Repair and Replacement, Pressure Testing, and Non-Destructive Testing Activities -Pilgrim Nuclear Power Station (TAC NO. ME0238)," dated April 30, 2009 [ADAMS Accession No. ML091130456]

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TABLE 1 – PROPOSED ASME SECTION XI CODE OF RECORD FOR PNPS

ASME Section XI Code Provision		ASME Section XI Code Edition/Addenda ¹		
Sub-section	Article	2001 Edition/ No Addenda	2001 Edition through 2003 Addenda	2007 Edition and 2008 Addenda
IWA-General Requirements	IWA-1000		X	
	IWA-2000		X ²	X ²
	IWA-3000		X	
	IWA-4000		X ³	
	IWA-5000		X	
	IWA-6000		X	
	IWA-9000		X	
IWB-Req'ts for Class 1 Components	IWB-1000			X ⁴
	IWB-2000			X ⁴
	IWB-3000		X ⁶	
	IWB-5000		X	
IWC-Req'ts for Class 2 Components	IWC-1000			X ⁴
	IWC-2000			X ⁴
	IWC-3000		X	
	IWC-5000		X	
IWD-Req'ts for Class 3 Components	IWD-1000			X ⁴
	IWD-2000			X ⁴
	IWD-3000		X	
	IWD-5000		X	
IWE-Req'ts for Class MC Components	IWE-1000			X ⁴
	IWE-2000			X ⁴
	IWE-3000		X	
	IWE-5000		X	
IWF-Req'ts for Class 1, 2, 3, and MC Supports	IWF-1000			X ⁴
	IWF-2000			X ⁴
	IWF-3000		X	
	IWF-5000		X ⁷	
IWL-Req'ts for Class CC Components	IWL-1000			X ⁵
	IWL-2000			X ⁵
	IWL-3000			X ⁵
	IWL-5000			X ⁵
Mandatory Appendices	I		X	
	II		X	
	III		X	
	IV		X	
	V		X	
	VI		X	
	VII		X	
	VIII	X		
	IX		X	
	X			

See Next Page for Table 1 Notes

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Table 1 Notes:

- (1) Entergy will also comply with all NRC conditions, limitations, and restrictions specified in 10 CFR 50.55a.
- (2) PNPS is proposing to use IWA-2100, 2200, and 2300 from the 2001 Edition through 2003 Addenda for requirements applicable to authorized inspection, examination methods, and qualification of NDE personnel. However, PNPS will use the 2007 Edition and 2008 Addenda when using IWA-2400, 2500, 2600 for the selection, planning, and scheduling of ISI examinations and tests.
- (3) As exceptions to IWA-4000 of the 2001 Edition/2003 Addenda, PNPS will comply with the alternatives listed below to comply with NRC restrictions in 10 CFR 50.55a:
 - The NDE provision in IWA-4540(a)(2) of the 2001 Edition and 2002 Addenda will be applied when performing system leakage tests after repair/replacement activities involving welding or brazing to comply with 10 CFR 50.55a(b)(2)(xx)(B).
 - Pressure testing of mechanical joints of Class 1, 2, and 3 items will be performed in accordance with IWA-4540(c) of the 1998 Edition/No Addenda to comply with 10 CFR 50.55a(b)(2)(xxvi).
- (4) The selection, planning, and scheduling of ISI examinations/tests will comply with these ASME Section XI articles (e.g. IWB-1000 and 2000) from the 2007 Edition and 2008 Addenda or applicable NRC approved alternatives that are specified in the PNPS ISI Program Plan.
- (5) PNPS does not have a Class CC Containment. Therefore, the requirements of Subsection "IWL" do not apply for this site.
- (6) Entergy will not apply the IWB-3514 acceptance standards of the 2001 Edition through 2003 Addenda to planar surface flaws in UNS N06600, N06682, or W86182 materials or austenitic stainless steels which are subject to stress corrosion cracking. Therefore, if a flaw is found in an ASME Class 1 austenitic stainless steel weld, Entergy would either evaluate the acceptability of the flaw in accordance with IWB-3600 or correct the flawed condition by performing an approved ASME Section XI repair/replacement activity.
- (7) As required by 10 CFR 50.55a(b)(3)(v), snubber pre-service and in-service inspection and testing requirements are implemented in subsection ISTD of the ASME Operation and Maintenance (OM) Code, 2004 Edition through 2006 Addenda in its entirety.