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10 CFR 50
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February 11, 2019

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

Peach Bottom Atomic Power Station, Units 2 and 3
Renewed Facility Operating License Nos. DPR-44 and DPR-56
NRC Docket Nos. 50-277 and 50-278

Subject: Supplement No. 3 - Changes to the Peach Bottom Atomic Power Station, Units 2 and 3, Subsequent License Renewal Application

References:

1. Letter from Michael P. Gallagher, Exelon Generation Company, LLC (Exelon) to NRC Document Control Desk, dated July 10, 2018, "Application for Subsequent Renewed Operating Licenses"

2. Letter from Michael P. Gallagher, Exelon Generation Company, LLC (Exelon) to NRC Document Control Desk, dated September 14, 2018, "Changes to the Peach Bottom Atomic Power Station, Units 2 and 3, Subsequent License Renewal Application" (Supplement No. 1)

3. Letter from Michael P. Gallagher, Exelon Generation Company, LLC (Exelon) to NRC Document Control Desk, dated January 23, 2019, "Changes to the Peach Bottom Atomic Power Station, Units 2 and 3, Subsequent License Renewal Application" (Supplement No. 2)

In Reference 1, Exelon submitted the Subsequent License Renewal Application (SLRA) for the Peach Bottom Atomic Power Station, Units 2 and 3 (PBAPS). In References 2 and 3, Exelon submitted Supplement Nos. 1 and 2 to the SLRA for PBAPS. The purpose of this letter is to provide Supplement No. 3 to the SLRA for PBAPS. Supplement No. 3 includes three changes to the SLRA which provide additional information and clarifications in the SLRA to address the NRC Safety Review Audit information needs.

Enclosure A to this letter provides a description of each change, and corresponding mark-ups to affected portions of the SLRA, thereby supplementing the PBAPS SLRA.

Enclosure B to this letter provides an update to the PBAPS Subsequent License Renewal Commitment List (SLRA Appendix A, Section A.5). There are no other new or revised regulatory commitments contained in this letter.

This submittal has been discussed with the NRC License Renewal Senior Project Manager for the PBAPS Subsequent License Renewal project.

If you have any questions, please contact Mr. David Distel, Licensing Lead, Exelon License Renewal Projects, at 610-765-5517.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 11th day of February 2019.

Respectfully submitted,

Michael P. Gallagher
Vice President - License Renewal and Decommissioning
Exelon Generation Company, LLC

Enclosures: A. Changes to the PBAPS Subsequent License Renewal Application
B. PBAPS Subsequent License Renewal Commitment List Update

cc: Regional Administrator – NRC Region I
NRC Senior Project Manager (Safety Review), NRR-DMLR
NRC Project Manager (Environmental Review), NRR-DMLR
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Enclosure A

Changes to the PBAPS Subsequent License Renewal Application

Introduction

This Enclosure contains three changes that are being made to the Subsequent License Renewal Application (SLRA) that were identified after submittal of the SLRA. For each item, the change is described and the affected page number(s) and portion(s) of the SLRA is provided. For clarity, entire sentences or paragraphs from the SLRA are provided with deleted text highlighted by ~~strikethroughs~~ and inserted text highlighted by ***bolded italics***. Revisions to SLRA tables are shown by providing excerpts from the affected tables.

Change #1 – Additional Enhancements to the ASME Section XI, Subsection IWF Aging Management Program

Affected SLRA Sections: Appendix A, Section A.2.1.31, Appendix A, Section A.5, Appendix B, Section B.2.1.31

SLRA Page Numbers: A-40, A-41, A-107, B-180, and B-181

Description of Changes:

Three changes are required to Appendix A, Section A.2.1.31 and Appendix B, Section B.2.1.31 of the SLRA for the ASME Section XI, Subsection IWF aging management program.

First, GALL-SLR Report AMP XI.S3, Element 4 directs volumetric examination of ASTM A-490 bolting materials. This element also discusses scope expansion in the event of adverse volumetric test results. However, the guidance for scope expansion is not included in the SLRA. Enhancement 3 is revised to include this guidance.

