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RS-21-117 10 CFR 50.90

December 9, 2021

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Braidwood Station, Units 1 and 2
Renewed Facility Operating License No. NPF-72 and NPF-77
NRC Docket Nos. STN 50-456 and STN 50-457

Subject: Application for Amendment to Renewed Facility License to Remove License Condition 2.C.(12)(d)

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (EGC) requests an amendment to the Renewed Facility License No. NPF-77 for Braidwood Station, Unit 2 (Braidwood).

This proposed amendment request revises the Renewed Facility Operating License (RFOL) for Braidwood Station Unit 2 to remove license condition 2.C.(12)(d). The license condition is no longer applicable as the Pressure Temperature and Limits Curves have been updated for the Period of Extended Operations (PEO) and NRC has approved WCAP-16143, Revision 1 (Reference 2).

Although the proposed change only affects Braidwood Station Unit 2, this submittal is being docketed for Braidwood Station Units 1 and 2 since the Technical Specifications (TS) are common to Units 1 and 2 for the Braidwood Station.

The attached request is subdivided as follows:

- Attachment 1 provides an evaluation of the proposed change.
- Attachment 2 provides Braidwood Unit 2 Proposed Renewed Facility Operating License (Markup).
- Attachment 3 provides Braidwood Unit 2 Proposed Renewed Facility Operating License (Clean).

The proposed change has been reviewed by Braidwood Plant Operations Review Committee in accordance with the requirements of the EGC Quality Assurance Program.

Approval of the proposed amendment is requested by December 9, 2022. Once approved the amendment shall be implemented within 60 days.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), EGC is notifying the State of Illinois of this application for license amendment by transmitting a copy of this submittal and its attachment to the designated State Officials. This submittal contains no regulatory commitments. Should you have any questions concerning this submittal, please contact Mr. Phillip A. Henderson at (630) 657-4327.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 9th day of December 2021.

Respectfully,

Lueshen, Kevin

Digitally signed by Lueshen, Kevin
Date: 2021.12.09 15:54:32 -06'00'

Kevin Lueshen
Sr. Manager – Licensing
Exelon Generation Company, LLC

Attachments:
1) Evaluation of the Proposed Change
2) Braidwood Unit 2 Proposed Renewed Facility Operating License (Markup)
3) Braidwood Unit 2 Proposed Renewed Facility Operating License (Clean)

cc: NRC Regional Administrator, Region III
NRC Senior Resident Inspector – Braidwood Station
Illinois Emergency Management Agency – Division of Nuclear Safety

Subject: Application for Amendment to Renewed Facility License to Remove License Condition 2.C.(12)(d)

1.0 SUMMARY DESCRIPTION

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (EGC) requests amendment to the Renewed Facility Operating License (RFOL) NPF-77 for Braidwood Station, Unit 2 (Braidwood).

This proposed amendment would remove license condition 2.C.(12)(d). The requested RFOL amendment supports continued operation of Braidwood Unit 2 with Reactor Pressure Vessel (RPV) Head Stud No. 35 removed.

2.0 DETAILED DESCRIPTION

2.1 Proposed Change

The proposed change to Braidwood Unit 2 RFOL is being requested as described below.

License Condition 2.C.(12)(d) currently states:

(d) The Braidwood Unit 2 reactor head closure stud hole location No. 35 will be repaired no later than June 18, 2027, or before the end of the last refueling outage prior to the period of extended operation (whichever occurs later), so that all 54 reactor head closure studs are operable and tensioned during the period of extended operation.

The revised License Condition 2.C.(12)(d) will state:

(d) Deleted

Attachment 2 provides the existing RFOL page for Braidwood Station Unit 2, marked up to show the proposed change. To assist the NRC's review of the proposed change, Attachment 3 provides the revised (i.e., camera-ready) RFOL page.

