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October 4, 2021

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

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

SUBJECT: Response to Request for Additional Information for Request to Use Provisions of a Later Edition and Addenda of the ASME Boiler and Pressure Vessel Code, Section XI for Repair/Replacement Activities in accordance with 10 CFR 50.55a(g)(4)(iv)

References:

1. Duke Energy Submittal RA-21-0152, "McGuire Nuclear Station, Unit 1 – Request to Use Provisions of a Later Edition and Addenda of the ASME Boiler and Pressure Vessel Code, Section XI for Repair/Replacement Activities in accordance with 10 CFR 50.55a(g)(4)(iv)" (Agencywide Documents Access and Management System [ADAMS] Accession No. ML21182A028), dated July 1, 2021.
2. NRC E-mail to Art Zaremba, "Formal Release of RAIs, 30 day Response, McGuire Relief Request, Ref: Later Edition Addenda ASME Code, Section XI, 50.55a(g)(4)(iv)" (ADAMS Accession No. ML21252A053), dated September 8, 2021.

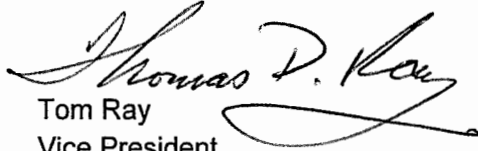
Ladies and Gentlemen,

By letter dated July 1, 2021 (Reference 1) Duke Energy Carolinas, LLC (Duke Energy) requested U.S. Nuclear Regulatory Commission (NRC) approval to utilize provisions of a later edition of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section XI (ASME Code) for McGuire Nuclear Station (MNS), Unit 1. Specifically, Duke Energy requested approval to use Paragraphs 4550(b), IWA-2318, IWA-5120, IWA-5213, IWA-5241, IWA-5242, IWA-5250, and IWA-4340 of the 2017 Edition of the ASME Code.

By E-mail dated September 8, 2021 (Reference 2) the NRC provided requests for additional information (RAIs) to complete its review. Duke Energy's response to the RAIs are provided in Enclosure 1 to this letter.

If you have any questions concerning this request, please contact Lee Grzeck, Manager – Fleet Licensing, at (980) 373-2062.

Sincerely,

A handwritten signature in black ink that reads "Thomas D. Ray". The signature is fluid and cursive, with a large, sweeping flourish at the end.

Tom Ray
Vice President
McGuire Nuclear Station

Enclosures:

1. Response to Request for Additional Information

cc: L. Dudes, Regional Administrator USNRC Region II
G. A. Hutto, USNRC Senior Resident Inspector – MNS
J. Klos, NRR Project Manager – MNS

Enclosure 1
Duke Energy Carolinas, LLC
McGuire Nuclear Station, Unit 1

Response to Request for Additional Information

By letter dated July 1, 2021 Duke Energy requested NRC approval to utilize provisions of a later edition of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section XI (ASME Code) for McGuire Nuclear Station (MNS), Unit 1. Specifically, Duke Energy requested approval to use Paragraphs 4550(b), IWA-2318, IWA-5120, IWA-5213, IWA-5241, IWA-5242, IWA-5250, and IWA-4340 of the 2017 Edition of the ASME Code.

By E-mail dated September 8, 2021 the NRC provided requests for additional information (RAIs) to complete its review. The NRC RAIs and Duke Energy's response to the RAIs are provided below.

NRC Request for Additional Information (RAI)

By letter dated July 1, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession ML21182A028), Duke Energy Carolinas, LLC (aka, Duke Energy, the licensee) submitted a licensing action containing Enclosures 1, 2, and 3 in accordance with Title 10 of the Code of Federal Regulations (10 CFR) 50.55a(g)(4)(iv).

During the Nuclear Regulatory Commission (NRC) staff's review it was determined that more information was needed to complete the review. A clarification call was held on September 8, 2021 between the NRC staff and the licensee. This request for additional information (RAI) is now released formally with a 30 day calendar response period; thereby, these RAIs are due on October 8, 2021.

In the licensee's submittal the following is stated;

- Enclosure 1. Request to use the 2017 Edition of the ASME Code, Section XI, IWA4540(b) for the pressure testing of the Class 1, 2, and 3 items following the repair/replacement activities in lieu of the 2007 Edition with 2008 Addenda.
- Enclosure 2. Request to use the 2017 Edition of the ASME Code, Section XI, IWA-5120, IWA-5213, IWA-5241, IWA-5242, and IWA-5250 for pressure testing of the Class 1, 2, and 3 systems in lieu of the 2007 Edition with 2008 Addenda.
- Enclosure 3. Request to use the 2017 Edition of the ASME Code, Section XI, IWA-4340 for repair/replacement activities in lieu of the 2007 Edition with 2008 Addenda.

The licensee submitted this request for the duration of the first inspection period of the fifth 10-year inservice inspection (ISI) interval at the McGuire Nuclear Station (McGuire), Unit 1.

To complete its review, the NRC staff requests the following additional information.

RAI 1

The NRC staff notes that Enclosure 3 did not identify the ASME Code Classes affected. Clarify which ASME Code Class (e.g., Class 1, Class 2, and/or Class 3) piping and associated supports will be affected in Enclosure 3.

Duke Energy Response to RAI 1:

The scope of this request is limited to ASME Code Class 2 and Class 3 items per IWA-4340 (Reference 1).

RAI 1 Reference

1. ASME Boiler and Pressure Vessel Code, Section XI, 2017 Edition, American Society of Mechanical Engineers, New York.

RAI 2

The NRC staff notes that the regulations in 10 CFR 50.55a(b)(2)(xxvii), "Section XI condition: Removal of insulation," have conditions for use of ASME Code, Section XI, IWA-5241. Clarify whether all conditions in 10 CFR 50.55a(b)(2)(xxvii) will be complied with when using IWA-5241 of the 2017 Edition of the ASME Code, Section XI in Enclosure 2.

Duke Energy Response to RAI 2:

Duke Energy will adhere to all conditions in 10 CFR 50.55a(b)(2)(xxvii) when using IWA-5241 of the 2017 Edition of the ASME Code, Section XI.

RAI 3

Clarify whether Enclosure 2 includes ASME Code, Section XI, IWA-2318 in addition to IWA-5120, IWA-5213, IWA-5241, IWA-5242, and IWA-5250.

Duke Energy Response to RAI 3:

Duke Energy's request includes paragraph IWA-2318 in addition to IWA-5120, IWA-5213, IWA-5241, IWA-5242 and IWA-5250. As specified in the first paragraph of Enclosure 2 (Reference 1), Duke Energy will adhere to the related requirements of IWA-2318 in addition to IWA-5120, IWA-5213, IWA-5241, IWA-5242, and IWA-5250 when using the 2017 Edition of the ASME Code, Section XI.

RAI 3 Reference

1. Duke Energy Submittal RA-21-0152, "McGuire Nuclear Station, Unit 1 – Request to Use Provisions of a Later Edition and Addenda of the ASME Boiler and Pressure Vessel Code, Section XI for Repair/Replacement Activities in accordance with 10 CFR 50.55a(g)(4)(iv)" (ADAMS Accession No. ML21182A028).