

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

July 18, 2019

Mr. Bryan C. Hanson 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 USE ASME CODE CASES N-878 AND N-880 (EPID L-2018-LLR-0077)

Dear Mr. Hanson:

By application dated May 30, 2018 (Agencywide Documents Access and Management System (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 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," and the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code 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). The application also requested to use the proposed alternative at Three Mile Island Nuclear Station (TMI), Unit 1. However, the licensee withdrew the request for TMI by letter dated June 17, 2019 (ADAMS Accession No. ML19169A031).

The proposed alternative would allow the licensee to use ASME 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."

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the subject request 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 proposed alternative described in its application, as supplemented, at Braidwood, Byron, Calvert Cliffs, Clinton, Dresden, FitzPatrick, LaSalle, Limerick, NMP, Peach Bottom, Quad Cities, and Ginna. This authorization is for the remainder of the current 10-year inservice inspection (ISI) intervals at Braidwood Units 1 and 2, Byron Unit Nos. 1 and 2, Calvert Cliffs Units 1 and 2, Clinton, Dresden Units 2 and 3, FitzPatrick, LaSalle Units 1 and 2, Limerick Units 1 and 2, NMP Unit 2, Peach Bottom Units 2 and 3, Quad Cities Units 1 and 2, and Ginna, as specified in the licensee's June 4, 2019, letter. In addition, this authorization is for the duration of the fourth 10-year ISI interval at Clinton, the fifth 10-year ISI interval at NMP Unit 1, and the sixth 10-year ISI interval at Ginna, as specified in the licensee's June 4, 2019, letter.

All other ASME 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.

Sincerely,

/RA Robert F. Kuntz for/

Lisa M. Regner, Acting Branch 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, 50-244, and 50-289

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,

<u>50-461, 50-237, 50-249, 50-333, 50-373, 50-374, 50-352, 50-353, 50-220, 50-410,</u>

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

1.0 INTRODUCTION

By application dated May 30, 2018 (Agencywide Documents Access and Management System (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 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,"

and the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code 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) (the facilities).

The application also requested to use the proposed alternative at Three Mile Island Nuclear Station (TMI), Unit 1. However, the licensee withdrew the request for TMI by letter dated June 17, 2019 (ADAMS Accession No. ML19169A031). Therefore, this safety evaluation (SE) is not applicable to TMI.

The proposed alternative would allow the licensee to use ASME 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." This alternative would allow 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. As discussed in its July 26, 2018, letter, the licensee requested to use the 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) 12 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 U.S. Nuclear Regulatory Commission (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 and include designing, purchasing, fabricating, handling, shipping, storing, cleaning,

erecting, installing, inspecting, testing, operating, maintaining, repairing, refueling, and modifying SSCs.

- 3.0 TECHNICAL EVALUATION
- 3.1 Licensee's Relief Request
- 3.1.1 ASME Code Components Affected

The licensee stated in its July 26, 2018, letter that all ASME Code Class 1, 2, and 3 stainlesssteel piping systems are affected by this alternative request. The Code Cases are limited to fittings which are nominal pipe size (NPS) 2 or smaller.

3.1.2 Applicable Code Edition and Addenda

The licensee identified the applicable ASME BPV Code editions and addenda for each plant in its June 4, 2019, letter as shown in the table below. In addition, the table shows the associated 10-year ISI interval, including the start and end dates, for each plant.

PLANT	ISI INTERVAL	ASME BPV CODE EDITION	START	END
Braidwood Unit 1	4th	2013 Edition	8/29/2018	7/28/2028
Braidwood Unit 2	4th	2013 Edition	10/17/2018	10/16/2028
Byron Units 1 and 2	4th	2007 Edition, through 2008 Addenda	7/16/2016	7/15/2025
Calvert Cliffs	4th	2013 Edition	7/1/2019	6/30/2029
Clinton	3rd	2004 Edition	7/1/2010	6/30/2020
	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	10/6/2018	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	5th	2004 Edition	1/1/2010	12/31/2019
	6th	2013 Edition	1/1/2020	12/31/2029

Paragraphs IWA-4142, "Repair/Replacement Organization's Quality Assurance Program," and IWA-4143, "Stamping," of Section XI of the ASME BPV Code address the QA program requirements for the owners with respect to repair and replacement activities. The licensee requested to use Code Cases N-878 and N-880 at its facilities as an alternative to these requirements. These code cases are approved by ASME but have not been approved by the NRC staff for generic use by licensees.