The second change is also related to GALL-SLR Report AMP XI.S3, Element 4. The existing scope contained in Element 4 is specific to currently installed high strength bolting greater than 1-inch nominal diameter. However, this element does not address the potential for new high strength bolting greater than 1-inch to be added via a design change. Enhancement 5 is added to extend the same requirements in the event high strength bolting greater than 1-inch is utilized in the future.

Finally, GALL-SLR Report AMP XI.S3, Element 5 recommends that if a component support does not exceed the acceptance standards of IWF-3400 but is repaired to as-new condition, the sample is increased or modified to include another support that is representative of the remaining population of supports that were not repaired. However, the existing ASME Section XI, Subsection IWF aging management program and the SLRA does not include a program enhancement as required. Enhancement 6 is added to implement this guidance.

Accordingly, SLRA Appendix A, Section A.2.1.31, Appendix A, Section A.5, and Appendix B, Section B.2.1.31 are revised to add these new and revised enhancements.

SLRA Appendix A, Section A.2.1.31, ASME Section XI, Subsection IWF, beginning with the last paragraph on page A-40, is revised as shown below:

A.2.1.31 ASME Section XI, Subsection IWF

The program will be enhanced to address sampling requirements for elective repairs. If a component support does not exceed the acceptance standards of IWF-3400 but is electively repaired to as-new condition, the sample is increased or modified to include another support that is representative of the remaining population of supports that were not repaired.

The ASME Section XI, Subsection IWF aging management program will be enhanced to:

1. Perform periodic evaluations of the acceptability of inaccessible areas of supports (e.g., portions of supports encased in concrete, buried underground, or encapsulated by guard pipe), when conditions exist in accessible areas that could indicate the presence of, or result in, degradation to inaccessible areas of supports. Perform these evaluations once every 10 years during the second period of extended operation.

2. Perform a one-time inspection of an additional five percent of the currently inspected sample size specified in Table IWF-2500-1 for Class 1, 2, and 3 piping supports. Conduct the one-time inspection within the five years prior to entering the second period of extended operation. Select the additional supports from the remaining population of IWF piping supports. Ensure that the sample expansion includes components that are most susceptible to age-related degradation (i.e., based on factors such as time in service, material, and aggressiveness of the environment).

3. Perform VT-3 examinations of all ASTM A-490 bolting materials, used for the reactor vessel support skirts and for the core spray pump supports once per 10-year interval during the second period of extended operation. Perform volumetric examination comparable to that of ASME Code Section XI, Table IWB-2500-1, Examination Category B-G-1, of 12 ASTM A490 bolts at each of the reactor vessel support skirts, once per 10-year interval during the second period of extended operation. ***If the volumetric examination of these ASTM A490 bolts reveals conditions that do not meet acceptance criteria, enter the results into the corrective action program and extend the ASTM A490 bolt examination scope to include other ASTM A490 bolts used in similar joint configurations and subject to similar environmental exposure conditions, which is comparable to the methodology used by the ASME Code, section IWF-2430 for IWF component supports.***

4. Clarify that the recommended guidance for proper selection of bolting material and lubricants, and appropriate installation torque or tension to prevent or minimize loss of bolting preload and cracking of high-strength bolting is a requirement at Peach Bottom in accordance with the guidelines provided in EPRI NP-5067 and TR-104213. Clarify that the recommended requirements for storage, lubricant selection, and bolting and coating material selection include the recommendations in Section 2 of Research Council on Structural Connections (RCSC) publication "Specification for Structural Joints Using High-Strength Bolts," are a requirement at Peach Bottom.

5. Enhance engineering procedures to require volumetric examination should high-strength bolting (actual measured yield strength greater than or equal to 150 ksi) in sizes greater than 1-inch nominal diameter (including ASTM A490 and equivalent ASTM F2280) be installed. The examination shall be comparable to that of ASME Code Section XI, Table IWB-2500-1, Examination Category B-G-1, at least once per 10-year interval, to detect cracking, in addition to the VT-3 examination.

6. Provide guidance, regarding the selection of supports to be inspected on subsequent inspections, when a support that does not meet the threshold of "unacceptable for continued service" as defined in IWF-3400, is restored in accordance with the Corrective Action Program. The enhanced guidance will ensure that the sample is increased or modified to include another support that is representative of the remaining population of supports that were not repaired.

