



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

June 5, 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 – RELIEF FROM THE
REQUIREMENTS OF THE AMERICAN SOCIETY OF MECHANICAL
ENGINEERS CODE (EPID L-2018-LLR-0131)

Dear Mr. Hanson:

By letter dated October 11, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18284A445), Exelon Generation Company, LLC (Exelon, the licensee), submitted relief request (RR) I4R-10, which proposes an alternative to the requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) regarding requirements for the repair and examination of reactor pressure vessel head penetration nozzles (RPVHPNs) at Braidwood Station (Braidwood), Units Nos. 1 and 2, for the fourth inservice inspection (ISI) interval.

Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.55a(z)(1), the licensee requested to use the proposed alternative on the basis that it provides an acceptable level of quality and safety.

The U.S. Nuclear Regulatory Commission (NRC or Commission) staff has reviewed the subject request and concludes, as set forth in the enclosed safety evaluation, that Exelon has adequately addressed all of the regulatory requirements in 10 CFR 50.55a(z)(1). Therefore, the NRC authorizes the use of RR I4R-10 at Braidwood Station, Units 1 and 2, for the fourth ISI interval currently scheduled to end on July 28, 2028, and October 16, 2028, respectively.

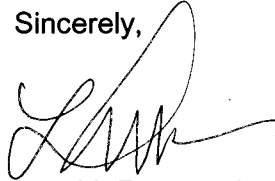
All other requirements of ASME Code, Section XI, for which relief was not specifically requested and authorized by the NRC staff remain applicable, including the third-party review by the Authorized Nuclear Inservice Inspector.

B. Hanson

- 2 -

If you have any questions, please contact the Project Manager, Joel Wiebe at 301-415-6606 or via e-mail at Joel.Wiebe@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'L. Regner', written in a cursive style.

Lisa M. Regner, Acting Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-456 and 50-457

Enclosure:
Safety Evaluation

cc: Listserv



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELIEF REQUEST I4R-10 REGARDING REPAIR AND EXAMINATION OF

REACTOR VESSEL HEAD PENETRATION NOZZLES

EXELON GENERATION COMPANY, LLC

BRAIDWOOD STATION, UNITS 1 AND 2

DOCKET NOS. 50-456 AND 50-457

1.0 INTRODUCTION

By letter dated October 11, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18284A445), Exelon Generation Company, LLC (Exelon, the licensee), submitted relief request (RR) I4R-10, which proposes an alternative to the requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) regarding requirements for the repair and examination of reactor pressure vessel head penetration nozzles (RPVHPNs) at Braidwood Station (Braidwood), Units Nos. 1 and 2, for the fourth inservice inspection (ISI) interval.

Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(z)(1), the licensee requested to use the proposed alternative on the basis that it provides an acceptable level of quality and safety.

2.0 REGULATORY EVALUATION

Adherence to Section XI of the ASME Code is mandated by 10 CFR 50.55a(g)(4), which states, in part, that ASME Code Class 1, 2, and 3 components will meet the requirements, except the design and access provisions and the pre-service examination requirements, set forth in the ASME Code, Section XI.

Pursuant to 10 CFR 50.55a(g)(6)(ii), the U.S. Nuclear Regulatory Commission (NRC) may require the licensee to follow an augmented ISI program for systems and components for which the NRC deems that added assurance of structural reliability is necessary.

As stated in 10 CFR 50.55a(g)(6)(ii)(D), *Reactor vessel head inspections*, licensees of pressurized-water reactors (PWR) are required to augment their ISI of the reactor vessel head (RVH) with ASME Code Case N-729-4, "Alternative Examination Requirements for PWR Reactor Vessel Upper Heads With Nozzles Having Pressure-Retaining Partial-Penetration Welds, Section XI, Division 1," with conditions.

Enclosure

As stated, in part, in 10 CFR 50.55a(z), alternatives to the requirements of paragraph (g) of 10 CFR 50.55a may be used when 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.

Based on the above, and subject to the following technical evaluation, the NRC staff finds that regulatory authority exists for the licensee to request and the NRC to authorize the alternative requested by the licensee.