3.1.4 Licensee's Proposed Alternative and Basis for Use

The licensee requested to use ASME Code Cases N-878 and N-880 as an alternative to QA requirements of subparagraphs IWA-4142.1(b)(4) and (5) and paragraph IWA-4143 of Section XI of the ASME BPV Code. 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. 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 paragraph IWA-4142 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 [nominal pipe size] 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 "Rules for Construction of Nuclear Facility Components," 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, letter, 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, letter, states, 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's Evaluation

3.2.1 Quality Assurance Evaluation

The licensee requested to use ASME Code Cases N-878 and N-880 as an alternative to certain QA requirements in paragraphs IWA-4142 and IWA-4143 of Section XI of the ASME BPV Code. Subparagraph IWA-4142(a)(2) 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, Parts II and III, Basic Requirements and Supplements; 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 licensee's July 26, 2018, letter states that Exelon will control the approval of the repair/ replacement organization applying the provisions of the Code Cases N-878 and N-880, and it will ensure that requirements of Appendix B to 10 CFR Part 50 are met for the supply of welded and non-welded proprietary fittings. The additional verification required Code Case N-880 will be performed to ensure the quality of fitting-to-fitting welds because these welds will be made by a non-ASME-accredited fabricator. The licensee will ensure that the materials, design, fabrication, installation, and testing of these fittings complies fully with the ASME BPV Code, Section III, as required by ASME BPV Code, Section XI.

The licensee's January 8, 2019, letter states that either Exelon or third-party organization will test and certify unqualified source materials in accordance with subparagraph NCA-3855.5 of ASME BPV Code, Section III. If a third party is used, Exelon will ensure that "the third party organization is a 10 CFR 50, Appendix B Quality Assurance Program holder as audited and approved by Exelon." The licensee will share responsibility for the quality documentation review upon receipt of the finished product to ensure compliance with the requirements of NCA-3855.5. An authorized nuclear inservice inspector (ANII) will be provided the opportunity to perform oversight of these activities.

The licensee's January 8, 2019, letter, states that all welding materials will be purchased from an ASME-accredited welding material manufacturer. The welding material will be certified to meet the requirements of Section II, Part C, and Section III, Articles NCA-3800/4200 and NB/NC/ND-2400, of the ASME BPV Code. The licensee stated that the welding materials will not be accepted by commercial grade dedication or other form of testing, such as subparagraph NCA-3855.5. Exelon or its contracted repair/replacement organization will perform or subcontract nondestructive examination (NDE) services required by ASME BPV Code, Section III. NDE personnel qualification will meet the requirements of Sections III and V of the ASME BPV Code. An ANII will be provided the opportunity to perform oversight of all welding and NDE activities.

The licensee's May 1, 2019, letter states, in part:

Exelon will be responsible for preparation and review of the design documentation for the use of the fittings. Exelon will either perform the piping system design applicable to use of the fittings or will commission a vendor qualified in accordance with 10 CFR 50, Appendix B to perform this design, in accordance with all applicable Section III design requirements, including those of NB/NC/ND-3671.7. The piping system designer will be responsible for verification and acceptance of applicable prototype qualification test results, in accordance with NB/NC/ND-3671.7, under a Quality Assurance Program complying with 10 CFR 50, Appendix B, Criterion III. The designer will be responsible for ensuring that prototype qualification test results comply with 10 CFR 50, Appendix B, Criterion XI. As required by Section XI, IWA-4170, the Authorized Nuclear Inservice Inspector will be given an opportunity to review the design activities, including verification of design documents, including prototype fitting test data, by reviewing the records at or before the time at which the piping systems containing the fittings are returned to service.

The NRC staff reviewed the licensee's application, as supplemented, for the proposed alternative to use Code Cases N-878 and N-880. 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 III. The performance of NDE services by qualified NDE personnel will ensure compliance with the applicable requirements of stated offsite. The allowance for ANII oversite as it relates to these activities provides assurance that the requirements of Section XI of the 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.

3.2.2 Pipe Fitting Materials Evaluation

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

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 fitting. Code Case N-880 applies to nonstandard welded fittings of NPS 2 and smaller and requires that the materials, including welding materials, used for these fittings to meet the requirements in Articles NB/NC/ND-2000 of the ASME BPV Code, Section III, except for NB/NC/ND-2610.

The NRC staff considered the ASME BPV Code requirements for the materials, design, fabrication, mechanical testing, and non-destructive examination of the pipe fittings. These attributes must work in concert to facilitate the production of a robust fitting with sound mechanical properties. The 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 will be procured in accordance with the requirements of Part A, "Ferrous Material Specifications," and Part D, "Specifications for Welding Rods, Electrodes, and Filler Materials," of the ASME BPV Code, Section II. The licensee's January 8, 2019, letter, states that either Exelon or 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.

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. Compliance with the ASME BPV Code, Section III, requirements ensures that the subject fittings will maintain their structural integrity under all operating conditions.

3.2.3 Duration of Proposed Alternative

In the July 26, 2018, letter, the licensee requested to use the proposed alternative for the remainder of the current 10-year ISI interval, as specified in Section 2 of the letter, and "for the remainder of the plant's life."