2.2 Background

Braidwood Unit 2 began commercial operation in the fall of 1988. In 1991, during the second Braidwood Unit 2 refueling outage, RPV head closure stud location number 35 (stud 35) became stuck during RPV disassembly. Attempts to remove the stud included "soaking" the stud with an approved lubricant. However, the stud could not be removed without excessive or destructive methods. Since the stud was only withdrawn 15/32 inches (4 turns), it was decided to leave the stud in place during the refueling outage and protect it from borated water when the reactor cavity was flooded. An engineering evaluation was completed in 1991 which justified operating Braidwood Unit 2 with stud 35 tensioned and withdrawn 15/32 of an inch from the RPV flange. From the fall of 1991 until the spring of 1994, Braidwood Unit 2 stud 35 was tensioned during plant operation and remained in the RPV flange during refueling outages.

However, the protruding portion of stud 35 was an obstacle to fuel moves during a refueling outage. Therefore, in the spring of 1994, an evaluation was developed that demonstrated the Braidwood Unit 2 RPV could be placed in service without stud 35 tensioned. The evaluation

concluded that the increased stud stresses and flange separation in the area corresponding to stud 35 and the adjacent studs were not significant, and the O-ring configuration would ensure the RPV flange remain sealed during reactor operation. The evaluation confirmed that without stud 35 tensioned the structural integrity of the RPV satisfied the 1971 Edition of ASME Section III, with addenda, through Summer 1973.

Engineering authorized a new configuration without RPV stud 35 tensioned during power operation. In the spring of 1994 refueling outage, the portion of stud 35 that protruded above the RPV flange was removed and Braidwood Unit 2 started up from the refueling outage with 53 studs tensioned. UFSAR Table 5.3-2 was updated to reflect the new configuration, with the periodic UFSAR update submitted to the NRC in accordance with 10 CFR 50.71(e) (Accession Number 9812160122).

Braidwood then developed plans to restore the capability of stud 35. The plans included destructively removing the remaining portion of stud 35 and a contingency modification in case the RPV flange threads were damaged to the extent in which the threads could not be reused. The contingency modification would require the installation of a larger diameter sleeve in the RPV vessel flange hole. The outer male threads of the sleeve would thread into new female threads that would be machined into the larger RPV flange hole. A new stud would then be threaded into the sleeve. During the 2002 refueling outage the plan was implemented and the remaining portion of stud 35 was destructively removed from the RPV flange hole. Inspection of the RPV flange hole threads showed significant damage and it was concluded that the RPV flange hole could not be reused as found. Therefore, the site commenced the contingency modification, which first required boring a larger hole in the RPV flange hole and then machining new threads in the RPV flange hole. However the vendor's equipment malfunctioned and, as a result, the station decided not to continue the repair in the refueling outage and to continue operating Braidwood Unit 2 with 53 studs tensioned during operation as previously evaluated. An engineering change was performed authorizing the new configuration of the RPV flange hole in stud location 35.

During the license renewal for Braidwood Unit 2, EGC committed to the License Condition 2.C.(12)(d) for the repair of stud hole location 35. This License Condition was due to the fact that the Pressure and Temperature Limits Report Technical Specification (TS) 5.6.6 referenced a document WCAP-16143, that did not reflect the Braidwood Unit 2 53 studs configuration and the Pressure Temperature and Limits Curves did not reflect the period of extended operation.

Since that time, Braidwood Unit 2 has been approved by the NRC to utilize WCAP-16143, Revision 1, which has been revised to include an analysis of the RPV with 53 head studs (ML15232A441). The Pressure and Temperature Limits Curves have been implemented to cover the period of extended operation. The updated Pressure and Temperature Limits Report reflects the latest revision of WCAP-16143 (Revision 1) and the report date (October 2014) as required by TS 5.6.6. Additionally, as part of a License Amendment activity, Tech Spec Table 1.1-1, “MODES”, was updated to add “required” to the description of closure bolts tensioned.

3.0 TECHNICAL EVALUATION

3.1 System Description

The reactor vessel closure studs, nuts, and washers are designed, fabricated, and examined in accordance with the requirements of ASME Section III. The closure studs are fabricated of SA-540, Class 3 Grade B23 material. The closure stud material meets the fracture toughness requirements of ASME Section III, and 10 CFR 50 Appendix G. Inservice nondestructive examinations are performed in accordance with the station ISI program.

