

Steve Snider Vice President

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Serial: RA-20-0191 September 21, 2020

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

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2, DOCKET NOS. 50-325, 50-324 CATAWBA NUCLEAR STATION, UNITS 1 AND 2, DOCKET NOS. 50-413, 50-414 MCGUIRE NUCLEAR STATION, UNITS 1 AND 2, DOCKET NOS. 50-369, 50-370 OCONEE NUCLEAR STATION, UNITS 1, 2 AND 3, DOCKET NOS. 50-269, 50-270, 50-287 H.B. ROBINSON STEAM ELECTRIC PLANT, UNIT 2, DOCKET NO. 50-261 SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1, DOCKET NO. 50-400

SUBJECT: Request to use a provision of a later Edition and Addenda of the ASME Boiler and Pressure Vessel Code, Section XI in accordance with 10 CFR 50.55a(g)(4)(iv)

In accordance with 10 CFR 50.55a, "Codes and standards," paragraph (g)(4)(iv), and the guidance provided in NRC Regulatory Issue Summary (RIS) 2004-12, "Clarification on Use of Later Editions and Addenda to the ASME OM Code and Section XI", dated July 28, 2004, Duke Energy Carolinas, LLC and Duke Energy Progress, LLC (hereafter referred to collectively as Duke Energy), requests NRC approval to use specific provisions of a later edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, for Duke Energy Nuclear Fleet. Specifically, Duke Energy requests approval to use the ASME Boiler and Pressure Vessel Code, Section XI, 2017 Edition, Articles IWA-5120, IWA-5213, IWA-5241, IWA-5242, and IWA-5250 for pressure testing of Class 1, Class 2, and Class 3 systems.

Duke Energy requests approval of this request by February 25, 2021. There are no regulatory commitments in this letter.

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If you have any questions concerning this request, please contact Art Zaremba, Director – Fleet Licensing, at (980) 373-2062.

Sincerely,

Steve Snider

Vice President - Nuclear Engineering

Attachment:

Request to Use a Portion of a Later Edition of the ASME B&PV Code, Section XI

cc: L. Dudes, Regional Administrator USNRC Region II

G. Smith, USNRC Senior Resident Inspector - BNP

J. D. Austin, USNRC Senior Resident Inspector - CNS

J. Zeiler, USNRC Senior Resident Inspector – HNP

G. A. Hutto, USNRC Senior Resident Inspector – MNS

J. Nadel, USNRC Senior Resident Inspector - ONS

M. Fannon, USNRC Senior Resident Inspector - RNP

A. Hon, NRR Project Manager

Attachment
Request to Use a Portion of a Later Edition of the ASME B&PV Code, Section XI

Pursuant to 10 CFR 50.55a(g)(4)(iv) and in accordance with the guidance provided in NRC Regulatory Issue Summary (RIS) 2004-12, dated July 28, 2004, Duke Energy Carolinas, LLC and Duke Energy Progress, LLC, requests NRC approval to use specific provisions of a later edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, for Duke Energy Nuclear Fleet. Specifically, Duke Energy requests approval to use the ASME Boiler and Pressure Vessel Code, Section XI, 2017 Edition, Articles IWA-5120, IWA-5213, IWA-5241, IWA-5242, and IWA-5250 for pressure testing of Class 1, Class 2, and Class 3 systems.

1. ASME Code Component(s) Affected:

All pressure-retaining components subject to pressure testing requirements of Examination Category B-P for Class 1, Category C-H for Class 2, and Category D-B for Class 3.

2. Applicable Code Edition and Addenda:

The applicable Edition and Addenda of the ASME Code, Section XI is identified in Table 1.

Table 1

Plant/Unit(s)	ISI Interval	ASME Section XI Code Edition/Addenda	Interval Start Date	Interval End Date ¹
Brunswick Steam Electric Plant Units 1 and 2	Fifth	2007 Edition, Through 2008 Addendum	05/11/2018	05/10/2028
Catawba Nuclear Station Units 1 and 2	Fourth	2007 Edition, Through 2008 Addendum	08/19/2015	12/06/2024 (Unit 1) 02/24/2026 (Unit 2)
H.B. Robinson Steam Electric Plant Unit 2	Fifth	2007 Edition, Through 2008 Addendum	07/21/2012	02/19/2023
McGuire Nuclear Station Units 1 and 2	Fourth	2007 Edition, Through 2008 Addendum	12/01/2011 (Unit 1) 07/15/2014 (Unit 2)	11/30/2021 (Unit 1) 02/29/2024 (Unit 2)
Oconee Nuclear Station Units 1, 2, and 3	Fifth	2007 Edition, Through 2008 Addendum	07/15/2014	07/15/2024
Shearon Harris Nuclear Power Plant Unit 1	Fourth	2007 Edition, Through 2008 Addendum	09/09/2017	09/08/2027

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.

3. Proposed Subsequent Code Edition and Addenda (or Portion):

Duke Energy proposes to utilize portions of the ASME Section XI, 2017 Edition in lieu of the 2007 Edition up to and including the 2008 Addenda. Until the 2017 Edition was published, the ASME Section XI code did not contain requirements for pressure testing pneumatic safety related systems. Additionally, the 2017 edition provides exemptions for periodic system pressure tests, clarification for test condition hold time, and incorporates clarification for systems borated for the purpose of controlling reactivity. The affected ASME Section XI Examination Categories are B-P for Class 1, C-H for Class 2, and D-B for Class 3.

4. 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."

Federal Register, Volume 85, Number 86, dated May 4, 2020 (85 FR 26540), incorporates by reference the 2015 and 2017 Editions of the ASME Code for inservice inspection. Duke Energy will adhere to any conditions that apply to pressure testing.

5. Duration of Proposed Request:

The duration of this approval will continue for the remainder of the current inservice inspection interval's listed in Table 1.

6. 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, 85 FR 26540, dated May 4, 2020