These enhancements will be implemented in accordance with the schedule described within the enhancements. Inspections that are required to be performed in the five-year period prior to the second period of extended operation will be completed no later than six months prior to the second period of extended operation, or no later than the last refueling outage prior to the second period of extended operation.

SLRA Section A.5, Second License Renewal Commitment List, Page A-107, is revised as shown below:

NO.	PROGRAM OR TOPIC	COMMITMENT	IMPLEMENTATION SCHEDULE*	SOURCE
31	ASME Section XI, Subsection IWF	ASME Section XI, Subsection IWF is an existing program that will be enhanced to: 1. Perform periodic evaluations of the acceptability of inaccessible areas of supports (e.g., portions of supports encased in concrete, buried underground, or encapsulated by guard pipe), when conditions exist in accessible areas that could indicate the presence of, or result in, degradation to inaccessible areas of supports. Perform these evaluations once every 10 years during the second period of extended operation. 2. Perform a one-time inspection of an additional five percent of the currently inspected sample size specified in Table IWF-2500-1 for Class 1, 2, and 3 piping supports. Conduct the one-time inspection within the five years prior to entering the second period of extended operation. Select the additional supports from the remaining population of IWF piping supports. Ensure that the sample expansion includes components that are most susceptible to age-related degradation (i.e., based on factors such as time in service, material, and aggressiveness of the environment). 3. Perform VT-3 examinations of all ASTM A-490 bolting materials, used for the reactor vessel support skirts and for the core spray pump supports once per 10-year interval during the second period of extended operation. Perform volumetric examination comparable to that of ASME Code Section XI, Table IWB-2500-1, Examination Category B-G-1, of 12 ASTM A490 bolts at each of the reactor vessel support skirts, once per 10-year interval during the second period of extended operation. ***If the volumetric examination of these ASTM A490 bolts reveals conditions that do not meet acceptance criteria, enter the results into the corrective action program and extend the ASTM A490 bolt examination scope to include other ASTM A490 bolts used in similar joint configurations and subject to similar environmental exposure conditions, which is comparable to the methodology used by the ASME Code, section IWF-2430 for IWF component supports.*** 4. Clarify that the recommended guidance for proper selection of bolting material and lubricants, and appropriate installation torque or tension to prevent or minimize loss of bolting preload and cracking of high-strength bolting is a requirement at Peach Bottom in accordance with the guidelines provided in EPRI NP-5067 and TR-104213. Clarify that the recommended requirements for storage, lubricant selection, and bolting and coating material selection include the recommendations in Section 2 of Research Council on Structural Connections (RCSC) publication "Specification for Structural Joints Using High-Strength Bolts," are a requirement at Peach Bottom.	Program will be enhanced in accordance with the schedule described within the enhancements. Inspections that are required to be performed in the five-year period prior to the second period of extended operation will be completed no later than six months prior to the second period of extended operation, or no later than the last refueling outage prior to the second period of extended operation.	Section A.2.1.31 Exelon Letter PBAPS SLRA Supplement No. 2, dated January 23, 2019 ***Exelon Letter PBAPS SLRA Supplement No. 3, dated February 11, 2019***

		5. Enhance engineering procedures to require volumetric examination should high-strength bolting (actual measured yield strength greater than or equal to 150 ksi) in sizes greater than 1-inch nominal diameter (including ASTM A490 and equivalent ASTM F2280) be installed. The examination shall be comparable to that of ASME Code Section XI, Table IWB-2500-1, Examination Category B-G-1, at least once per 10-year interval, to detect cracking, in addition to the VT-3 examination. *6. Provide guidance, regarding the selection of supports to be inspected on subsequent inspections, when a support that does not meet the threshold of "unacceptable for continued service" as defined in IWF-3400, is restored in accordance with the Corrective Action Program. The enhanced guidance will ensure that the sample is increased or modified to include another support that is representative of the remaining population of supports that were not repaired.*		

SLRA Section B.2.1.31, ASME Section XI, Subsection IWF, beginning on page B-180, second paragraph, is revised as shown below:

B.2.1.31 ASME Section XI, Subsection IWF

The program will be enhanced to address sampling requirements for elective repairs. If a component support does not exceed the acceptance standards of IWF-3400 but is electively repaired to as-new condition, the sample is increased or modified to include another support that is representative of the remaining population of supports that were not repaired.