The studs, nuts, and washers are removed from the refueling cavity and stored at convenient locations on the containment operating deck prior to removal of the reactor closure head and refueling cavity flooding. Therefore, the reactor closure studs are never exposed to the borated refueling cavity water. Additional protection against the possibility of incurring corrosion effects is ensured by the use of a manganese base phosphate surfacing treatment.

3.2 WCAP-16143, Revision 1

WCAP-16143 has been revised to include an analysis of the RPV with 53 head studs. Specifically, WCAP-16143, Revision 1 (Reference 5), addresses the effect of the missing RPV head stud on the technical basis for elimination of the 10 CFR 50, Appendix G fracture toughness requirements. The stress analysis and fracture mechanics evaluation for the "missing head stud" case determined that, for the boltup condition, the "all studs intact" case is more limiting. The results of the missing head stud evaluation remain in agreement with the conclusions of WCAP-16143, Revision 0. It should be noted that WCAP-16143, Revision 1, addresses both the originally designed 54 RPV head stud configuration and the 53 RPV head stud configuration for all Braidwood and Byron units. The NRC reviewed and approved WCAP-16143, Revision 1, for use at Braidwood Unit 2 (Reference 2).

Amendment 186 that was issued to approve the use of WCAP-16143, Revision 1 additionally updated Braidwood Technical Specification Table 1.1-1. That change is included below for reference.

Prior to Amendment 186 TS Notes (b) and (c) to Table 1.1-1

(b) All reactor vessel head closure bolts fully tensioned.

(c) One or more reactor vessel head closure bolts less than fully tensioned.

Current TS Notes (b) and (c) to Table 1.1-1

(b) All required reactor vessel head closure bolts fully tensioned.

(c) One or more required reactor vessel head closure bolts less than fully tensioned.

In summary, WCAP-16143, Revision 1, and the change to the Notes of Table 1.1-1 allow for Braidwood Unit 2 to be operated with only 53 studs tensioned.

3.3 Pressure Temperature and Limits Report

The operating curves including pressure-temperature limitations are calculated in accordance with 10 CFR 50, Appendix G, and ASME Code Section XI, Appendix G requirements. In addition, Braidwood Unit 2 has received an exemption from the 10 CFR 50, Appendix G, flange region requirements (Reference 1). The exemption is approved for a 54 studs and 53 studs configuration (Reference 2). The exemption allows for removal of the pressure limitations that are governed by the limiting RT_{NDT} of the closure head flange or vessel flange. The NRC approved a license amendment number 217 for Braidwood Technical Specification (TS) 5.6.6, "Reactor Coolant System (RCS) Pressure and Temperature Limits Report (PTLR)," to add use of approved methodologies to TS 5.6.6 for determining RCS pressure-temperature limits (References 3 and 4).

On October 25, 2021 Braidwood Unit 2 implemented Pressure and Temperature Limits Report Revision 8. The new Pressure and Temperature Limit Curves are valid for 57 effective full power years. As required by TS 5.6.6, Braidwood Unit 2 Pressure and Temperature Limits Report Revision 8 was sent to the NRC on October 27, 2021 (ML21300A076). Revision 8 of the updated Pressure and Temperature Limits Report reflects the latest revision of WCAP-16143 (Revision 1) and the report date (October 2014) as required by TS 5.6.6.

3.4 Aging Management

The RPV disassembly and assembly procedures at Braidwood are periodically revised to ensure that best practices are utilized to eliminate or mitigate the potential causes for stud damage. For example, the Braidwood station RPV disassembly and assembly procedures have been revised in excess of 25 times each, since stud 35 became stuck in 1991. These revisions include requiring the use of the Biach Industries electrical stud drive tool (ESDT), which is capable of supporting the weight of the stud during installation and removal, thereby minimizing the stress on the RPV flange and stud threads and requiring inspection for foreign material that could be concealed under the RPV head prior to installation. Given that Braidwood has removed, handled, stored, and reinstalled individual RPV head closure studs over 2200 times since commercial operation began, one (1) stuck stud, although not desired, provides a positive indication that these procedures have significantly minimized the potential causes for stud damage. There is confidence that these procedures provide an effective process to eliminate or mitigate the potential causes for a stuck RPV stud, including those that are aging-related, and that ongoing improvements implemented through the operating experience and corrective action program will ensure that best practices are utilized to minimize the occurrence of stuck studs during the period of extended operation.

