



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

August 2, 2023

Mr. R. Keith Brown  
Regulatory Affairs Director  
Southern Nuclear Operating Co., Inc.  
3535 Colonnade Parkway  
Birmingham, AL 35243

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2; JOSEPH M. FARLEY NUCLEAR PLANT UNITS, 1 AND 2; AND VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2 – 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-2023-LRM-0046)

Dear Mr. Brown:

By letter dated April 12, 2023 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML23102A123), Southern Nuclear Operating Company (SNC, the licensee) submitted a request to use a provision of a later edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code, Section XI, at Edwin I. Hatch Nuclear Plant (Hatch), Units 1 and 2; Joseph M. Farley Nuclear Plant (Farley), Units 1 and 2; and Vogtle Electric Generating Plant (Vogtle), Units 1 and 2. Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(g)(4)(iv), the licensee requested approval to use provisions IWA-6211(a) through IWA-6211(e) (Owner's Responsibilities), IWA-6220 (Owner's repair/Replacement Certification Record), IWA-6230 (Owner's Activity Report), and Mandatory Appendix II (Owner's Record and Report) of the 2019 Edition of the ASME BPV Code, Section XI for post-refueling outage reporting requirements.

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the subject request and concludes, as set forth in the enclosed safety evaluation, that SNC has adequately addressed the requirements in 10 CFR 50.55a(a)(1)(ii) and 10 CFR 50.55a(g)(4)(iv). Therefore, NRC staff approves the use of provisions IWA-6211(a) through IWA-6211(e), IWA-6220, IWA-6230, and Mandatory Appendix II of the 2019 Edition of the ASME Code, Section XI at Hatch, Units 1 and 2, Farley, Units 1 and 2, and Vogtle, Units 1 and 2 for the remainder of the current 10-year inservice inspection interval.

The NRC staff notes that this approval does not apply to the use of provisions other than IWA-6211(a) through IWA-6211(e), IWA-6220, IWA-6230, and Mandatory Appendix II of the 2019 Edition of the ASME BPV Code, Section XI. All other requirements of the ASME BPV Code, Section XI, as incorporated by reference in 10 CFR 50.55a, for which relief was not specifically requested and approved remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector.

R.K. Brown

- 2 -

If you have any questions, please contact the Project Manager, Dawnmathews Kalathiveettil, at 301-415-5905 or e-mail at [Dawnmathews.Kalathiveettil@nrc.gov](mailto:Dawnmathews.Kalathiveettil@nrc.gov).

Sincerely,

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

Docket Nos. 50-321, 50-366,  
50-348, 50-364,  
50-424, and 50-425

Enclosure:  
Safety Evaluation

cc: Listserv



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

REQUEST TO USE A PROVISION OF A LATER EDITION OF

THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

BOILER AND PRESSURE VESSEL CODE, SECTION XI

FOR

EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

SOUTHERN NUCLEAR OPERATING COMPANY

DOCKET NOS. 50-321, 50-366, 50-348, 50-364, 50-424, AND 50-425

1.0 INTRODUCTION

By letter dated April 12, 2023, (Agencywide Documents and Access Management System (ADAMS) Accession No. ML23102A123), pursuant to Title 10 of *Code of Federal Regulations* (10 CFR) 50.55a(g)(4)(iv), Southern Nuclear Operating Company (SNC, the licensee) requested U.S. Nuclear Regulatory Commission (NRC) approval to use a specific provision of a later edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code, Section XI for Edwin I. Hatch Nuclear Plant (Hatch), Units 1 and 2; Joseph M. Farley Nuclear Plant (Farley), Units 1 and 2; and Vogtle Electric Generating Plant (Vogtle), Units 1 and 2. Specifically, the licensee requested approval to use subarticles IWA-6211(a) through IWA-6211(e) (Owner's Responsibilities), IWA-6220 (Owner's repair/Replacement Certification Record), IWA-6230 (Owner's Activity Report), and Mandatory Appendix II (Owner's Record and Report) of the 2019 Edition of the ASME BPV Code, Section XI for post-refueling outage reporting requirements.

2.0 REGULATORY EVALUATION

Specific editions and addenda, or portions thereof, of the ASME BPV Code, Section XI have been incorporated by reference into 10 CFR 50.55a(a)(1)(ii). The editions and addenda of the ASME BPV Code, Section XI are subject to the limitations in 10 CFR 50.55a(b)(2).