The ASME Section XI, Subsection IWF program utilizes inspections that detect degradation before loss of intended function. Preventive measures associated with structural bolts are addressed in implementing procedures.

NUREG-2191 Consistency

The ASME Section XI, Subsection IWF aging management program will be consistent with the ten elements of aging management program XI.S3, "ASME Section XI, Subsection IWF" specified in NUREG-2191.

Exceptions to NUREG-2191

None.

Enhancements

Prior to the second period of extended operation, the following enhancements will be implemented in the following program elements:

1. Perform periodic evaluations of the acceptability of inaccessible areas of supports (e.g., portions of supports encased in concrete, buried underground, or encapsulated by guard pipe), when conditions exist in accessible areas that could indicate the presence of, or result in, degradation to inaccessible areas of supports. Perform these evaluations once every 10 years during the second period of extended operation.
Program Element Affected: Scope of Program (Element 1)

2. Perform a one-time inspection of an additional five percent of the currently inspected sample size specified in Table IWF-2500-1 for Class 1, 2, and 3 piping supports. Conduct the one-time inspection within five years prior to entering the second period of extended operation. Select the additional supports from the remaining population of IWF piping supports. Ensure that the sample expansion includes components that are most susceptible to age-related degradation (i.e., based on factors such as time in service, material, and aggressiveness of the environment).
Program Element Affected: Detection of Aging Effects (Element 4)

3. Perform VT-3 examinations of all ASTM A490 bolting materials, used for the reactor vessel support skirts and for the core spray pump supports once per 10-year interval during the second period of extended operation. Perform volumetric examination comparable to that of ASME Code Section XI, Table IWB-2500-1,

Examination Category B-G-1, of 12 ASTM A490 bolts at each of the reactor vessel support skirts, once per 10-year interval during the second period of extended operation. ***If the volumetric examination of these ASTM A490 bolts reveals conditions that do not meet acceptance criteria, enter the results into the corrective action program and extend the ASTM A490 bolt examination scope to include other ASTM A490 bolts used in similar joint configurations and subject to similar environmental exposure conditions, which is comparable to the methodology used by the ASME Code, section IWF-2430 for IWF component supports.*** **Program Elements Affected: Detection of Aging Effects (Element 4)** ***and Corrective Actions (Element 7)***

4. Clarify that the recommended guidance for proper selection of bolting material and lubricants, and appropriate installation torque or tension to prevent or minimize loss of bolting preload and cracking of high-strength bolting is a requirement at Peach Bottom in accordance with the guidelines provided in EPRI NP-5067 and TR-104213. Clarify that the recommended requirements for storage, lubricant selection, and bolting and coating material selection include the recommendations in Section 2 of Research Council on Structural Connections (RCSC) publication "Specification for Structural Joints Using High-Strength Bolts," are a requirement at Peach Bottom. **Program Element Affected: Preventative Action (Element 2)**

5. Enhance engineering procedures to require volumetric examination should high-strength bolting (actual measured yield strength greater than or equal to 150 ksi) in sizes greater than 1-inch nominal diameter (including ASTM A490 and equivalent ASTM F2280) be installed. The examination shall be comparable to that of ASME Code Section XI, Table IWB-2500-1, Examination Category B-G-1, at least once per 10-year interval, to detect cracking, in addition to the VT-3 examination. Program Element Affected: Detection of Aging Effects (Element 4)

6. Provide guidance, regarding the selection of supports to be inspected on subsequent inspections, when a support that does not meet the threshold of "unacceptable for continued service" as defined in IWF-3400, is restored in accordance with the Corrective Action Program. The enhanced guidance will ensure that the sample is increased or modified to include another support that is representative of the remaining population of supports that were not repaired. Program Element Affected: Monitoring and Trending (Element 5)

Change #2 – Removal of the Flaw Tolerance Evaluation Code Case N-481 as an Alternate Method to Screen Pumps for Thermal Aging Embrittlement

Affected SLRA Sections: Appendix A, Section A.2.1.8 and Appendix B, Section B.2.1.8

SLRA Page Numbers: A-16, B-53

Description of Change:

The Thermal Aging Embrittlement of Cast Austenitic Stainless Steel (CASS) aging management program (XI.M12) is being revised to eliminate the flaw tolerance evaluation N-481 as an alternate method to screen pumps for thermal aging embrittlement.