In addition, the RPV flange stud hole 35 is cleaned and inspected prior to reactor vessel flood-up. The reactor vessel flange stud hole 35 is cleaned, inspected, and borated water is removed after the reactor cavity is drained. These specific aging management requirements are identified in the reactor closure head removal and installation procedures. These procedures steps apply to each reactor vessel flange hole, including stud hole 35. Stud hole location 35 remains dry during the operating cycle of Braidwood Unit 2.

4.0 REGULATORY ANALYSIS

4.1 Applicable Regulatory Requirements/Criteria

Section 182a of the Atomic Energy Act requires applicants for nuclear power plant operating licenses to include technical specifications as part of the license. The Commission's regulatory requirements related to the content of the technical specifications are contained in Title 10, Code of Federal Regulations (10 CFR), Section 50.36, "Technical Specifications," of 10 CFR Part 50 "Domestic Licensing of Production and Utilization Facilities." The Technical Specification requirements in 10 CFR 50.36 include the following categories: (1) safety limits, limiting safety systems settings and control settings, (2) limiting conditions for operation, (3) surveillance requirements, (4) design features, and (5) administrative controls. As required by 10 CFR 50.36(c)(5), administrative controls are the provisions relating to organization and management, procedure, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner.

TS 5.6.6, "Reactor Coolant System (RCS) Pressure and Temperature Limits Report (PTLR)," Item (b) requires that the analytical methods used to determine the RCS pressure and temperature limits shall be those previously reviewed and approved by the NRC; and provides a specific list of references.

WCAP-16143, Revision 1, addresses the effect of the missing RPV head stud, on the technical basis for elimination of the 10 CFR 50, Appendix G fracture toughness requirements; and has been approved by the NRC on October 28, 2015 (ML15232A441). In summary, the stress analysis and fracture mechanics evaluation for the "missing head stud" case determined that, for the boltup condition, the "all studs intact" case is more limiting. The results of the missing RPV head stud evaluation remain in agreement with the conclusions of WCAP-16143, Revision 0. It should be noted that WCAP-16143, Revision 1, addresses both the originally designed 54 RPV head stud configuration and the 53 RPV head stud configuration for all Braidwood and Byron units.

On October 25, 2021, Braidwood Unit 2 implemented Pressure and Temperature Limits Report Revision 8. The new Pressure and Temperature Limit Curves are valid for 57 effective full power years. The new revision applies WCAP-16143 (Reference 5) for the elimination of flange requirements. This exemption to the method has been previously reviewed and accepted by the NRC in References 1 and 2. As required by TS 5.6.6 Braidwood Unit 2 Pressure and Temperature Limits Report Revision 8 was sent to the NRC on October 27, 2021 (ML21300A076).

4.2 No Significant Hazards Consideration

Exelon Generation Company, LLC (EGC) requests an amendment to the Renewed Facility Operating License (RFOL) for Renewed Facility License No. NPF-77 for Braidwood Station, Unit 2. This proposed amendment would remove license condition 2.C.(12)(d). The requested amendment would allow operation of Braidwood Unit 2 with Reactor Pressure Vessel (RPV) with Head Stud No. 35 removed through the period of extended operation.

EGC has evaluated the proposed change against the criteria of 10 CFR 50.92(c) criteria to determine if the proposed change results in any significant hazards. The following is the evaluation of each of the 10 CFR 50.92(c) criteria:

1) Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No.

   WCAP-16143, Revision 1, permits operation with a 53 RPV stud configuration as opposed to 54 studs. Operation with 53 studs was approved by the NRC by Safety Evaluation dated December 31, 2015. The Braidwood Unit 2 Revision 8 Pressure Temperature Limits Report was implemented on October 25, 2021. The proposed license amendment does not involve a change to any plant equipment that initiates or mitigates a plant accident. The change is administrative and therefore, the proposed change would not affect the functionality of the associated structures, systems, and components (SSC) in the aging management programs (AMP).

   Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2) Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

   Response: No.

