



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

September 15, 2020

Mr. Gerald T. Bischof
Senior Vice President – Nuclear Operations & Fleet Performance
Dominion Nuclear
Innsbrook Technical Center
5000 Dominion Blvd.
Glen Allen, VA 23060-6711

SUBJECT: DOMINION ENERGY FLEET - MILLSTONE POWER STATION UNITS 2 AND 3; NORTH ANNA POWER STATION UNITS 1 AND 2, SURRY POWER STATION UNITS 1 AND 2, AND VIRGIL C. SUMMER STATION UNIT 1 – REQUEST TO USE A PROVISION OF A LATER EDITION OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS BOILER AND PRESSURE VESSEL CODE, SECTION XI (EPID L-2020-LLR-0121)

Dear Bischof:

The U.S. Nuclear Regulatory Commission (NRC) has authorized your request to use a provision of a later edition of American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code, Section XI, for Millstone Power Station, Units 2 and 3 (Millstone); North Anna Power Station (North Anna), Units 1 and 2; Surry Power Station, Units 1 and 2 (Surry); and Virgil C. Summer Station, Unit 1 (Summer), collectively referred to as the Dominion Energy Fleet. This action is in response to your request dated September 3, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20247J616).

Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(g)(4)(iv), Dominion Energy proposed to use subparagraph IWA-4540(b) of the 2017 Edition of the ASME BPV Code, Section XI.

The NRC staff authorizes the use of subparagraph IWA-4540(b) of the 2017 Edition of ASME BPV Code, Section XI, for the Dominion Energy Fleet for the duration of the inservice inspection intervals that started and ends on the dates shown in Table 1 of the enclosed NRC staff safety evaluation.

All other ASME BPV Code, Section XI, requirements which are not modified by the NRC staff's authorization of the licensee's request remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector.

G. Bischof

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Enclosed is the NRC staff's safety evaluation.

Sincerely,

Michael T. Markley, Chief
Plant Licensing Branch 2-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos.: 50-336, 50-423, 50-338,
50-339, 50-280, 50-281,
and 50-395

cc: Listserv



UNITED STATES
NUCLEAR REGULATORY COMMISSION
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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

REQUEST TO USE A PROVISION OF A

LATER EDITION OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

BOILER AND PRESSURE VESSEL CODE

DOMINION ENERGY FLEET

MILLSTONE POWER STATION, UNITS 2 AND 3

NORTH ANNA POWER STATION, UNITS 1 AND 2

SURRY POWER STATION, UNITS 1 AND 2

VIRGIL C. SUMMER STATION, UNIT 1

DOCKET NOS. 50-336, 50-423, 50-338, 50-339, 50-280, 50-281 AND 50-395

1.0 INTRODUCTION

By letter dated September 3, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20247J616), Dominion Energy (the licensee) submitted proposal to use a portion of a later edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code for Millstone Power Station, Units 2 and 3 (Millstone); North Anna Power Station, Units 1 and 2 (North Anna); Surry Power Station, Units 1 and 2 (Surry); and Virgil C. Summer Station, Unit 1 (Summer).

Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(g)(4)(iv), the licensee proposed to use subparagraph IWA-4540(b) of the 2017 Edition of the ASME BPV Code, Section XI.

2.0 REGULATORY EVALUATION

The regulation 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.

The regulations in 10 CFR 50.55(g)(4)(iv) permit the U.S. Nuclear Regulatory Commission (NRC) staff to authorize the use of subsequent ASME BPV Code edition and addenda, Section XI. The licensee proposed to use IWA-4540(b) of the 2017 Edition of the ASME BPV Code, Section XI, and the NRC staff has the regulatory authority to approve the use of this portion of the later edition and addenda of the ASME BPV Code, Section XI.

3.0 TECHNICAL EVALUATION

3.1 The Licensee's Request

3.1.1 ASME Code Requirement

The licensee proposes to use IWA-4540(b) of the 2017 Edition of the ASME BPV Code, Section XI.

3.1.2 Applicable Code Edition and Addenda – Duration of Request

The licensee provided the Code of record, and the duration of the inservice inspection (ISI) intervals in Table 1 below.