The SLRA Appendix A, Section A.2.1.8 and Appendix B, Section B.2.1.8 contain the following statement, "For pump casings, as an alternative to screening for significance of thermal aging embrittlement, no further actions are needed if a flaw tolerance evaluation performed as part of Code Case N-481 implementation is bounding for 80 years." The alternative screening method for pumps (Code Case N-481) was deemed unnecessary and will be eliminated.

Accordingly, SLRA Appendix A, Section A.2.1.8 and Appendix B, Section B.2.1.8 are revised.

SLRA Appendix A, Section A.2.1.8, Thermal Aging Embrittlement of Cast Austenitic Stainless Steel (CASS), page A-16, second paragraph, is revised as shown below:

A.2.1.8 Thermal Aging Embrittlement of Cast Austenitic Stainless Steel (CASS)

The program will include a screening methodology to determine components for which thermal aging embrittlement is potentially significant based on casting method, molybdenum content, and percent ferrite. Components with the potential for significant thermal aging embrittlement will be managed through either, qualified visual inspections, such as enhanced visual examination, or qualified ultrasonic testing methodology. ~~For pump casings, as an alternative to screening for significance of thermal aging embrittlement, no further actions are needed if a flaw tolerance evaluation performed as part of Code Case N-481 implementation is bounding for 80 years.~~

SLRA Appendix B, Section B.2.1.8, Thermal Aging Embrittlement of Cast Austenitic Stainless Steel (CASS), page B-53, second paragraph is revised as shown below:

B.2.1.8 Thermal Aging Embrittlement of Cast Austenitic Stainless Steel (CASS)

The program will include a screening methodology to determine components for which thermal aging embrittlement is potentially significant based on casting method, molybdenum content, and percent ferrite. Ferrite content is calculated by using the Hull's equivalent factors (described in NUREG/CR-4513, Revision 1). Components with the potential for significant thermal aging embrittlement will be managed through either, qualified visual inspections, such as enhanced visual examination, or qualified ultrasonic testing methodology in accordance with ASME Code, Section XI. ~~For pump casings, as an alternative to screening for significance of thermal aging embrittlement, no further actions are needed if a flaw tolerance evaluation performed as part of Code Case N-481 implementation is bounding for 80 years.~~

Change #3 – Revision of SLRA Chapter 4, Section 4.7.1 including Table 4.7.1-2 and Appendix A, Section A.4.7.1.

Affected SLRA Sections: Section 4.7.1 and Appendix A, Section A.4.7.1

SLRA Page Numbers: 4-114, 4-117, and A-83

Description of Change:

SLRA Chapter 4, Section 4.7.1 and SLRA Appendix A, Section A.4.7.1 are revised to update the total number of turbine building crane lift cycles documented in this section and the minimum weight that was considered for a load cycle.

Also, additional clarifications are added to Table 4.7.1-2 as follows:

- Note 2 is added to clarify that lifts of the generator rotor and low pressure turbine rotors require use of the Unit 2 and Unit 3 Turbine Building Cranes concurrently (i.e., these are 2 crane picks), so the number of lifts of these 4 components is doubled.
- Note 3 is added to clarify that plant construction cycles include margin for miscellaneous component staging, component replacements, modifications, etc.

As a result of these changes, additional margin to the allowable load cycle limit at 80 years is projected (i.e., the previous projection of 36.7% of the limit is now 7%).

Accordingly, SLRA Chapter 4, Section 4.7.1 and Appendix A, Section A.4.7.1 are revised.

