



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

June 25, 2021

Mr. David P. Rhoades  
Senior Vice President  
Exelon Generation Company, LLC  
President and Chief Nuclear Officer (CNO)  
Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2; BYRON STATION, UNIT NOS. 1 AND 2; CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2; CLINTON POWER STATION, UNIT NO. 1; DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3; JAMES A. FITZPATRICK NUCLEAR POWER PLANT; LASALLE COUNTY STATION, UNITS 1 AND 2; LIMERICK GENERATING STATION, UNITS 1 AND 2; NINE MILE POINT NUCLEAR STATION, UNITS 1 AND 2; PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3; QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2; AND R. E. GINNA NUCLEAR POWER PLANT — PROPOSED ALTERNATIVE TO EXPAND THE USE OF ASME CODE CASES N-878 AND N-880 TO CARBON STEEL PIPING (EPIDS L-2021-LLR-0000, -0002, AND -0003)

Dear Mr. Rhoades:

By application dated January 4, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21004A066), Exelon Generation Company, LLC (Exelon, the licensee) submitted a request for a proposed alternative to the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a, "Codes and standards," for Braidwood Station (Braidwood), Units 1 and 2; Byron Station (Byron), Unit Nos. 1 and 2; Calvert Cliffs Nuclear Power Plant (Calvert Cliffs), Units 1 and 2; Clinton Power Station (Clinton), Unit No. 1; Dresden Nuclear Power Station (Dresden), Units 2 and 3; James A. FitzPatrick Nuclear Power Plant (FitzPatrick); LaSalle County Station (LaSalle), Units 1 and 2; Limerick Generating Station (Limerick), Units 1 and 2; Nine Mile Point Nuclear Station (NMP), Units 1 and 2; Peach Bottom Atomic Power Station (Peach Bottom), Units 2 and 3; Quad Cities Nuclear Power Station (Quad Cities), Units 1 and 2; and R. E. Ginna Nuclear Power Plant (Ginna).

Specifically, Exelon requested to revise an alternative that the U.S. Nuclear Regulatory Commission (NRC) authorized on July 18, 2019 (ADAMS Accession No. ML19192A244) to expand its use to carbon steel piping systems. The revised alternative would allow the licensee to use the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code Case N-878, "Alternative to QA [Quality Assurance] Program Requirements of IWA-4142, Section XI, Division 1," and Code Case N-880, "Alternative to Procurement Requirements of IWA-4143 for Small Nonstandard Welded Fittings, Section XI, Division 1," for both stainless steel and carbon steel piping systems. The alternative allows the licensee to procure material from a supplier that does not possess ASME accreditation as a quality system

certificate holder or a national pipe taper certificate holder. The licensee requested to use the revised alternative on the basis that it will provide an acceptable level of quality and safety pursuant to 10 CFR 50.55a(z)(1).

The NRC staff has reviewed Exelon's January 4, 2021, application and concludes, as set forth in the enclosed safety evaluation, that the licensee has adequately addressed the regulatory requirements set forth in 10 CFR 50.55a(z)(1). Therefore, the NRC staff authorizes the licensee to use the revised alternative described in its January 4, 2021, application at Braidwood, Units 1 and 2; Byron, Unit Nos. 1 and 2; Calvert Cliffs, Units 1 and 2; Clinton, Unit No. 1; Dresden, Units 2 and 3; FitzPatrick; LaSalle, Units 1 and 2; Limerick, Units 1 and 2; NMP, Units 1 and 2; Peach Bottom, Units 2 and 3; Quad Cities, Units 1 and 2; and Ginna. This authorization is for the remainder of the current 10-year inservice inspection intervals for each facility, as described in the licensee's January 4, 2021, application.

All other ASME BPV Code requirements for which relief was not been specifically requested and approved remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector.

If you have any questions, please contact Blake Purnell at 301-415-1380 or via e-mail at [Blake.Purnell@nrc.gov](mailto:Blake.Purnell@nrc.gov).