Enclosure

The regulations in 10 CFR 50.55a(g)(4) state, in part, that ASME Code Class 1, 2, 3, MC [metallic containment] and CC [concrete containment] components must meet the requirements, except the design and access provisions and the preservice examination requirements, set forth in Section XI of the applicable editions and addenda of the ASME Code to the extent practical within the limitations of design, geometry, and materials of construction of the components. Paragraph 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 paragraph (a) of this section [10 CFR 50.55a], 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.

Paragraph 50.55a(b)(2)(xxxii) of 10 CFR 50.55a states, in part, that:

*Section XI condition: Summary report submittal.* When using ASME BPV Code, Section XI, 2010 Edition through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section, Summary Reports and Owner's Activity Reports described in IWA-6230 must be submitted to the NRC. Preservice inspection reports for examinations prior to commercial service must be submitted prior to the date of placement of the unit into commercial service. For preservice and inservice examinations performed following placement of the unit into commercial service, reports must be submitted within 120 calendar-days of the completion of each refueling outage.

NRC Regulatory Issue Summary (RIS) 2004-12 (ML042090436), "Clarification on Use of Later Editions and Addenda to the ASME Code for Operation and Maintenance of Nuclear Power Plants, and Section XI," reinforces that licensees must request approval to use later Code editions and addenda via a letter to the NRC. The licensees may not simply update their Inservice Testing (IST) or Inservice Inspection (ISI) program without NRC's prior regulatory approval.

### 3.0 TECHNICAL EVALUATION

#### 3.1 Licensee's Request

##### 3.1.1 ASME BPV Code Components Affected

All ASME BPV Code Class 1, 2, 3, MC and CC components.

##### 3.1.2 Applicable Code Edition and Addenda

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

**Table 1: Current Applicable ASME BPV Code Edition and Addenda**

PLANT	ISI INTERVAL	ASME BPV CODE, SECTION XI	START	END
Farley Nuclear Plant, Units 1 and 2	5 <sup>th</sup>	2007 Edition, through 2008 Addenda	12/01/2017	11/30/2027
Hatch Nuclear Plant, Units 1 and 2	5 <sup>th</sup>	2007 Edition, through 2008 Addenda	01/01/2016	12/31/2025
Vogtle Electric Generating Plant, Units 1 and 2	4 <sup>th</sup>	2007 Edition, through 2008 Addenda	05/31/2017	5/30/2027

### 3.1.3 Proposed Subsequent Code Edition

The licensee proposed to use IWA-6211(a) through IWA-6211(e), IWA-6220, IWA-6230, and Mandatory Appendix II of the ASME BPV Code, Section XI, 2019 Edition in lieu of the 2007 Edition through the 2008 Addenda. These Code provisions change the reporting requirements, including extending the 90-calendar day submittal requirement for the Owner’s Activity Report to 120 calendar days, following completion of a refueling outage.

### 3.1.4 Basis for Use

As the basis for its request to use a portion of a later ASME BPV Code, the licensee cited 10 CFR 50.55a(g)(4)(iv), as noted in Section 2.0 of this safety evaluation.

The licensee stated that it complies with the requirements of IWA-6000, Records and Reports. However, the licensee explained that it has implemented Code Case N-532-5, “Repair/ Replacement Activity Documentation Requirements and Inservice Inspection Summary Report Preparation and Submission, Section XI, Division 1.” The licensee further stated that ASME BPV Code Case N-532-5 allows for the use of an Owner’s Activity Report, Form OAR-1 in lieu of Inservice Inspection Summary Report. These requirements are based on the ASME Section XI Code of Record, which currently is the 2007 Edition through the 2008 Addenda. The 2019 Edition of the ASME BPV Code incorporates the alternate repair/replacement activity documentation and Inservice Inspection summary report preparation and submission requirements of Code Case N-532-5 and extends the submittal time for the OAR-1 outage summary report from 90 days to 120 days.

According to the licensee, there are no related requirements or applicable conditions associated with the subarticles IWA-6211(a) through IWA-6211(e), IWA-6220, IWA-6230, and Mandatory Appendix II that must be considered.

### 3.1.5 Duration of Proposed Alternative

The licensee proposed the alternative for the remainder of the current inservice inspection intervals listed in Table 1 of its submittal.

### 3.2 NRC Staff Evaluation

Based on the requirements in 10 CFR 50.55a(g)(4)(iv), the NRC staff considered the following criteria in its review of the subject submittal:

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

The licensee requested to use subarticles IWA-6211(a) through IWA-6211(e), IWA-6220, IWA-6230, and Mandatory Appendix II of the 2019 Edition of the ASME BPV Code, Section XI. The staff notes that 10 CFR 50.55a(a) incorporates by reference the 2019 Edition of the ASME BPV Code, Section XI as published in *Federal Register*, 87 FR 65128, dated October 27, 2022. Therefore, the first criterion above has been satisfied.