SLRA Chapter 4, Section 4.7.1, Cranes Cyclic Loading Analyses, Subsection TLAA Evaluation, Turbine Building Cranes on page 4-114 is revised as shown below:

Turbine Building Cranes

Each PBAPS unit has a turbine building crane that is within the scope of license renewal. The design specifications document that these cranes were originally rated for 115 tons and are designated as "Class A" (Standby Service). Referring to Table 2.8-1 of CMAA Specification 70, the turbine building cranes are Class A cranes experience "irregular occasional use followed by long idle periods." For these cranes, the CMAA design considerations allow for between 20,000 and 100,000 load cycles. Therefore, 20,000 load cycles is a conservative limitation on load cycles for this crane and is considered acceptance criterion for this TLAA. Load cycles that lift less than 50 percent of the crane design capacity of 115 tons (57.5 tons) result in minimal fatigue of the crane. ~~Therefore~~***Conservatively***, ***this evaluation considered*** load cycles that lift ***38*** ~~50~~ tons or more~~ are evaluated~~.

Table 4.7.1-2 provides the 80-year projections for turbine building crane load cycles. The number of cycles projected for 80 years of operation is ~~7,340~~ ***1,400*** cycles for each crane.

The 80-year projected number of cycles is ***7*** ~~less than 40~~ percent of the minimum allowable design value of 20,000 cycles and therefore the acceptance criterion is met. Therefore, the fatigue analysis for the turbine building cranes remains valid for 80 years of plant operation.

SLRA Chapter 4, Section 4.7.1, Cranes Cyclic Loading Analyses, Table 4.7.1-2, PBAPS Unit 2 and 3 Turbine Building Crane Load Cycles, on page 4-117 is revised as shown below:

Table 4.7.1-2
PBAPS Unit 2 and Unit 3 Turbine Building Crane Load Cycles

Heavy Load Description	***Number of Lifts*** **Frequency (Note 1)**	**Number of Occurrences**	**Number of Lifts over 80 years *(Note 2)***
Plant Construction Cycles ***(Note 3)***			500
Generator Rotor with Lifting Beam	2/8 years	10	~~20~~ ***40***
Generator Outer End Sections	2/8 years	10	20
Generator Rad Wall	2/4 years	20	40
Front Standard Rad Wall	2/4 years	20	40
HP Turbine Outer Shell (Lower)	2/4 years	20	40
HP Turbine Outer Shell (Upper)	2/4 years	20	40
HP Turbine Rotor	2/4 years	20	40
LP Turbine Exhaust Hood	2/2 years	40	80
LP Turbine Inner Casing	2/2 years	40	80
LP Turbine A Rotor	6/6 years	13.3	~~80~~ ***160***
LP Turbine B Rotor	6/6 years	13.3	~~80~~ ***160***
LP Turbine C Rotor	6/6 years	13.3	~~80~~ ***160***
80-Year Total Load Cycles:			~~7,340~~ ***1,400***
Minimum Design Limit			20,000
Percent of Load Cycle Limit at 80 Years			~~36.7%~~ ***7%***

Note 1: Frequencies conservatively assume recommended turbine and generator maintenance schedules.

Note 2: Generator and LP turbine rotors require both the Unit 2 and Unit 3 cranes to complete a lift, so the number of lifts are doubled for these loads.

Note 3: Plant construction cycles also includes margin for lifts required for miscellaneous component staging, component replacements, modifications, etc.

SLRA Appendix A, Section A.4.7.1,Cranes Cyclic Loading Analyses, page A-83, third paragraph is revised as shown below:

Turbine Building Cranes

Each PBAPS unit has a turbine building crane that is within the scope of license renewal. The number of anticipated lifts for each of these cranes is estimated to be ~~7,340~~ ***1,400*** cycles through the second period of extended operation; which is ~~approximately~~ ~~40~~ ***7*** percent of the conservative limitation.

Enclosure B

PBAPS Subsequent License Renewal Commitment List Update

Introduction

This Enclosure identifies commitments made in this document and is an update to the PBAPS SLRA Appendix A, Section A.5 Subsequent License Renewal Commitment List. Any other actions discussed in the submittal represent intended or planned actions. They are described to the NRC for the NRC's information and are not regulatory commitments.

Changes to the PBAPS SLRA Appendix A, Section A.5 Subsequent License Renewal Commitment List are as a result of this SLRA Supplement.