Sincerely,

Nancy L. Salgado, Chief  
Plant Licensing Branch III  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. STN 50-456, STN 50-457,  
STN 50-454, STN 50-455, 50-317, 50-318,  
50-461, 50-237, 50-249, 50-333 50-373,  
50-374, 50-352, 50-353, 50-220, 50-410,  
50-277, 50-278, 50-254, 50-265, and  
50-244

Enclosure:  
Safety Evaluation

cc: Listserv



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

PROPOSED ALTERNATIVE TO USE ASME CODE CASES N-878 AND N-880

BRAIDWOOD STATION, UNITS 1 AND 2;

BYRON STATION, UNIT NOS. 1 AND 2;

CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2;

CLINTON POWER STATION, UNIT NO. 1;

DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3;

JAMES A. FITZPATRICK NUCLEAR POWER PLANT;

LASALLE COUNTY STATION, UNITS 1 AND 2;

LIMERICK GENERATING STATION, UNITS 1 AND 2;

NINE MILE POINT NUCLEAR STATION, UNITS 1 AND 2;

PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3;

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2; AND

R.E. GINNA NUCLEAR POWER PLANT.

EXELON GENERATION COMPANY, LLC

DOCKET NOS. STN 50-456, STN 50-457, STN 50-454, STN 50-455, 50-317, 50-318,

50-461, 50-237, 50-249, 50-333, 50-373, 50-374, 50-352, 50-353, 50-220, 50-410,

50-277, 50-278, 50-254, 50-265, AND 50-244

1.0 INTRODUCTION

By application dated January 4, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21004A066), Exelon Generation Company, LLC (Exelon, the licensee) submitted a request for a proposed alternative to the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a, "Codes and standards," for Braidwood Station (Braidwood), Units 1 and 2; Byron Station (Byron), Unit Nos. 1 and 2; Calvert

Enclosure

Cliffs Nuclear Power Plant (Calvert Cliffs), Units 1 and 2; Clinton Power Station (Clinton), Unit No. 1; Dresden Nuclear Power Station (Dresden), Units 2 and 3; James A. FitzPatrick Nuclear Power Plant (FitzPatrick); LaSalle County Station (LaSalle), Units 1 and 2; Limerick Generating Station (Limerick), Units 1 and 2; Nine Mile Point Nuclear Station (NMP), Units 1 and 2; Peach Bottom Atomic Power Station (Peach Bottom), Units 2 and 3; Quad Cities Nuclear Power Station (Quad Cities), Units 1 and 2; and R. E. Ginna Nuclear Power Plant (Ginna) (collectively, the facilities).

Specifically, Exelon requested to revise an alternative that the U.S. Nuclear Regulatory Commission (NRC) authorized on July 18, 2019 (ADAMS Accession No. ML19192A244) to expand its use to carbon steel piping systems. The revised alternative would allow the licensee to use the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code Case N-878, "Alternative to QA [Quality Assurance] Program Requirements of IWA-4142, Section XI, Division 1," and Code Case N-880, "Alternative to Procurement Requirements of IWA-4143 for Small Nonstandard Welded Fittings, Section XI, Division 1," for both stainless steel and carbon steel piping systems. The alternative allows the licensee to procure material from a supplier that does not possess ASME accreditation as a quality system certificate holder or a national pipe taper (NPT) certificate holder. The licensee requested to use the revised alternative on the basis that it will provide an acceptable level of quality and safety pursuant to 10 CFR 50.55a(z)(1).

## 2.0 REGULATORY EVALUATION

The regulations in 10 CFR 50.55a(g)(4) state, in part, that ASME Code Class 1, 2, and 3 components (including supports) 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 BPV Code to the extent practical within the limitations of design, geometry, and materials of construction of the components.

Paragraph 10 CFR 50.55a(g)(4)(ii) requires, in part, that inservice examination of components and system pressure tests conducted during successive 10-year inservice inspection (ISI) intervals (i.e., after the initial 10-year interval) must comply with the latest edition and addenda of the ASME BPV Code (or the optional ASME Code Cases) incorporated by reference in 10 CFR 50.55a(a) 18 months before the start of the 10-year interval subject to the conditions listed in 10 CFR 50.55a(b).

The regulations in 10 CFR 50.55a(z) state, in part, that alternatives to the requirements in paragraphs (b) through (h) of 10 CFR 50.55a may be authorized by the NRC if the licensee demonstrates that: (1) the proposed alternative provides an acceptable level of quality and safety, or (2) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50 establishes QA requirements for the design, fabrication, construction, and testing of structures, systems, and components (SSCs). The pertinent requirements of Appendix B apply to all activities affecting the safety-related functions of those SSCs, including designing, purchasing, fabricating, handling, shipping, storing, cleaning, erecting, installing, inspecting, testing, operating, maintaining, repairing, refueling, and modifying SSCs.

