



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 25, 2015

Vice President, Operations
Entergy Nuclear Operations, Inc.
Palisades Nuclear Plant
27780 Blue Star Memorial Highway
Covert, MI 49043-9530

SUBJECT: PALISADES NUCLEAR PLANT – RELIEF REQUEST NUMBER 5-1,
PROPOSED ALTERNATIVE, EXTEND THE CURRENT ASME CODE OF
RECORD INTO THE FIFTH 10-YEAR ISI INTERVAL FOR ISI RELATED
ACTIVITIES (CAC NO. MF6162)

Dear Sir:

By letter dated April 29, 2015 (Agencywide Documents and Access Management System (ADAMS) Accession No. ML15119A223), Entergy Nuclear Operations, Inc. (Entergy, the licensee) submitted a request to the U.S. Nuclear Regulatory Commission (NRC) for the use of an alternative to certain American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) requirements at Palisades Nuclear Plant (PNP). The licensee proposes to use the current 2001 edition through the 2003 addenda in combination with the 2007 edition through the 2008 addenda for certain inservice inspection (ISI) activities from December 13, 2015, to December 31, 2017, at the PNP.

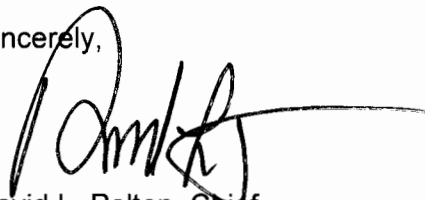
Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(z)(1), the licensee requested to use the proposed alternative in Relief Request No. RR 5-1 on the basis that the alternative provides an acceptable level of quality and safety.

The NRC staff has reviewed the subject request and concludes, as set forth in the enclosed safety evaluation, that Entergy has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(z)(1). Therefore, the NRC staff authorizes the use of Relief Request No. RR 5-1 for the PNP from December 13, 2015, to December 31, 2017.

All other requirements of the ASME Code, Section XI, for which relief has not been specifically requested and authorized by NRC staff remain applicable, including a third party review by the Authorized Nuclear Inservice Inspector.

If you have any questions, please contact the Project Manager, Jennivine Rankin at 301-415-1530 or via e-mail at Jennivine.Rankin@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Pelton', with a long horizontal flourish extending to the right.

David L. Pelton, Chief
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-255

Enclosure:
Safety Evaluation for the Fifth 10-Year
Inservice Inspection Interval Relief
Request No. 5-1

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELIEF REQUEST NUMBER RR 5-1

USE OF ALTERNATIVE EDITION AND ADDENDA OF THE ASME CODE

FIFTH 10-YEAR INSERVICE INSPECTION INTERVAL

PALISADES NUCLEAR PLANT

ENTERGY NUCLEAR OPERATIONS, INC.

DOCKET NO. 50-255

1.0 INTRODUCTION

By letter dated April 29, 2015 (Agencywide Documents and Access Management System (ADAMS) Accession No. ML15119A223), Entergy Nuclear Operations, Inc. (Entergy, the licensee) submitted a request to the U.S. Nuclear Regulatory Commission (NRC) for the use of an alternative to certain American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) requirements at Palisades Nuclear Plant (PNP). The licensee proposes to use the current 2001 edition through the 2003 addenda in combination with the 2007 edition through the 2008 addenda for certain inservice inspection (ISI) activities from December 13, 2015, to December 31, 2017 at the PNP.

Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(z)(1), the licensee requested to use the proposed alternative in Relief Request No. RR 5-1 on the basis that the alternative provides an acceptable level of quality and safety.

2.0 REGULATORY EVALUATION

The regulations in 10 CFR 50.55a(g)(4) states, in part, "[t]hroughout 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 BPV Code (or ASME OM [Operation and Maintenance] Code for snubber examination and testing) that become effective subsequent to editions specified in paragraphs (g)(2) and (3) of this section and that are incorporated by reference in paragraph (a)(1)(ii) or (iv) for snubber examination and testing of this section [10 CFR 50.55a], to the extent practical within the limitations of design, geometry and materials of construction of the components."