Table 1: Plant ISI Intervals and the Start and End Dates

Plant	ISI Interval	ASME Section XI Edition/Addenda	Interval Start	Interval End
Millstone, Unit 2	5	2013 Edition	04/01/2020	03/31/2030
Millstone, Unit 3	4	2013 Edition	02/23/2019	02/22/2029
North Anna, Unit 1	5	2013 Edition	05/01/2019	04/30/2029
North Anna, Unit 2	4	2004 Edition	12/14/2010	12/13/2020
	5	2013 Edition	12/14/2020	12/13/2030
Surry, Unit 1	5	2004 Edition	12/14/2013	10/13/2023
Surry, Unit 2	5	2004 Edition	05/10/2014	05/09/2024
Summer, Unit 1	4	2007 Edition 2008 Addenda	01/01/2014	12/31/2023

The duration of the request is until the end of the ISI intervals presented in Table 1.

3.1.3 Reason for Request

In its letter dated September 3, 2020, the licensee stated:

Pursuant to 10 CFR 50.55a(g)(4)(iv), Dominion Energy requests permission to utilize IWA-4540(b) from the 2017 Edition. This subparagraph outlines items that are exempt from pressure testing after repair/replacement activities.

3.1.4 Licensee's Proposed Request

Pursuant to 10 CFR 50.55a(g)(4)(iv), Dominion Energy requests to utilize IWA-4540(b) from the 2017 ASME BPV Code edition, Section XI.

3.1.5 Basis for Request

The regulation 10 CFR 50.55a(g)(4)(iv) states:

Portions of editions or addenda may be used, provided that all related requirements of the respective editions or addenda are met.

3.1.6 Duration of Proposed Request

The licensee is requesting approval of this request until the end of the ISI intervals presented in Table 1.

3.2 NRC Staff Evaluation

Prior to authorizing the use of a subsequent edition and addenda of the ASME BPV Code, Section XI under 10 CFR 50.55a(g)(4)(iv), the NRC staff must find that (1) the proposed subsequent edition and addenda are incorporated by reference in 10 CFR 50.55a(a); (2) the licensee has identified any conditions listed in 10 CFR 50.55a(b) appropriate to the request and will comply with those conditions; (3) the licensee has requested approval to use the subsequent edition and addenda; and (4) if only portions of edition or addenda are to be used, all related requirements of the respective edition or addenda are met. If these criteria are met, the NRC staff finds the use of the subsequent edition and addenda of the ASME BPV Code, Section XI is acceptable.

In evaluating the first criterion, 10 CFR 50.55a(a) incorporates by reference the ASME BPV Code, Section XI, from the 1970 Edition through the 1976 Winter Addenda, and the 1977 Edition through the 2017 Edition. The licensee proposed to use the IWA-4540(b) of the 2017 Edition of ASME Section XI, which is included in the list of editions and addenda incorporated by reference in the current edition of 10 CFR 50.55a(a). Therefore, the NRC finds that the first criterion has been satisfied.

In evaluating the second criterion, the NRC staff notes that 10 CFR 50.55a(b) contains no conditions relevant to this request. Therefore, the NRC staff finds that the second criterion has been satisfied.

In evaluating the third criterion, the licensee's request dated September 3, 2020, constitutes a request to the Commission for approval to use a subsequent edition of the ASME BPV Code, Section XI. Therefore, the NRC staff finds that the third criterion has been satisfied.

In evaluating the fourth criterion, the NRC staff finds that there are no related requirements relevant to this request. Therefore, the NRC staff finds that the fourth criterion has been satisfied.

Based on the above, the NRC staff finds that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(g)(4)(iv).

5.0 CONCLUSION

As set forth above, NRC staff finds 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 concludes that the use of subparagraph IWA-4540(b) the 2017 Edition of the ASME BPV Code,

Section XI, is acceptable. The NRC staff authorizes the use of subparagraph IWA-4540(b) of the 2017 Edition of the ASME BPV Code, Section XI, at Millstone Power Station, Units 2 and 3; North Anna Power Station, Units 1 and 2; Surry Power Station, Units 1 and 2; and Virgil C. Summer Station, Unit 1 for the ISI intervals shown in Table 1.

All other ASME BPV Code, Section XI, requirements which are not modified by the NRC staff's approval of the licensee's request remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector.

Principal Contributor: V. Thomas, NRR

Date: September 15, 2020

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ADAMS Accession No.: ML20252A007*** via email**

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