By application dated May 30, 2018 (ADAMS Accession No. ML18151A028), as supplemented by letters dated July 26, 2018; January 8, 2019; May 1, 2019; and June 4, 2019 (ADAMS Accession Nos. ML18208A345, ML19008A187, ML19122A307, and ML19155A214, respectively), Exelon submitted a request for a proposed alternative to the requirements in 10 CFR 50.55a for its facilities. By letter dated July 18, 2019, the NRC staff authorized the use of this proposed alternative at Exelon’s facilities for the 10-year ISI intervals listed in Table 1 below. This NRC-approved alternative allows Exelon to use ASME Codes Cases N-878 and N-880 at its facilities for stainless steel piping systems.

### 3.0 TECHNICAL EVALUATION

#### 3.1 Licensee’s Request

##### 3.1.1 ASME Code Components Affected

The previously approved alternative affected all ASME Code Class 1, 2, and 3 stainless steel piping systems. The revised alternative would affect all ASME Code Class 1, 2, and 3 stainless steel and carbon steel piping systems. The ASME Code Cases N-878 and N-879 are limited to fittings which are nominal pipe size (NPS) 2 or smaller.

##### 3.1.2 Applicable Code Edition and Addenda

Table 1 identifies the applicable ASME BPV Code editions and addenda for the current 10-year ISI interval for each plant. The table also shows the start and end dates for the ISI intervals.

**Table 1:** ISI Interval and Applicable Code Edition and Addenda

<b>PLANT</b>	<b>ISI INTERVAL</b>	<b>ASME BPV CODE EDITION</b>	<b>START</b>	<b>END</b>
Braidwood, Unit 1	4th	2013 Edition	8/29/2018	7/28/2028
Braidwood, Unit 2	4th	2013 Edition	10/5/2018	10/16/2028
Byron, Unit Nos. 1 and 2	4th	2007 Edition, through 2008 Addenda	7/16/2016	7/15/2025
Calvert Cliffs, Units 1 and 2	5th	2013 Edition	7/1/2019	6/30/2029
Clinton, Unit No. 1	4th	2013 Edition	7/1/2020	6/30/2030
Dresden, Units 2 and 3	5th	2007 Edition, through 2008 Addenda	1/20/2013	1/19/2023
FitzPatrick	5th	2007 Edition, through 2008 Addenda	8/1/2017	6/15/2027
LaSalle, Units 1 and 2	4th	2007 Edition, through 2008 Addenda	10/1/2017	9/30/2027
Limerick, Units 1 and 2	4th	2007 Edition, through 2008 Addenda	2/1/2017	1/31/2027
NMP, Unit 1	5th	2013 Edition	8/23/2019	8/22/2029
NMP, Unit 2	4th	2013 Edition	8/23/2018	8/22/2028
Peach Bottom, Units 2 and 3	5th	2013 Edition	1/1/2019	12/31/2028
Quad Cities, Units 1 and 2	5th	2007 Edition, through 2008 Addenda	4/2/2013	4/1/2023
Ginna	6th	2013 Edition	1/1/2020	12/31/2029

### 3.1.3 Licensee's Proposed Alternative and Basis for Use

The licensee's January 4, 2021, application requests to revise the alternative that the NRC approved on July 18, 2019. The previously approved alternative is only applicable to stainless steel piping systems. The revised alternative would allow the licensee to expand the use of the previously approved alternative to carbon steel piping systems. The January 4, 2021, application does not request any other changes to the proposed alternative described in the licensee's May 30, 2018, application, as supplemented by letters dated July 26, 2018; January 8, 2019; May 1, 2019; and June 4, 2019. Therefore, the NRC staff understands that the revised alternative would be consistent with the licensee's May 30, 2018, proposed alternative, as supplemented, except for the specific changes identified in Exelon's January 4, 2021, application.

The January 4, 2021, application requests to use ASME Code Cases N-878 and N-880 as an alternative to QA requirements of subparagraphs IWA-4142.1(b)(4) or (5) and paragraph IWA-4143 of the ASME BPV Code, Section XI. The licensee's request was made in accordance with 10 CFR 50.55a(z)(1), which requires that the proposed alternative provide an acceptable level of quality and safety.

