



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

November 2, 2017

Vice President, Operations
Entergy Operations, Inc.
River Bend Station
5485 US Highway 61N
St. Francisville, LA 70775

SUBJECT: RIVER BEND STATION, UNIT 1 – RELIEF TO USE LATER EDITION OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS BOILER AND PRESSURE VESSEL CODE, SECTION XI (EPID NO. L-2017-LLR-0114)

Dear Sir or Madam:

By letter dated September 27, 2017, Entergy Operations, Inc. (Entergy) submitted a request to the U.S. Nuclear Regulatory Commission (NRC) to use a later edition and addenda of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, for Inservice Inspection (ISI) activities at River Bend Station, Unit 1 (RBS), in accordance with Title 10 to the *Code of Federal Regulations* (10 CFR) paragraph 50.55a(g)(4)(iv) subject to the limitations and modifications listed in 10 CFR 50.55a(b).

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(g)(4)(iv). Therefore, the NRC staff authorizes the use of the 2007 Edition through the 2008 Addenda of the ASME Code, Section XI, and ASME Code Class 2, pump casing welds, for RBS for the remainder of the third 10-year ISI interval, which ends on November 30, 2017.

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

If you have any questions, please contact the Project Manager, Lisa Regner, at 301-415-1906 or via e-mail at Lisa.Regner@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "R. J. Pascarelli".

Robert J. Pascarelli, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-458

Enclosure:
Safety Evaluation

cc w/encl: Distribution via Listserv



UNITED STATES
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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
REQUEST TO USE LATER EDITION OF THE AMERICAN SOCIETY OF
MECHANICAL ENGINEERS BOILER AND PRESSURE VESSEL CODE, SECTION XI

ENTERGY OPERATIONS, INC.

RIVER BEND STATION, UNIT 1

DOCKET NO. 50-458

1.0 INTRODUCTION

By letter dated September 27, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17275B088), Entergy Operations, Inc. (Entergy, the licensee) requested to use a later edition and addenda of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI for inservice examinations of certain pump casing welds at River Bend Station, Unit 1 (RBS).

Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) paragraph 50.55a(g)(4)(iv), "Applicable ISI [Inservice Inspection] Code: Use of subsequent Code editions and addenda," the licensee requested to use the 2007 Edition through the 2008 Addenda of the ASME Code, Section XI, subject to the conditions listed in 10 CFR 50.55a(b), "Use and conditions on the use of standards," instead of the 2001 Edition through the 2003 Addenda of ASME Code, Section XI (the current Code of Record for RBS) for Examination Category C-G, Item Number C6.10, for inservice examinations of certain pump casing welds during the third 10-year ISI interval at RBS.

2.0 REGULATORY EVALUATION

In the letter dated September 27, 2017, the licensee proposed the use of a later edition of the ASME Code in accordance with 10 CFR 50.55a(g)(4)(iv). Section 50.55a(g)(4)(iv) of 10 CFR states:

Inservice examination of components and system pressure tests may meet the requirements set forth in subsequent editions and addenda, that are incorporated by reference in [10 CFR 50.55a(a)], subject to the conditions listed in [10 CFR 50.55a(b)], and subject to Commission approval. Portions of editions or addenda may be used, provided that all related requirements of the respective editions or addenda are met.

Enclosure

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

3.0 TECHNICAL EVALUATION

3.1 ASME Code Components Affected

The ASME Code components affected by the licensee's request are Examination Category C-G, Item Number C6.10, ASME Code Class 2, pump casing welds.

3.2 Applicable ASME Code Edition and Addenda Requirements

The ASME Code of Record for the current interval at RBS for ASME Code Class 1, 2 and 3 components is the ASME Code, Section XI, 2001 Edition through the 2003 Addenda. The ASME Code, Section XI, 2001 Edition through the 2003 Addenda requires surface examinations of welds in each piping run examined for Examination Category C-G. The current ISI interval at RBS began on May 31, 2008 and is scheduled to end on November 30, 2017.

3.3 Licensee Proposed Alternative

In lieu of the current Code of Record, ASME Code, Section XI, 2001 Edition through the 2003 Addenda, for Examination Category C-G, Item Number C6.10 for its pump casing welds, Entergy proposed to use the 2007 Edition through the 2008 Addenda. The licensee noted that Examination Category C-G was deleted from the 2007 Edition through the 2008 Addenda of the ASME Code because the required surface examinations were deemed unnecessary. Additionally, Entergy noted that the 2007 Edition through the 2008 Addenda of the ASME Code, Section XI were incorporated into the regulations by reference in 10 CFR 50.55a(a)(1)(ii). The licensee further noted that 10 CFR 50.55a(b) does not have specific conditions or provisions that refer to Examination Category C-G.

3.2 NRC Staff Evaluation

Paragraph 50.55a(g)(4)(iv) of 10 CFR contains four criteria, which must be met prior to use of a subsequent edition of the ASME Code. These criteria are:

1. The proposed edition and addenda of the ASME Code is incorporated by reference in 10 CFR 50.55a(a).
2. The proposed edition and addenda of the ASME Code is subject to the conditions listed in 10 CFR 50.55a(b).
3. The licensee shall request Commission approval to use the proposed edition and addenda of the ASME Code.
4. If only portions of editions or addenda are to be used all related requirements of the respective editions or addenda must be met.

The NRC staff evaluated Criterion 1 by examining 10 CFR 50.55a(a)(1)(ii) and determining that it incorporates by reference the ASME Code, Section XI from the 1970 Edition through the 1976 Winter Addenda and the 1977 Edition through the 2007 Edition with the 2008 Addenda,

which was proposed by the licensee. Therefore, the NRC staff concludes that Criterion 1 is satisfied.

The NRC staff evaluated Criterion 2 by examining 10 CFR 50.55a(b) and determining that it does not set conditions on Examination Category C-G of the 2007 Edition through the 2008 Addenda of the ASME Code, Section XI. Therefore, the NRC staff concludes that Criterion 2 is satisfied.

The licensee's letter dated September 27, 2017, is a request to the Commission for approval to use the 2007 Edition through the 2008 Addenda of the ASME Code, Section XI, therefore, the NRC staff determines that Criterion 3 is satisfied.

The NRC staff evaluated Criterion 4 by reviewing the licensees listing of all related requirements in Examination Category C-G, to the 2007 Edition through the 2008 Addenda of the ASME Code, Section XI in its submittal. The licensee determined that there are no related requirements that need to be implemented since the 2008 Addenda deletes the Examination Category C-G from the ASME Code. The NRC staff determined that the licensee does not need to meet related requirements since the Category C-G requirements no longer exist, therefore, the NRC staff finds that Criterion 4 has been satisfied.

Based on the above, the NRC staff concludes that the four criteria contained in 10 CFR 50.55a(g)(4)(iv) are satisfied and that the licensee's request to use the 2007 Edition through the 2008 Addenda of the ASME Code, Section XI for its Code Class 2 pumps casing welds is acceptable.

4.0 CONCLUSION

As set forth above, the NRC staff determines that the use of a subsequent edition of ASME Code, Section XI requirements is acceptable. Accordingly, the NRC staff concludes that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(g)(4)(iv). Therefore, the NRC staff authorizes the use of the 2007 Edition through the 2008 Addenda of the ASME Code, Section XI for RBS, ASME Code Class 2, pump casing welds, for the remainder of the RBS third 10-year ISI interval, which will end on November 30, 2017.

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

Principal Contributor: Roger Kalikian, NRR/DMLR/MPHB

Date: November 2, 2017

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