These Enclosure B pages are the same as the corresponding PBAPS SLRA Appendix A , Section A.5 pages included in Enclosure A.

To facilitate understanding, relevant portions of the previously submitted Subsequent License Renewal Commitment List have been repeated in this Enclosure, with revisions indicated. Previously submitted information is shown in normal font. Additions due to this submittal are highlighted with ***bolded italics*** for inserted text, and ~~strikethroughs~~ for deleted text.

SLRA Section A.5, Second License Renewal Commitment List, Page A-107, is revised as shown below:

NO.	PROGRAM OR TOPIC	COMMITMENT	IMPLEMENTATION SCHEDULE*	SOURCE
31	ASME Section XI, Subsection IWF	ASME Section XI, Subsection IWF is an existing program that will be enhanced to: 1. Perform periodic evaluations of the acceptability of inaccessible areas of supports (e.g., portions of supports encased in concrete, buried underground, or encapsulated by guard pipe), when conditions exist in accessible areas that could indicate the presence of, or result in, degradation to inaccessible areas of supports. Perform these evaluations once every 10 years during the second period of extended operation. 2. Perform a one-time inspection of an additional five percent of the currently inspected sample size specified in Table IWF-2500-1 for Class 1, 2, and 3 piping supports. Conduct the one-time inspection within the five years prior to entering the second period of extended operation. Select the additional supports from the remaining population of IWF piping supports. Ensure that the sample expansion includes components that are most susceptible to age-related degradation (i.e., based on factors such as time in service, material, and aggressiveness of the environment). 3. Perform VT-3 examinations of all ASTM A-490 bolting materials, used for the reactor vessel support skirts and for the core spray pump supports once per 10-year interval during the second period of extended operation. Perform volumetric examination comparable to that of ASME Code Section XI, Table IWB-2500-1, Examination Category B-G-1, of 12 ASTM A490 bolts at each of the reactor vessel support skirts, once per 10-year interval during the second period of extended operation. ***If the volumetric examination of these ASTM A490 bolts reveals conditions that do not meet acceptance criteria, enter the results into the corrective action program and extend the ASTM A490 bolt examination scope to include other ASTM A490 bolts used in similar joint configurations and subject to similar environmental exposure conditions, which is comparable to the methodology used by the ASME Code, section IWF-2430 for IWF component supports.*** 4. Clarify that the recommended guidance for proper selection of bolting material and lubricants, and appropriate installation torque or tension to prevent or minimize loss of bolting preload and cracking of high-strength bolting is a requirement at Peach Bottom in accordance with the guidelines provided in EPRI NP-5067 and TR-104213. Clarify that the recommended requirements for storage, lubricant selection, and bolting and coating material selection include the recommendations in Section 2 of Research Council on Structural Connections (RCSC) publication "Specification for Structural Joints Using High-Strength Bolts," are a requirement at Peach Bottom.	Program will be enhanced in accordance with the schedule described within the enhancements. Inspections that are required to be performed in the five-year period prior to the second period of extended operation will be completed no later than six months prior to the second period of extended operation, or no later than the last refueling outage prior to the second period of extended operation.	Section A.2.1.31 Exelon Letter PBAPS SLRA Supplement No. 2, dated January 23, 2019 ***Exelon Letter PBAPS SLRA Supplement No. 3, dated February 11, 2019***

		5. Enhance engineering procedures to require volumetric examination should high-strength bolting (actual measured yield strength greater than or equal to 150 ksi) in sizes greater than 1-inch nominal diameter (including ASTM A490 and equivalent ASTM F2280) be installed. The examination shall be comparable to that of ASME Code Section XI, Table IWB-2500-1, Examination Category B-G-1, at least once per 10-year interval, to detect cracking, in addition to the VT-3 examination. *6. Provide guidance, regarding the selection of supports to be inspected on subsequent inspections, when a support that does not meet the threshold of "unacceptable for continued service" as defined in IWF-3400, is restored in accordance with the Corrective Action Program. The enhanced guidance will ensure that the sample is increased or modified to include another support that is representative of the remaining population of supports that were not repaired.*		