3.0 TECHNICAL EVALUATION

3.1 Relief Request I4R-10

3.1.1 ASME Code Components Affected

The RPVHPNs and their associated partial penetration J-groove attachment welds are ASME Code, Section XI, Class 1, components. Pursuant to 10 CFR 50.55a(g)(6)(ii)(D), augmented ISI requirements: Reactor vessel head inspections - (1) All licensees of pressurized water reactors must augment their ISI program with ASME Code Case N-729-4, "Alternative Examination Requirements for PWR Reactor Vessel Upper Heads With Nozzles Having Pressure-Retaining Partial-Penetration Welds, Section XI, Division 1," subject to the conditions specified in paragraphs (g)(6)(ii)(D)(2) through (4) of 10 CFR 50.55a. In accordance with ASME Code Case N-729-4 (Table 1), the RPVHPNs and their associated attachment welds are classified as Item No. 4.20. Each of the Braidwood units have 78 RPVHPNs numbered P-1 through P-78. The RPVHPN No. P-69 for Unit 1 was previously repaired in accordance with RR I3R-09 during the previous inspection interval and was approved for use by NRC letter dated March 29, 2012 (ADAMS Accession No. ML120790647). The RPVHPNs are 4-inch nominal outside diameter and are fabricated with Inconel Alloy 600, SB-167.

3.1.2 Applicable Code Edition and Addenda

The applicable Code of Record for the fourth 10-year ISI interval for Braidwood is the 2013 Edition of the ASME Code, Section XI. Additionally, examinations of the RPVHPNs are performed in accordance with 10 CFR 50.55a(g)(6)(ii)(D), which specifies the use of Code Case N-729-4, with conditions.

The licensee stated that the applicable Code of Construction (hereafter known as Construction Code) for Braidwood is the 1971 Edition through Summer 1973 Addenda of the ASME Code, Section III.

3.1.3 Applicable Code Requirements

ASME Code, Section XI, article IWA-4000, contains requirements for the removal of defects from and welded repairs performed on ASME Code components. The specific ASME Code requirements for which use of a proposed alternative is requested are promulgated in ASME Code, Section XI, paragraph IWA-4421, which requires that:

Defects shall be removed or mitigated in accordance with the following requirements:

- (a) Defect removal by mechanical processing shall be in accordance with IWA-4462.

- (b) Defect removal by thermal methods shall be in accordance with IWA-4461.
- (c) Defect removal or mitigation by welding or brazing shall be in accordance with IWA-4411.
- (d) Defect removal or mitigation by modification shall be in accordance with IWA-4340. However, use of mitigation by modification provisions of IWA-4340 are specifically prohibited by 10 CFR 50.55a(b)(2)(xxv).

ASME Code, Section XI, IWA-4411, requires that repairs and installation of replacement items shall be performed in accordance with the Owner's Design Specification and the original Construction Code of the component or system.

The original Construction Code of the reactor vessel is ASME Code, Section III, 1971 Edition through summer 1973 Addenda. The applicable requirements of the original Construction Code from which relief is requested are ASME Code, Section III, paragraph NB-4131, which requires that defects in base material are eliminated, repaired, and examined in accordance with the requirements of NB-2500. These requirements include removal of defects by grinding or machining per NB-2538. Additionally, defect removal must be verified by magnetic particle or liquid penetrant examination in accordance with NB-2545 or NB-2546 and satisfy the design thickness requirements of NB-3000 and, if needed, perform repair using welding per NB-2539.

ASME Code, Section III, subparagraph NB-2539.1, pertains to the removal or reduction of a defect to an acceptable size by mechanical or thermal cutting or gouging.

ASME Code, Section III, subparagraph NB-2539.4, states that each repair shall be examined by magnetic particle or by liquid penetrant examination in accordance with the requirements of NB-2545 or NB-2546. Additionally, repair cavities the depth of which exceeds the lesser of 3/8 inch or 10 percent of the section thickness, shall be radiographed after repair in accordance with NB-5110 and to the acceptance standards of NB-5320.

ASME Code, Section III, subsubarticle NB-4450, pertain to the repair of weld metal defects, specifically, paragraph NB-4451, states, in part, that, unacceptable defects in weld-metal shall be removed by grinding or machining following the requirements of NB-4452 and repaired if needed following the requirements of NB-4453. Subparagraph NB-4453.1 addresses removal of defects in welds by mechanical grinding or thermal gouging and requires that the areas shall be examined by magnetic particle or liquid penetrant examinations in accordance the acceptance standards of NB-5340 or NB-5350, prior to repair using welding.

