



Brent Bare
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Serial: RA-23-0127
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10 CFR 50.4
10 CFR 50.36(c)(5)

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

MCGUIRE NUCLEAR STATION, UNIT NO.1
DOCKET NO. 50-369 / RENEWED LICENSE NUMBER NPF-9

**SUBJECT: 10 CFR 50.55a(g)(4)(iv) Request to Use a Subsequent Edition of ASME
Section XI referenced in 10 CFR 50.55a(a) for ISI Code of Record**

Duke Energy Carolinas, LLC (hereafter referred to as Duke Energy), requests NRC approval to use a later edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code, Section XI, for the McGuire Nuclear Station, Units 1 and 2, (MNS) Inservice Inspection (ISI) Program.

The ASME BPV Section XI ISI Program at MNS is currently being updated for its next (Fifth) 120-month interval. Per 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 ASME Code incorporated by reference in 10 CFR 50.55a(a) 18 months before the start of the 120-month inspection interval.

The Enclosure to this letter provides details of the proposed request, which is being submitted in accordance with NRC Regulatory Issue Summary 2004-12, "Clarification on Use of Later Editions and Addenda to the ASME OM Code and Section XI," dated July 28, 2004. Duke Energy requests NRC approval of this request by September 28, 2023.

This submittal contains no new regulatory commitments. If you have any questions, please contact Ryan Treadway, Director – Nuclear Fleet Licensing, at 980-373-5873.

Sincerely,

A handwritten signature in black ink, appearing to read "Brent Bare", written over a white background.

Brent Bare
Plant Manager
McGuire Nuclear Station

Enclosure:

- 10 CFR 50.55a(g)(4)(iv) Request to Use a Subsequent Edition of ASME Section XI referenced in 10 CFR 50.55a(a) for ISI Code of Record

cc: (with enclosure)

J. Klos, NRC Project Manager, NRR

L. Dudes, NRC Regional Administrator, Region II

C. Safouri, NRC Senior Resident Inspector

RA-23-0127
Enclosure

Enclosure

**10 CFR 50.55a(g)(4)(iv) Request to Use a Subsequent Edition of ASME Section XI
referenced in 10 CFR 50.55a(a) for ISI Code of Record**

1.0 **ASME CODE COMPONENTS AFFECTED:**

All Class 1, 2, and 3 items located in the ASME Section XI boundaries.

2.0 **REQUESTED DATE FOR APPROVAL:**

Approval requested by October 1, 2023.

3.0 **APPLICABLE CODE EDITION AND ADDENDA:**

Table 1:

| Plant/Units | ISI Interval | ASME Section XI Code Edition and Addenda | Interval Start Date | Interval End Date ¹ |
|---------------------------------|--------------|------------------------------------------|---------------------|--------------------------------|
| McGuire Nuclear Station, Unit 1 | Fifth | 2017 Edition | 12/01/2021 | 11/30/2031 |
| McGuire Nuclear Station, Unit 2 | Fifth | 2017 Edition | 03/01/2024 | 02/28/2034 |

Note 1: Date listed is the currently planned interval end date. In accordance with IWA-2430(c)(1), this end date may be extended or shortened as necessary.

4.0 **PROPOSED SUBSEQUENT CODE EDITION AND ADDENDA:**

Duke Energy Carolinas, LLC (hereafter referred to as Duke Energy), requests NRC approval to use a later edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code, Section XI, for the McGuire Nuclear Station, Units 1 and 2, (MNS) Inservice Inspection (ISI) Program as described in Enclosure 1.

The ASME BPV Section XI ISI Program at MNS is currently being updated for its next (Fifth) 120-month interval. Per 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 ASME Code incorporated by reference in 10 CFR 50.55a(a) 18 months before the start of the 120-month inspection interval.

The MNS Fifth ISI Interval started on December 1, 2021 for Unit 1 and will start on March 1, 2024 for Unit 2. Currently, MNS Unit 1 has authorization to implement the requirements of the Section XI, 2007 Edition with the 2008 Addenda, for the First Period of the Fifth ISI Interval per Relief Request RA-20-0031 (ADAMS ML ML20023A272). After the end of the Unit 1 First Period, the Unit 1 Code of Record is to be updated in conjunction with the Unit 2 Interval update, based on the Unit 2 Fifth Interval start date of March 1, 2024. This Unit 1 Relief Request was approved by the NRC on August 21, 2020 (ADAMS ML20230A205).

Per 10 CFR 50.55a(g)(4)(ii), the next MNS Code of Record would be the 2017 Edition based on the Code of Record lock date of September 1, 2022 (using 18 months prior to the March 1, 2024 Interval date). Effective on November 28, 2022, the 2019 Edition was endorsed by the NRC

through reference in 10 CFR 50.55a(a). In accordance with 10 CFR 50.55a(g)(4)(iv), and using the guidance of RIS 2004-12 (Reference 1), MNS requests to use the 2019 Edition of the ASME BPV Section XI Code, in full, for the ISI Program Code of Record implemented during the Fifth ISI Interval updates for Units 1 and 2, as discussed above.

5.0 RELATED REQUIREMENTS:

10 CFR 50.55a(g)(4)(iv) 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 paragraph (a) of this section, subject to the conditions listed in paragraph (b) of this section, 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.”

Duke is requesting to use the 2019 Edition of the ASME Section XI code in its entirety.

6.0 DURATION OF PROPOSED ALTERNATIVE:

Approval is requested for the duration of the fifth inservice inspection intervals listed in Table 1.

7.0 PRECEDENTS:

1. Letter from V. Sreenivas (U.S. Nuclear Regulatory Commission) to C. Domingos (Northern States Power Company – Minnesota) “Monticello Nuclear Generating Plant – Request RR-003 to Use Later Edition of ASME Section XI Code for ISI Code of Record (EPID L-2023-LLR-0005),” dated April 11, 2023.

8.0 REFERENCES:

1. NRC Regulatory Issue Summary 2004-12, “Clarification on Use of Later Editions and Addenda to the ASME OM Code and Section XI,” dated July 28, 2004.
2. Federal Register, 87 FR 65148, dated October 27, 2022.