Paragraphs IWA-4142, "Repair/Replacement Organization's Quality Assurance Program," and IWA-4143, "Stamping," of the ASME BPV Code, Section XI, address the QA program requirements for the owners with respect to repair and replacement activities. Subparagraph IWA-4142.1(b)(4) states, in part, that "[w]hen accepting small products, the Owner shall perform the activities required of the Certificate Holder by NB/NC/ND/NE/NF-2610(b)." Subparagraph IWA-4142.1(b)(4) states that "[w]hen utilizing unqualified source material, the Owner shall perform the activities required of the Certificate Holder by NCA-3855.5(b)."

Code Case N-878 provides an alternative to the requirements of subparagraphs IWA-4142.1(b)(4) or (5) of the ASME BPV Code, Section XI, for procurement of nonwelded fittings to be used in repair and replacement activities. Code Case N-878 states, in part:

It is the opinion of the Committee that, as an alternative to the requirements imposed on the Owner by IWA-4142.1(b)(4) or (5), for proprietary fittings, the activities required of the Owner by IWA-4142.1(b)(4) or (5) may be subcontracted by the Owner to a Repair/Replacement Organization whose Repair/Replacement Program has been approved by the Owner. As an alternative to IWA-4142.1(b)(5), the Repair/Replacement Organization may perform the testing and certification of unqualified source material in accordance with NCA-3855.5. As an alternative to IWA-4142.1(b)(4), the Repair/Replacement Organization may include in its Repair/Replacement Program measures to provide assurance that proprietary pipe fittings NPS 2 (DN 50) and smaller are furnished in accordance with the material specification and the applicable requirements of Section III and the Owner's Requirements.

Code Case N-880 provides alternative requirements of subparagraphs IWA-4142.1(b)(4) or (5) and paragraph IWA-4143 for procurement of small, nonstandard, welded fittings without an ASME Code stamp when Section III of the ASME BPV Code is applicable to the repair and replacement activities. Section III is applicable when it was used as the original construction code for SSCs.

The licensee requested the proposed alternative so it can use nonstandard, proprietary, welded or non-welded pipe fittings in applications requiring compliance with Section III of the ASME BPV Code without having to comply with the administrative requirements imposed by paragraphs IWA-4142 and IWA-4143 and Article IWA-4200 of Section XI of the ASME BPV Code. In its July 26, 2018, and January 4, 2021, letters, the licensee stated:

Nonstandard, proprietary welded or nonwelded pipe fittings can be proven, by testing, to comply with Section III design requirements. Exelon has a supplier of such fittings that does not possess ASME accreditation as a Quality System Certificate Holder or an NPT Certificate Holder. Exelon cannot find any supplier of equivalent products that possesses the accreditation required by ASME Section III. However, these products can be verified as having an acceptable level of safety by complying with the provisions specified in ASME Cases N-878 and N-880.

Section XI of the ASME BPV Code requires pipe fittings to be designed in accordance with the original construction code, which, for these applications, is Section III of the ASME BPV Code. The licensee stated that these pipe fittings are typically designed in accordance with subparagraph NB-3671.7, "Sleeve Coupled and Other Patented Joints," using prototype testing. Alternatively, subparagraphs NC/ND-3671.7 may be used for Class 2 or 3 pipe fittings, as applicable.

The licensee's July 26, 2018, and January 4, 2021, letters, state, in part:

Reconciliation and use of editions and addenda of ASME Section III will be in accordance with ASME Section XI, IWA-4220, and only editions and addenda of ASME Section III that have been accepted by 10 CFR 50.55a may be used. The Code of Record for the specific 10-year ISI interval at each nuclear unit ... will be used when applying the various IWA paragraphs of Section XI, unless specific regulatory relief to use other editions or addenda is approved.

### 3.2 NRC Staff Evaluation

By letter dated July 18, 2019, the NRC staff authorized Exelon to use the proposed alternative described in its application dated May 30, 2018, as supplemented by letters dated July 26, 2018; January 8, 2019; May 1, 2019; and June 4, 2019, at its facilities. As discussed in the associated safety evaluation (SE) enclosed with the July 18, 2019, letter, the NRC staff determined that the licensee's May 30, 2018, proposed alternative, as supplemented, provides an acceptable level of quality and safety. Therefore, the NRC staff concluded in the SE that the licensee had adequately addressed the regulatory requirements set forth in 10 CFR 50.55a(z)(1).