   The proposed changes in this license amendment request are administrative in nature because they remove a License Condition that is no longer applicable. The proposed change does not modify or add any equipment or involve controlling or operating equipment. It is an administrative change that will allow changes to a license condition. There are no postulated hazards, new or different, contained in this amendment as the amendment does not change design or operational requirements of any SSC. The change does not create the possibility of a new or different kind of accident due to credible new failure mechanisms, malfunctions, or accident initiators that not considered in the design and licensing bases.

   Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3) Does the proposed amendment involve a significant reduction in a margin of safety?

   Response: No.

   The proposed changes in this license amendment request are administrative in nature because they remove a License Condition that is no longer applicable. The proposed change does not change any of the controlling values of parameters used to avoid exceeding regulatory or licensing limits. The proposed change does not affect a design

basis or safety limit, or any controlling value for a parameter established in the UFSAR or the license.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, EGC concludes that the proposed amendments do not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

4.3 Precedent

There is no direct precedent in which similar License Renewal License Conditions have been removed.

4.4 Conclusion

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

5.0 ENVIRONMENTAL CONSIDERATION

EGC has determined that the proposed amendments would change requirements with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendments do not involve (i) a significant hazards consideration, (ii) a significant change in the types or a significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendments.

6.0 REFERENCES

1. Letter from R.F. Kuntz (U.S. Nuclear Regulatory Commission) to C. M. Crane (Exelon Generation Company, LLC), "Byron Station, Units 1 and 2, and Braidwood Station, Units 1 and 2 – Exemption from the Requirements of 10 CFR Part 50, Appendix G" dated November 22, 2006 (ML061890003).

2. Letter from J. S. Wiebe (U.S. Nuclear Regulatory Commission) to B. C. Hanson (Exelon Generation Company, LLC), "Braidwood Station, Units 1 and 2, and Byron

Station, Units 1 and 2 – Issuance of Amendments to Utilize WCAP-16143-P, Revision 1, "Reactor Vessel Closure Head/Vessel Flange Requirements Evaluation for Byron/Braidwood Units 1 and 2," dated October 28, 2015 (ML15232A441).

3. Letter from J. S. Wiebe (U.S. Nuclear Regulatory Commission) to B. C. Hanson (Exelon Generation Company, LLC), "Braidwood Station, Units 1 and 2, and Byron Station, Units 1 and 2 – Exemption of the Requirements of 10 CFR 50.61 and 10 CFR 50, Appendix G," dated August 31, 2020 (ML20022A336).

4. Letter from J. S. Wiebe (U.S. Nuclear Regulatory Commission) to B. C. Hanson (Exelon Generation Company, LLC), "Braidwood Station, Units 1 and 2, and Byron Station, Units 1 and 2 – Issuance of Amendments to Regarding Reactor Coolant System Pressure and Temperature Limits Report Technical Specifications," dated September 18, 2020 (ML20163A046).

5. WCAP-16143-P Revision 1 Reactor Vessel Closure Head/Vessel Flange Requirements Evaluation for Byron/Braidwood Units 1 and 2 (ML14289A580).

6. WCAP-14040-A, "Methodology Used to Develop Cold Overpressure Mitigating System Setpoints and RCS Heatup and Cooldown Limit Curves", J.D. Andrachek, et al., May 2004.

7. NUREG-2190, Safety Evaluation Report Related to the License Renewal of Byron Station, Units 1 and 2, and Braidwood Station, Units 1 and 2 (ML15350A038/ML15350A041)

ATTACHMENT 2

Braidwood Station, Unit 2
Renewed Facility Operating License No. NPF-77
NRC Docket No. STN 50-457

Proposed Renewed Facility Operating License (Mark-Up)

(c) The flux thimble tube corrective actions, inspections, and replacements identified in the SER, Commitment No. 24, for Braidwood Units 1 and 2, shall be implemented in accordance with the schedule in the Commitment. Periodic eddy current testing/inspections of all flux thimble tubes shall be performed at least every two refueling outages, and the data shall be trended and retained in auditable form. A flux thimble tube shall not remain in service for more than two (2) operating fuel cycles without successful completion of eddy current testing for that thimble tube.