3.1.4 Reason for Request

Exelon stated that it will perform the examinations for the Braidwood RPVHPNs in accordance with ASME Code Case N-729-4, as amended by 10 CFR 50.55a and NRC-approved alternatives. The licensee further stated that flaw indications requiring repair may be found on the RPVHPN tube material and/or the J-groove attachment welds located on the underside of the reactor vessel head. Consequently, the licensee is requesting relief from the requirements of ASME Section XI, paragraph IWA-4411, to perform permanent repair of future defects that may be identified on the Braidwood RPVHPN tube materials and/or the J-groove attachment welds in accordance with the rules of the ASME Code, Section III (Construction Code), as described in RR I4R-10.

Specifically, Exelon is seeking relief from the following requirements of ASME Code, Section III, for the Braidwood RPVHPNs:

The requirements of ASME Section III, paragraphs NB-4131, NB-2538, and NB-2539 to eliminate and repair defects in base materials.

The requirements of ASME Section III, subsubarticle NB-4450 to repair defects in weld metal.

3.1.5 Proposed Alternative and Basis for Use

As an alternative to the relevant ASME Code, Section III, requirements described above, Exelon proposes to perform the repairs of RPVHPNs at Braidwood using an embedded flaw repair based on Westinghouse Commercial Atomic Power (WCAP)-15987-P, Revision 2-P-A, "Technical Basis for the Embedded Flaw Process for Repair of Reactor Vessel Head Penetrations," December 2003 (WCAP-15987-2) (ADAMS Accession No. ML040290246). By letter dated July 3, 2003 (ADAMS Accession No. ML031840237), this embedded flaw process was approved by the NRC as an alternative to the defect removal requirements of ASME Code, Section III. The licensee stated that it will use the flaw evaluation established in 10 CFR 50.55a(g)(6)(ii)(D), which specifies the use of ASME Code Case N-729-4, in lieu of the "Flaw Evaluation Guidelines," referred to in the NRC letter dated April 11, 2003 (ADAMS Accession No. ML030980322). The licensee's proposed alternative included certain additional modifications to the NRC-approved methodology, as described in Section 5.0 of the licensee's October 11, 2018, letter and further discussed in Section 3.7 of this evaluation.

In its justification of the proposed alternative the licensee stated that the embedded flaw repair is considered a permanent repair. Specifically, the licensee stated that if a primary water stress corrosion cracking (PWSCC) flaw remains isolated from the primary coolant environment, it cannot propagate. The licensee stated that since the overlay (Alloy 52/52M) weldment is considered resistant to PWSCC, a new PWSCC flaw cannot initiate and grow through the Alloy 52/52M overlay and reconnect the embedded flaw with primary water. Therefore, structural integrity of the affected J-groove weld and/or the RPVHPN will be maintained by the remaining unflawed portion of the component. The licensee further stated that Alloy 52/52M resistance to PWSCC has been demonstrated by multiple laboratory tests, as well as over 20 years of service experience in replacement steam generators.

The licensee stated that the residual stresses produced by the embedded flaw technique have been measured and found to be relatively low, indicating that no new flaws will initiate and grow in the area adjacent to the repair weld. Therefore, fatigue-driven crack growth is not a mechanism for further crack growth into the Alloy 52/52M overlay after the embedded flaw repair is implemented.

The licensee cited its recent submission of relief request I4R-10, Revision 2, and WCAP-16401, Revision 1, "Technical Basis for Repair Options for Reactor Vessel Head Penetration Nozzles and Attachment Welds: Byron [Station] and Braidwood, Units 1 and 2," by letter dated February 13, 2017 (ADAMS Accession No. ML17044A294). Specifically, the licensee requested the use of a proposed alternative for the repair and examinations of Byron RPVHPNs. The NRC staff approved RR I4R-10 for use at Bryon for the fourth ISI interval on March 6, 2017 (ADAMS Accession No. ML17062A428). The licensee stated that the current request for Braidwood uses the same approach as the one previously authorized for Byron. Additionally, NRC staff approved use of a similar RR I3R-09, Revision 1, for the third ISI interval at Braidwood on March 29, 2012 (ADAMS Accession No. ML1020790647). Subsequently, the

licensee used the latter during its Spring 2012 outage to perform an embedded flaw repair on Braidwood Unit 1 RPVHPN No. P-69.