The licensee's January 4, 2021, application requests to revise the alternative that the NRC approved on July 18, 2019, to expand its use to carbon steel piping systems at Exelon's facilities. The NRC staff's review of this proposed revision focused on the changes to the previously approved alternative.

#### 3.2.1 Quality Assurance Evaluation

The previously approved alternative allows the licensee to use ASME Code Cases N-878 and N-880 as an alternative to the QA requirements in subparagraphs IWA-4142.1(b)(4) or (5) and

paragraph IWA-4143 of Section XI of the ASME BPV Code. Subparagraph IWA-4142(a)(2) of the 2013 Edition<sup>1</sup> of Section XI of the ASME BPV Code states:

When the Repair/Replacement Organization is other than the Owner, the Repair/Replacement Organization's Quality Assurance Program shall be documented and shall comply with the applicable quality assurance program criteria of 10CFR50 Appendix B supplemented as necessary to be consistent with the Owner's Quality Assurance Program; NQA-1, Part I; or NCA-4000. The Owner shall ensure that the Repair/Replacement Organization's Quality Assurance Program meets the requirements of this Article for the activities to be performed. The program shall be reviewed and accepted by the Owner.

The NRC staff's quality assurance evaluation of the licensee's May 30, 2018, proposed alternative, as supplemented, was provided in Section 3.2.1 of the July 18, 2019, SE, which states, in part:

The staff has reasonable assurance that the licensee will continue to comply with Appendix B to 10 CFR Part 50 and meet the requirements of subparagraphs NB/NC/ND-3671.7 of the ASME BPV Code, Section III, because either the licensee or a repair/replacement organization with an Appendix B QA program (audited and approved by the licensee) will be used to implement the proposed alternative. Welding materials for fittings will be procured from an approved ASME-accredited material organization, which will ensure compliance with the applicable requirements of ASME BPV Code, Section II. The performance of NDE [nondestructive examination] services by qualified NDE personnel will ensure compliance with the applicable requirements of the ASME BPV Code, Section III, for welded fittings fabricated offsite. The allowance for ANII [authorized nuclear inservice inspector] oversight as it relates to these activities provides assurance that the requirements of Section XI of the ASME BPV Code will be met. Therefore, the staff concludes that the requirements in ASME BPV Code, Section III, for the design, procurement, fabrication, testing, inspection, and installation of nonstandard, proprietary, welded or non-welded pipe fittings will be met under the proposed alternative.

The NRC staff compared the licensee's January 4, 2021, application to the licensee's May 30, 2018, application and July 26, 2018; January 8, 2019; May 1, 2019; and June 4, 2019, supplements. The proposed revision would expand the use of the alternative to carbon steel piping systems at Exelon's facilities, but does not change any other aspect of the previously approved alternative. As a result, the revised alternative does not affect the basis for the NRC staff's quality assurance findings in Section 3.2.1 of the July 18, 2019, SE. Therefore, the NRC staff concludes that the requirements in ASME BPV Code, Section III, for the design, procurement, fabrication, testing, inspection, and installation of nonstandard, proprietary, welded or non-welded pipe fittings will be met under the revised alternative.

### 3.2.2 Pipe Fitting Materials Evaluation

The NRC staff reviewed the inclusion of carbon steel to the subject alternative as it relates to the performance of the materials used in the nonstandard, proprietary, welded and non-welded pipe fittings up to NPS 2 for ASME BPV Code, Section III, piping systems.

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<sup>1</sup> The 2007 Edition through 2008 Addenda of Section XI specifies similar requirements.



ASME Code Case N-878 allows the licensee to subcontract the activities required by subparagraphs IWA-4142.1(b)(4) or (5) of the ASME BPV Code, Section XI, to a repair/replacement organization approved by Exelon. These activities include testing and certification of unqualified source material for non-welded pipe fittings of NPS 2 and smaller size. This code case does not affect the ASME BPV Code requirements related to the materials used for the non-welded pipe fittings. Code Case N-880 applies to nonstandard welded pipe fittings of NPS 2 and smaller and requires that the materials, including welding materials, used for these pipe fittings meet the requirements in Articles NB/NC/ND-2000 of the ASME BPV Code, Section III, except for paragraphs NB/NC/ND-2610.