Paragraph 50.55a(b)(2)(xxxii) of 10 CFR states, in part:

...Summary Reports and Owner's Activity Reports described in IWA-6230 must be submitted to the NRC... For preservice and inservice examinations performed following placement of the unit into commercial service, reports must be submitted within 120 calendar-days of the completion of each refueling outage.

The NRC staff determined that the licensee's proposal is consistent with this condition on subarticles IWA-6211(a) through IWA-6211(e), IWA-6220, IWA-6230, and Mandatory Appendix II of the 2019 Edition of the ASME BPV Code, Section XI, listed in 10 CFR 50.55a(b). That is, the licensee's proposal is subject to the condition in Paragraph 50.55a(b)(2)(xxxii). Therefore, the second criterion above has been satisfied.

The NRC staff determined that the licensee's submittal dated April 12, 2023, constitutes a request to the Commission for approval to use a later, subsequent edition or addendum of the ASME BPV Code, Section XI. Therefore, the third criterion above has been satisfied.

Subarticles IWA-6230(b) of the 2019 Edition of the ASME BPV Code, Section XI states that:

...For preservice and inservice examinations performed following placement of the unit into commercial service, Form OAR-1 [Owner's Activity Report], as shown in Mandatory Appendix II [Owner's Record and Report], shall be processed as specified below within 120 calendar-days of the completion of each refueling outage...

The NRC staff compared the 2019 Edition with the prior Editions cited in Table 1 of the submittal to determine whether other relevant provisions would affect the proposed use of subarticles IWA-6211(a) through IWA-6211(e), IWA-6220, IWA-6230, and Mandatory Appendix II at the

licensee's facilities. The 2019 Edition of the ASME BPV Code, Section XI incorporates the alternate repair/replacement activity documentation and Inservice Inspection summary report preparation and submission requirements of ASME BPV Code Case N-532-5. As such, the 2019 Edition extends the submittal time of the *Owner's Activity Report, Form OAR-1, outage summary report* from 90 days to 120 days. The NRC staff determined that no other related provisions of the 2019 Edition of the ASME BPV Code, Section XI would need to be implemented as part of the licensee's request. The NRC noted that the licensee did not ask to use any other provisions of the 2019 Edition of the ASME BPV Code, Section XI. Therefore, the fourth criterion above has been satisfied.

The NRC staff finds that the licensee has adequately addressed all regulatory requirements set forth in 10 CFR 50.55a(g)(4)(iv) because the four criteria above have been satisfied.

#### 4.0 CONCLUSION

As set forth above, the NRC staff finds that the licensee has adequately addressed all of the regulatory requirements in 10 CFR 50.55a(g)(4)(iv). Therefore, the NRC staff concludes that the use of subarticles IWA-6211(a) through IWA-6211(e), IWA-6220, IWA-6230, and Mandatory Appendix II of the 2019 Edition of the ASME BPV Code, Section XI, is acceptable. The NRC staff approves the use of subarticles IWA-6211(a) through IWA-6211(e), IWA-6220, IWA-6230, and Mandatory Appendix II of the 2019 Edition of the ASME BPV Code, Section XI at Hatch, Units 1 and 2; Farley, Units 1 and 2; and Vogtle, Units 1 and 2 for the remainder of the current 10-year ISI interval, as listed in Table 1 above.

The NRC staff notes that this approval does not apply to the use of provisions other than IWA-6211(a) through IWA-6211(e), IWA-6220, IWA-6230, and Mandatory Appendix II of the 2019 Edition of the ASME BPV Code, Section XI.

All other requirements of the ASME BPV Code, Section XI, as incorporated by reference in 10 CFR 50.55a, for which relief was not specifically requested and approved remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector.

Principal Contributor: Omar Khan, NRR/DNRL/NPHP  
Carol Moyer, NRR/DNRL/NVIB  
John Tsao, NRR/DNRL/NVIB

Date: August 2, 2023

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2; JOSEPH M. FARLEY NUCLEAR PLANT UNITS, 1 AND 2; AND VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2 – 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-2023-LRM-0046) DATED AUGUST 2, 2023

**DISTRIBUTION:**

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**ADAMS Accession No.: ML23202A112**

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OFFICE	NRR/DNRL/NVIB/BC	NRR/DORL/ LPL2-1/BC	NRR/DORL/LPL2-1/PM
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