Duration of Relief

The licensee submitted RR I4R-10 for the remainder of the fourth 10-year ISI interval at Braidwood which currently is scheduled to end on July 28, 2028, for Unit 1, and October 16, 2028, for Unit 2.

3.2 NRC Staff's Evaluation

The licensee requested to use the proposed alternative RR I4R-10 for Braidwood during the fourth ISI interval, under 10 CFR 50.55a(z)(1), on the basis that the proposed alternative provides an acceptable level of quality and safety. The proposed alternative for Braidwood is similar to a previously approved alternative for Byron approved on March 6, 2017 (ADAMS Accession No. ML17062A428). Additionally, the licensee has proposed to perform the embedded flaw repairs following the guidance of WCAP-15987, Revision 2-P-A, with certain modifications. By letter dated July 3, 2003, NRC staff provided a safety evaluation (SE) and found WCAP-15987-2 to be acceptable for referencing in licensing applications as an alternative to ASME Code requirements with the following conditions (ADAMS Accession No. ML031840237):

1. Licensees must follow the NRC flaw evaluation guidelines provided in the R. J. Barrett (NRC) letter to A. Marion (Nuclear Energy Institute), "Flaw Evaluation Guidelines," April 11, 2003. (ADAMS Accession No. ML030980322)
2. The crack growth rate referenced in WCAP-15987-P, Revision 2, is not applicable to Alloy 600 or Alloy 690 weld material, i.e., Alloy 52, 82, 152, and 182, filler material.
3. The nondestructive examination (NDE) requirements listed in the table below must be implemented for examinations of repairs made using the embedded flaw process.

Repair Location	Flaw Orientation	Repair Weld	Repair NDE	ISI NDE of the Repair Note 2
VHP Nozzle Inside Diameter (ID)	Axial	Seal	Ultrasonic testing (UT) and Surface	UT or Surface
VHP Nozzle ID	Circumferential	Note 1	Note 1	Note 1
VHP Nozzle Outside Diameter (OD) above J-groove weld	Axial or Circumferential	Note 1	Note 1	Note 1
VHP Nozzle OD below J-groove weld	Axial or Circumferential	Seal	UT or Surface	UT or Surface
J-groove weld	Axial	Seal	UT and Surface, Note 3	UT and Surface, Note 3
J-groove weld	Circumferential	Seal	UT and Surface, Note 3	UT and Surface, Note 3

Notes: 1. Repairs must be reviewed and approved separately by the NRC.

2. Inspection consistent with the NRC Order EA-03-009 dated February 11, 2003, and any subsequent changes (ADAMS Accession No. ML030380470).
3. Inspect with personnel and procedures qualified with UT performance-based criteria. Examine the accessible portion of the repaired region. The UT coverage plus surface coverage must equal 100 percent.

The licensee stated that the proposed alternative RR I4R-10 will use the methodology of the NRC-approved WCAP-15987-2-A, with additional modifications as described in Section 5 of the licensee's October 11, 2018, letter. The NRC staff reviewed the proposed alternative to ensure that it is consistent with the methodology of WCAP-15987-2-A or that any modifications would be acceptable under 10 CFR 50.55a(z)(1). As part of this review, the NRC staff identified the following technical differences between the methodology of WCAP-15987-2-A, and licensee's letter dated October 11, 2018:

- A. The Alloy 600 tube material with a flaw will be repaired with two Alloy 52/52M isolation weld layers rather than three layers.
- B. A circumferential flaw on the nozzle or tube inside diameter can be repaired using the seal weld technique without additional submission of the repair method for approval by the NRC.
- C. Prior to the application of the Alloy 52/52M seal weld repair on the reactor pressure vessel clad surface, the stainless steel (SS) head cladding will have three beads (one layer) of 309L SS installed 360 degrees around the interface of the clad and the J-groove weld metal as a buffer layer. The J-groove weld will be completely covered with three layers of Alloy 52/52M deposited 360 degrees around the nozzle and over the SS 309L buffer.
- D. In accordance with Notes 2 and 3 of the NRC acceptance for WCAP-15987-P-Revision 2-A, the NDE of the repair will be performed in accordance with ASME Code Case N-729-4, as conditioned by 10 CFR 50.55a(g)(6)(ii)(D).
- E. Surface examination of the embedded flaw repairs shall be performed to ensure the repair satisfies ASME Code, Section III, NB-5350, acceptance standards. The frequency of examination shall be as follows:
 - a. Perform surface examination during the first and second refueling outage after installation or performance of embedded flaw repair.
 - b. When the examination results above verify acceptable results, then the reinspection of the embedded flaw repair will be continued at a frequency of every other refueling outage. If these examinations identify unacceptable results that require flaw removal, flaw reduction to acceptable dimensions, or weld repair, then the requirements of a. above shall be applied during the next refueling outage.

The NRC staff reviewed the licensee's proposal to use only two layers of the seal weld over the Alloy 600 nozzle material, in lieu of three layers (paragraph A). The licensee's basis is that the two layers will still provide sufficient isolation of the flaw from the primary coolant environment,

therefore, eliminating continued PWSCC growth of the embedded flaw. Based on the current operating experience, which has demonstrated that two layers of Alloy 52/52M material have been sufficient to address possible dilution effects of the high chromium content of the Alloy 52/52M material, high chromium content is the principle reason for the material's increased resistance to PWSCC. The NRC staff performed a conservative deterministic assessment of hypothetical flaw growth through a similar overlay material and showed that flaw growth through the Alloy 52 seal weld would take significantly longer than the reinspection frequency for a repaired penetration nozzle in accordance with 10 CFR 50.55a(g)(6)(ii)(D). In addition, the concern of increased residual stresses in the Alloy 600 material that might still be exposed to primary coolant is a cause for concern for future flaw initiation. Because the repair can be effective using two weld layers, a smaller seal weld will generate less residual weld stresses in the base metal, therefore, two weld layers would be preferable to using three weld layers. Based on the above, the NRC staff finds this change provides an acceptable level of quality and safety.

The NRC staff reviewed the licensee's proposal to eliminate the submittal of a repair plan to the NRC staff for each circumferential flaw identified that initiates from the inside diameter of the tube or nozzle surface (paragraph B). The licensee detailed a generic repair plan in Section 5.1.2.b of its October 11, 2018, letter, and proposed alternative repair would be to partially excavate the flaw to reduce it to an acceptable size, examine it by UT or surface examination overlay with Alloy 52/52M, and examine by UT and surface examination after overlay installation. The licensee stated that alternatively, if required, the unacceptable ID circumferential flaw will be repaired in accordance with existing ASME Code requirements. Operating experience from past similar repairs has shown this repair technique is effective in arresting growth of PWSCC flaws. Based on the above, the NRC staff finds that the generic repair plan to address circumferential ID flaws of RPVHPN base material provides an acceptable level of quality and safety.

The NRC staff reviewed the licensee's proposal in paragraph C above that the stainless steel head cladding will have three beads of SS 309L buffer layer installed 360 degrees around the interface of the clad and the J-groove weld metal. The licensee's application of this layer is to prevent contamination of the Alloy 52 weld wire which is susceptible to produce fabrication defects in welding. The NRC staff finds the proposed alternative to be appropriate as the Alloy 52 weld is less susceptible to PWSCC than the Alloy 182 weld at the existing nozzle penetration and will fully cover the Alloy 182 weld material. In addition, the SS 309L buffer layer, applied only to the periphery of the J-groove weld, will allow for a better-quality seal weld. Based on the above, the NRC staff finds this change provides an acceptable level of quality and safety.

The NRC staff reviewed the licensee's proposal for the inspection requirements of the seal weld and future ISI requirements (paragraph D, above). At the time when WCAP-15987-2 was approved by the NRC staff, the regulatory requirements for PWR vessel head inspections were dictated by NRC Order EA-03-009. In September 2008, by rule, the NRC established 10 CFR 50.55a(g)(6)(ii)(D) which defines the current regulatory requirements for reactor vessel upper head inspections and rescinded NRC Order EA-03-009. The NRC staff finds that the licensee's proposed alternative inspections for the reactor vessel upper head penetration nozzles under the current regulatory guidelines of ASME Code Case N-729-4, "Alternative Examination Requirements for PWR Reactor Vessel Upper Heads With Nozzles Having Pressure-Retaining Partial-Penetration Welds, Section X1, Division 1," satisfy the previous NRC conditions on the NDE required for implementation of an embedded flaw repair under WCAP-15987-2. Based on the above, the NRC staff finds these changes provide an acceptable level of quality and safety.