Enclosure

The regulations in 10 CFR 50.55a(g)(4)(ii) require that: "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 (a) of this section [10 CFR 50.55a] 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 17, when using Section XI; or Regulatory Guide 1.192, Revision 1 when using the OM Code, that are incorporated by reference in paragraph (a)(3)(ii) and (iii) 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."

Paragraph 10 CFR 50.55a(b)(2) states, in part, that 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.

Paragraph 10 CFR 50.55a(z)(1) states, in part, that proposed alternatives to the requirements of 10 CFR 50.55a(g) may be used when authorized by the NRC if the applicant demonstrates that (i) the proposed alternatives would provide an acceptable level of quality and safety.

Based on the above, and subject to the following technical evaluation, the NRC staff finds that regulatory authority exists for the licensee to request and the NRC staff to authorize the alternative requested by the licensee.

3.0 TECHNICAL EVALUATION

3.1 Licensee's Request for Alternative

3.1.1 Components Affected

The affected components are ASME Code Class 1, 2, 3, and MC components and component supports. The licensee is required to update the 10-year ISI Program to the latest edition and addenda of the ASME Code, Section XI, as specified in 10 CFR 50.55a(a)(1)(ii), for the fifth 10-year ISI interval.

3.1.2 Proposed Alternative

As stated in the licensee's request dated April 29, 2015, the licensee requested the following alternative:

[A]uthorization to maintain the current use of ASME BPV Code, Section XI, 2001 Edition through the 2003 Addenda for the performance of R/R [repair and replacement], PT [pressure testing], and NDE [nondestructive examinations] subject to the conditions contained in 10 CFR 50.55a. In implementing this proposal, ENO 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 BPV Section XI Code. Code Cases will also be adopted per RG 1.147, *Inservice Inspection Code Cases Acceptability, ASME Section XI, Division 1*, for those cases applicable to the 2001 Edition through the 2003 Addenda.

Additionally, PNP requests that [three relief requests previously] authorized for use during the fourth interval in accordance with 10 CFR 50.55a(a)(3)(i) or (ii), which is now 10 CFR 50.55a(z)(1) or (2) [respectively] be extended for use per this request into the fifth interval for the time duration coinciding with the planned use of the 2001 Edition through the 2003 Addenda of Section XI.

In accordance with 10 CFR 50.55a(g)(4)(ii), the code of record for the ISI program will be the ASME BPV Code, Section XI, 2007 Edition with 2008 Addenda with the selection, planning and scheduling of ISI examinations and tests as defined in IWB-, IWC-, IWD- and IWF-2500 or NRC authorized ISI alternatives being performed accordingly.

ENO has proposed specific details [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.

This request does not affect the Palisades Nuclear Plant (PNP) Containment ISI program for Subsection IWE/IWL, because the Containment ISI program at the Palisades Nuclear Plant is not required to be updated until after December 31, 2017, which is the expiration date for this request.

3.1.3 Reason for the Request

As stated in the licensee's request dated April 29, 2015, the licensee provided the following reason for the request for an alternative:

With eight other Entergy nuclear operating plants starting new 10-year ISI inspection intervals between June 2015 and December 2017, Entergy proposes with this alternative 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. This will be done so that these ISI-related activities can remain standardized, implemented and administered consistently at all of the Entergy plants so that all ISI related activities can be updated effectively at the same time.

3.1.4 Basis for Use

As stated in the licensee's request dated April 29, 2015, the licensee provided the following basis for using the proposed alternative:

Entergy has standardized the performance of ISI related activities such as R/R, PT, and NDE across its entire nuclear fleet to the ASME BPV Code, 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 set of corporate procedures. With Entergy being required to update the PNP, ISI, R/R, PT and NDE programs to the 2007 Edition with the 2008 Addenda in accordance with 10 CFR 50.55a(a)(1)(ii), this would require establishing and maintaining two different programs; one for PNP and one for the other nine (9) Entergy nuclear plants.