Deleted.

(d) ~~The Braidwood Unit 2 reactor head closure stud hole location No. 35 will be repaired no later than June 18, 2027, or before the end of the last refueling outage prior to the period of extended operation (whichever occurs later), so that all 54 reactor head closure studs are operable and tensioned during the period of extended operation.~~

(13) Adoption of 10 CFR 50.69, "Risk-informed categorization and treatment of structures, systems, and components for nuclear power plants"

Exelon is approved to implement 10 CFR 50.69 using the processes for categorization of Risk-Informed Safety Class (RISC)-1, RISC-2, RISC-3, and RISC-4 structures, systems, and components (SSCs) using:

Probabilistic Risk Assessment (PRA) models to evaluate risk associated with internal events, including internal flooding, and internal fire; the shutdown safety assessment process to assess shutdown risk; the Arkansas Nuclear One, Unit 2 (ANO-2) passive categorization method to assess passive component risk for Class 2, Class 3, and non-Code class SSCs and their associated supports; and the results of non-PRA evaluations that are based on the IPEEE Screening Assessment for External Hazards, i.e., seismic margin analysis (SMA) to evaluate seismic risk, and a screening of other external hazards updated using the external hazard screening significance process identified in ASME/ANS PRA Standard RA-Sa-2009; as specified in the license amendment No. 198, dated October 22, 2018.

Exelon will complete the updated implementation items listed in Attachment 1 of Exelon letter to NRC dated September 13, 2018, prior to implementation of 10 CFR 50.69. All issues identified in the attachment will be addressed and any associated changes will be made, focused scope peer reviews will be performed on changes that are PRA upgrades as defined in the PRA standard (ASME/ANS RA-Sa-2009, as endorsed by RG 1.200, Revision 2), and any findings will be resolved and reflected in the PRA of record prior to implementation of the 10 CFR 50.69 categorization process.

ATTACHMENT 3

Braidwood Station, Unit 2
Renewed Facility Operating License No. NPF-77
NRC Docket No. STN 50-457

Proposed Renewed Facility Operating License (Clean)

(c) The flux thimble tube corrective actions, inspections, and replacements identified in the SER, Commitment No. 24, for Braidwood Units 1 and 2, shall be implemented in accordance with the schedule in the Commitment. Periodic eddy current testing/inspections of all flux thimble tubes shall be performed at least every two refueling outages, and the data shall be trended and retained in auditable form. A flux thimble tube shall not remain in service for more than two (2) operating fuel cycles without successful completion of eddy current testing for that thimble tube.

(d) Deleted.

(13) Adoption of 10 CFR 50.69, "Risk-informed categorization and treatment of structures, systems, and components for nuclear power plants"

Exelon is approved to implement 10 CFR 50.69 using the processes for categorization of Risk-Informed Safety Class (RISC)-1, RISC-2, RISC-3, and RISC-4 structures, systems, and components (SSCs) using:

Probabilistic Risk Assessment (PRA) models to evaluate risk associated with internal events, including internal flooding, and internal fire; the shutdown safety assessment process to assess shutdown risk; the Arkansas Nuclear One, Unit 2 (ANO-2) passive categorization method to assess passive component risk for Class 2, Class 3, and non-Code class SSCs and their associated supports; and the results of non-PRA evaluations that are based on the IPEEE Screening Assessment for External Hazards, i.e., seismic margin analysis (SMA) to evaluate seismic risk, and a screening of other external hazards updated using the external hazard screening significance process identified in ASME/ANS PRA Standard RA-Sa-2009; as specified in the license amendment No. 198, dated October 22, 2018.

Exelon will complete the updated implementation items listed in Attachment 1 of Exelon letter to NRC dated September 13, 2018, prior to implementation of 10 CFR 50.69. All issues identified in the attachment will be addressed and any associated changes will be made, focused scope peer reviews will be performed on changes that are PRA upgrades as defined in the PRA standard (ASME/ANS RA-Sa-2009, as endorsed by RG 1.200, Revision 2), and any findings will be resolved and reflected in the PRA of record prior to implementation of the 10 CFR 50.69 categorization process.