The NRC staff reviewed the licensee's proposal regarding alternatives for ISI of embedded flaw repairs (paragraph E, above). The licensee proposes to perform surface examinations of embedded flaw repair welds for the first two refueling outages after the repairs and then every other refueling outage in lieu of every refueling outage following these weld repairs. The alternative in paragraph E and the licensee's supporting information are identical to the previous NRC-approved alternative for Byron and Braidwood, as described in the NRC staff SE of RRs IR3-09 and IR3-20, Revision 2, dated January 21, 2016 (ADAMS Accession No. ML16007A185). Based on the above, the NRC staff finds that the changes in the licensee's proposed alternative from the NRC approved WCAP-15987-2 provide an acceptable level of quality and safety.

In order to support the use of WCAP-15987-2 with a plant-specific technical basis for the use of the embedded flaw repair, the licensee previously submitted WCAP-16401, "Technical Basis for Repair Options for Reactor Vessel Head Penetration Nozzles and Attachment Welds: Byron and Braidwood, Units 1 and 2," Revision 1, January 2017 (ADAMS Accession No. ML17044A294). Based on WCAP-16401, the NRC staff finds sufficient technical basis to establish that any remaining ligaments of the flaws identified by the licensee in RPVHPN base material to be safely encapsulated for 20 years of operation. Based on WCAP-16401, the NRC staff finds sufficient technical basis to establish that any remaining ligaments of the flaws identified by the licensee in RPVHPN nozzle J-groove weld material to be safely encapsulated for 40 years of operation.

Based on the above, and in accordance with the previous NRC conditions imposed on the use of WCAP-15987-2, and plant-specific technical basis for the embedded flaw repair, the NRC staff confirms that the licensee has followed the NRC flaw evaluation guidelines and will implement the appropriate NDE for any potential repairs to RPVHPNs and associated J-groove welds at Braidwood. In accordance with the NRC SE for WCAP-15987-2 dated July 3, 2003, the embedded flaw repair process is an acceptable alternative to ASME Code requirements and provides an acceptable level of quality and safety, as required by 10 CFR 50.55a(z)(1).

4.0 CONCLUSION

Based on the above evaluation, the NRC staff finds that the proposed alternative provides an acceptable level of quality and safety. Accordingly, the NRC staff concludes that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(z)(1). Therefore, the NRC staff authorizes the use of the proposed alternative described in RR I4R-10, for the fourth 10-year ISI interval at Braidwood, Unit 1, which began on August 29, 2018, and is scheduled to end on July 28, 2028, and Braidwood, Unit 2, which began on November 5, 2018, and is scheduled to end on October 16, 2028.

All other ASME Code, Section XI, requirements for which relief was not specifically requested and authorized herein by the NRC staff remain applicable, including the third-party review by the Authorized Nuclear Inservice Inspector.

Principal Contributor: Roger Kalikian, NRR/DMLR

Date of issuance: June 5, 2019

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2 – RELIEF FROM THE REQUIREMENTS OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS CODE (EPID L-2018-LLR-0131) DATED JUNE 5, 2019

DISTRIBUTION:

PUBLIC

RidsACRS MailCTR Resource

RidsNrrDmlrMphb Resource

RidsNrrDorlLpl3 Resource

RidsNrrLASRohrer Resource

RidsNrrPMBraidwood Resource

RidsRgn3MailCenter Resource

ADAMS Accession No.: ML19141A020

*via email

OFFICE	NRR/DORL/LPL3/PM	NRR/DORL/LPL3/LA	NRR/DMLR/MPHB/BC
NAME	JWiebe	SRohrer	SCumblidge*
DATE	5/22/19	5/22/19	5/10/19
OFFICE	NRR/DORL/LPL3/BC (A)		
NAME	LRegner		
DATE	6/5/19		

OFFICIAL RECORD COPY