Since the licensee stated that no changes are needed for this alternative to use ASME Code Cases N-878 and N-880, other than adding applicability to carbon steel piping systems and revision to the currently applicable ASME Code Editions, the NRC staff concludes that the same requirements in the previously-approved alternative will continue to apply and finds this provides adequate assurance of the structural integrity of the carbon steel and stainless steel components. These requirements include the ASME BPV Code requirements for the materials, design, fabrication, mechanical testing, and NDE of the pipe fittings. These attributes work in concert to facilitate the production of a robust pipe fitting with sound mechanical properties. The NRC staff determined that the pipe fittings will be designed, fabricated, and inspected in accordance with all the requirements in Articles NB/NC/ND-2000 (material), NB/NC/ND-3000 (design), NB/NC/ND-4000 (fabrication and installation), and NB/NC/ND-5000 (examinations) of ASME BPV Code, Section III. In addition, the base materials and welding materials for carbon steel and stainless steel will be procured in accordance with the requirements of Part A, "Ferrous Material Specifications," and Part C, "Specifications for Welding Rods, Electrodes, and Filler Materials," of the ASME BPV Code, Section II. The licensee confirmed that either Exelon or a third-party organization will test and certify unqualified source materials used for the pipe fittings in accordance with subparagraph NCA-3855.5 of ASME BPV Code, Section III. The licensee also verifies that the procured, nonstandard, proprietary, welded and non-welded pipe fittings meet the design and testing (including prototype testing) requirements of the ASME BPV Code, Section III, NB/NC/ND-3671.7 for Class 1, 2, or 3 applications. Verification that the ASME BPV Code, Section III, requirements for the design and testing of these nonstandard, proprietary, welded and non-welded pipe fittings have been met prior to use is essential in ensuring the structural integrity of these Class 1, 2, and 3 systems is maintained.

Based on the above, the NRC staff concludes that with the proposed alternative the licensee will continue to comply with all the requirements in the ASME BPV Code, Section III, for the installation of the nonstandard, proprietary, welded or non-welded pipe fittings using carbon steel and stainless steel material. Compliance with the ASME BPV Code, Section III, requirements ensures that the subject pipe fittings will maintain their structural integrity under all operating conditions.

#### 4.0 CONCLUSION

As set forth above, the NRC staff determined that the licensee's revised alternative to use ASME Code Cases N-878 and N-880 for both stainless steel and carbon steel piping systems, in lieu of the specified ASME BPV Code requirements in paragraphs IWA-4142 and IWA-4143, provides an acceptable level of quality and safety. Accordingly, the NRC staff concludes that the licensee has adequately addressed the regulatory requirements set forth in 10 CFR 50.55a(z)(1). Therefore, the NRC staff authorizes the licensee to use the revised alternative described in its January 4, 2021, application at Braidwood, Units 1 and 2; Byron, Unit Nos. 1

and 2; Calvert Cliffs, Units 1 and 2; Clinton, Unit No. 1; Dresden, Units 2 and 3; FitzPatrick; LaSalle, Units 1 and 2; Limerick, Units 1 and 2; NMP, Units 1 and 2; Peach Bottom, Units 2 and 3; Quad Cities, Units 1 and 2; and Ginna. This authorization is for the remainder of the current 10-year ISI intervals for each facility, which are listed in Table 1.

The NRC approval of this alternative does not imply or infer the NRC approval of the ASME BPV Code Cases N-878 or N-880 for generic use. All other ASME BPV Code requirements for which relief was not been specifically requested and approved remain applicable, including third-party review by the ANII.

Principal Contributors: B. Purnell, NRR  
J. Honcharik, NRR

Date of issuance: June 25, 2021

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2; BYRON STATION, UNIT NOS. 1 AND 2; CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2; CLINTON POWER STATION, UNIT NO. 1; DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3; JAMES A. FITZPATRICK NUCLEAR POWER PLANT; LASALLE COUNTY STATION, UNITS 1 AND 2; LIMERICK GENERATING STATION, UNITS 1 AND 2; NINE MILE POINT NUCLEAR STATION, UNITS 1 AND 2; PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3; QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2; AND R. E. GINNA NUCLEAR POWER PLANT — PROPOSED ALTERNATIVE TO EXPAND THE USE OF ASME CODE CASES N-878 AND N-880 TO CARBON STEEL PIPING (EPIDS L-2021-LLR-0000, -0002, AND -0003) DATED JUNE 25, 2021

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