Although the 2007 Edition through the 2008 Addenda 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 ASME BPV 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 through the 2008 Addenda.

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

Entergy's existing processes will ensure that the use of dual Code Editions/Addenda at PNP are appropriately managed, tracked, and controlled. Maintaining the PNP 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 PNP. This allows leveraging the knowledge from the eight other Entergy nuclear plants of ISI related activities to provide PNP 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(z)(1).

3.1.5 Duration of Proposed Alternative

The proposed alternative will begin on December 13, 2015, and end on December 31, 2017, and is planned to include only the refueling outage scheduled for the spring of 2017.

3.2 NRC Staff Evaluation

The PNP is scheduled to begin the fifth 10-year ISI program on December 13, 2015, and as per 10 CFR 50.55a(g)(4)(ii) will adopt the 2007 Edition of ASME Code with the 2008 Addenda. The licensee is proposing to delay implementing some sections of the 2007 Edition with the 2008 Addenda, and continue using sections of the 2001 Edition of ASME Code Section XI until December 31, 2017. This proposed alternative to update the PNP ISI program while maintaining and performing certain ISI related activities such as R/R, PT, and NDE to the current, fourth 10-year ISI interval, is requested pursuant to 10 CFR 50.55a(z)(1) on the basis that the alternative provides an acceptable level of quality and safety.

The licensee has proposed this alternative to allow them to coordinate the implementation of the new ISI program requirements across their fleet of nuclear power plants. The phased and synchronized adoption of the 2007 Edition with 2008 Addenda would simplify the implementation of the NDE programs across the fleet and prevent confusion.

The 2001 Editions of code, with and without the 2003 Addenda, and the 2007 Edition of code with the 2008 Addenda have been reviewed and approved, with conditions, by the NRC staff. Many of the changes to the 2007 Edition of code when compared to the 2001 Edition, especially the changes to ASME Code Section XI Appendix VIII, are covered in the conditions on the 2001 Edition of ASME Code Section XI found in 10 CFR 50.55a.

The annotated table provided as an attachment to the licensee's request dated April 29, 2015, shows which sections of the 2001 Edition, the 2001 Edition with the 2003 Addenda, and the 2007 Edition with the 2008 Addenda will be used. The NRC staff finds that Relief Request RR 5-1 as documented in the licensee's letter dated April 29, 2015, provides necessary information as to which article in which edition and addenda of the ASME Code that will be applicable to the ASME Code Class 1, 2, 3 and MC components and component supports. The staff determined that approval of later editions and addenda of the ASME Section XI Code in 10 CFR 50.55a does not make earlier editions and addenda of the ASME Code unsafe because the staff has also approved the earlier edition and addenda with conditions in 10 CFR 50.55a. The NRC staff finds that the proposed alternative is acceptable because the licensee will follow the requirements in the 2001 Edition through the 2003 Addenda and the 2007 Edition through the 2008 Addenda of the ASME Code to maintain the plant safety.

4.0 CONCLUSION

As set forth above, the NRC staff has determined that Relief Request No. RR 5-1 as documented in the licensee's letter dated April 29, 2015, provides an acceptable level of quality and safety. Accordingly, the staff concludes that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(z)(1). Therefore, the NRC staff authorizes Relief Request No. RR 5-1 for the Palisades Nuclear Plant from December 13, 2015, to December 31, 2017.

All other requirements of 10 CFR 50.55a and ASME Code, Section XI, for which relief was not specifically requested and approved remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector.

Principal Contributor: S. Cumblidge

Date: November 25, 2015

If you have any questions, please contact the Project Manager, Jennivine Rankin at 301-415-1530 or via e-mail at Jennivine.Rankin@nrc.gov.

Sincerely,

/RA/

David L. Pelton, Chief
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-255

Enclosure:
Safety Evaluation for the Fifth 10-Year
Inservice Inspection Interval Relief
Request No. 5-1

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