The regulations in 10 CFR 50.55a(z) allow the NRC staff to authorize alternatives to the requirements in paragraphs (b) through (h) of 10 CFR 50.55a. This regulation does not allow the staff to approve alternatives to requirements not currently in these paragraphs. The staff does not generally approve alternatives to 10 CFR 50.55a and the ASME Code beyond the current inservice inspection or testing intervals, unless specific circumstances would justify a longer interval. The staff has approved alternatives for the next inservice inspection or testing intervals and the applicable requirements for the next interval are known. For example, 10 CFR 50.55a(g)(4)(ii) requires, in part, that for subsequent ISI intervals the licensee use the latest edition and addenda of the ASME BPV Code incorporated by reference in 10 CFR 50.55a(a) 12 months prior to the start of the 10-year ISI interval.

The licensee's June 4, 2019, letter provided a revised request which limited the duration of the proposed alternative to the remainder of the current 10-year ISI interval and the duration of the next 10-year ISI interval, as specified in SE Section 3.1.2. Specifically, the licensee requested to use the proposed alternative for the remainder of the current 10-year ISI intervals at

Braidwood, Byron, Calvert Cliffs, Clinton, Dresden, FitzPatrick, LaSalle, Limerick, NMP Unit 2, Peach Bottom, Quad Cities, and Ginna. In addition, the licensee requested to use the proposed alternative for the duration of the next 10-year ISI intervals at Clinton (starting on July 1, 2020), NMP Unit 1 (starting on August 23, 2019), and Ginna (starting on January 1, 2020). As the start of the next interval for these plants is within 12 months of the authorization of this alternative, the applicable edition and addenda of the ASME BPV Code are known. The NRC staff determined that the revised duration of the request is acceptable because the applicable edition and addenda of the ASME BPV Code for each facility have been incorporated into 10 CFR 50.55a(a).

4.0 <u>CONCLUSION</u>

As set forth above, the NRC staff determined that the licensee's proposed alternative to use ASME Code Cases N-878 and N-880 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 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 proposed alternative described in its application, as supplemented, at Braidwood, Byron, Calvert Cliffs, Clinton, Dresden, FitzPatrick, LaSalle, Limerick, NMP, Peach Bottom, Quad Cities, and Ginna. This authorization is for the remainder of the current 10-year ISI intervals at Braidwood Units 1 and 2, Byron Unit Nos. 1 and 2, Calvert Cliffs Units 1 and 2, NMP Unit 2, Peach Bottom Units 2 and 3, Quad Cities Units 1 and 2, and Ginna, as specified in the licensee's June 4, 2019, letter. In addition, this authorization is for the duration of the fourth 10-year ISI interval at Clinton, the fifth 10-year ISI interval at NMP Unit 1, and the sixth 10-year ISI interval at Ginna, as specified in the licensee's June 4, 2019, letter.

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

Principal Contributors: G. Cheruvenki, NRR R. Patel, NRR

Date of issuance: July 18, 2019

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 USE ASME CODE CASES N-878 AND N-880 (EPID L-2018-LLR-0077) DATED JULY 18, 2019

DISTRIBUTION:

PUBLIC RidsNrrDorlLpl1 Resource RidsNrrDorlLpl3 Resource RidsNrrLACSmith Resource RidsAcrsAcnw_MailCTR Resource RidsRgn1MailCenter Resource RidsRgn3MailCenter Resource DDodson, EDO RidsNrrPMExelon Resource RidsNrrPMBraidwood Resource RidsNrrPMByron Resource RidsNrrPMByron Resource RidsNrrPMCalvertCliffs Resource RidsNrrPMClinton Resource RidsNrrPMClinton Resource RidsNrrPMFitzPatrick Resource RidsNrrPMLaSalle Resource RidsNrrPMLimerick Resource RidsNrrPMNineMilePoint Resource RidsNrrPMPeachBottom Resource RidsNrrPMQuadCities Resource RidsNrrPMREGinna Resource RidsNrrPMThreeMileIsland Resource RidsNrrDmIrMphb Resource RidsNrrDirsIqvb Resource RidsNrrDirsDeEmib Resource GCheruvenki, NRR KHsu, NRR RPatel, NRR

ADAMS Accession No. ML19192A244

*by email **by memo

			By email by memo		
OFFICE	DORL/LPL3/PM	DORL/LPL3/LA	DMLR/MPHB/BC(A)**		
NAME	BPurnell	SRohrer	ABuford		
DATE	7/16/19	7/15/19	7/08/19		
OFFICE	DIRS/IQVB/BC**	DE/EMIB/BC*	DORL/LPL3/BC(A)		
NAME	KKavanagh	SBailey	LRegner (RKuntz for)		
DATE	7/08/19	7/16/19	7/18/19		

OFFICIAL RECORD COPY