



November 28, 2022

L-2022-177
10 CFR 54.17

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
11545 Rockville Pike
One White Flint North
Rockville, MD 20852-2746

Point Beach Nuclear Plant Units 1 and 2
Dockets 50-266 and 50-301
Renewed License Nos. DPR-24 and DPR-27

SUBSEQUENT LICENSE RENEWAL APPLICATION - SECOND ANNUAL UPDATE

References:

1. NextEra Energy Point Beach, LLC (NEPB) Letter NRC 2020-0032 dated November 16, 2020, Application for Subsequent Renewed Facility Operating Licenses (ADAMS Package Accession No. ML20329A292)
2. NextEra Energy Point Beach, LLC (NEPB) Letter L-2021-224 dated November 30, 2021, Subsequent License Renewal Application - First Annual Update (ADAMS Package Accession No. ML21334A293)

NEPB, owner and licensee for Point Beach Nuclear Plant (PBN) Units 1 and 2, has submitted a subsequent license renewal application (SLRA) for the Facility Operating Licenses for PBN Units 1 and 2 (Reference 1) and the first annual update (Reference 2). The License Renewal Rule, 10 CFR 54.21(b), requires that each year following submittal of an LRA, and at least 3 months before scheduled completion of the NRC review, an update to the LRA must be submitted that identifies any change to the current licensing basis (CLB) of the facility that materially affects the content of the LRA including the Updated Final Safety Analysis Report Supplement.

In accordance with the License Renewal Rule, NEPB has performed the second annual review of PBN Units 1 and 2 CLB changes since SLRA submittal to determine whether any sections of the SLRA were materially affected by these changes. As a result of this annual review, NEPB identified three changes to the PBN Units 1 and 2 CLB materially affecting SLRA content. A description of these changes and the corresponding affected SLRA content revisions are attached.

For ease of reference, the index of attached information is provided on page 3 of this letter. Attachment 2 includes associated revisions to the SLRA (Enclosure 3 Attachment 1 of Reference 1) denoted by ~~striketrough~~ (deletion) and/or **bold red underline** (insertion) text. Previous SLRA revisions are denoted by **bold black** text. SLRA table revisions are included as excerpts from each affected table.

NextEra Energy Point Beach, LLC

6610 Nuclear Road, Two Rivers, WI 54241

Should you have any questions regarding this submittal, please contact me at (561) 304-6256 or William.Maher@fpl.com.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on the 28th day of November 2022.

Sincerely,

**William
Maher**

Digitally signed by William Maher
DN: cn=William Maher, o=Nuclear,
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William D. Maher

Licensing Director - Nuclear Licensing Projects

Cc: Administrator, Region III, USNRC
Project Manager, Point Beach Nuclear Plant, USNRC
Resident Inspector, Point Beach Nuclear Plant, USNRC
Public Service Commission Wisconsin

Attachments Index	
Attachment No.	Subject
1	Current Licensing Basis (CLB) Changes Affecting the SLRA
2	Affected SLRA Content Revisions

CURRENT LICENSING BASIS (CLB) CHANGES AFFECTING THE SLRA

PBN 1 and 2 CLB Change Item	Screening / Aging Management Review / Program (AMR / AMP) Document Affected	SLRA Section Affected
<p>The Unit 1 Component Cooling Water (CCW) pumps were replaced, and a minimum flow (recirculation) cross connection installed. A new P&ID was created for the recirculation piping and instruments.</p> <p>The SLRA is updated to add a new boundary drawing.</p>	FPLCORP00036-REPT-015	Section 2.3.3.2
<p>The FSAR was revised to remove the references to maintaining a nitrogen blanket over the sodium hydroxide in the Spray Additive Tanks. This change adds an "air – indoor uncontrolled" internal environment for the spray additive tanks and associated piping/valves.</p> <p>The new component type / material / environment combinations affect SLRA Section 3.2 (Table 3.2.2-2).</p>	FPLCORP00036-REPT-011	Section 3.2 (Table 3.2.2-2)
<p>PBN letter to the Staff (ML22053A149) provided notification of a change to the Control Rod Guide Tube (CRGT) guide card examination frequency for PBN Unit 1. An extension of the CRGT guide card examination frequency from 10 Effective Full Power Years (EFPY) to 20 EFPY aligns with the latest industry approved CRGT guide card evaluation methodology (WCAP-17 451-P, Revision 2).</p> <p>The SLRA is updated to remove specific guide card examination schedules and identify the re-evaluation using WCAP-17451-P Revision 2.</p>	FPLCORP00036-REPT-046	Section B.2.3.7

As a result of PBN current licensing basis (CLB) changes made during the second SLRA annual update period, SLRA Sections 2.3.3.2, 3.2 (Table 3.2.2-2), and B.2.3.7 are amended as indicated by the following text deletion (~~strike through~~) and text additions (**red underlined font**) revisions.

[Change 1]

SLRA Section 2.3.3.2, page 2.3-31 is revised as follows:

PBN Unit 1:

SLR-110E018 Sheet 1

SLR-110E018 Sheet 2

SLR-110E018 Sheet 3

SLR-110E018 Sheet 5

PBN Unit 2:

SLR-110E029 Sheet 1

SLR-110E029 Sheet 2

SLR-110E029 Sheet 3

SLR-110E029 Sheet 4

Point Beach Common:

SLR-PBM-230

In addition, the non-safety-related piping and piping components associated with waste evaporator distillate cooler and concentrator are attached to safety-related components. As such, though not highlighted on boundary drawings SLR-110E018 Sheet 3 and SLR-110E029 Sheet 3, the piping and piping components are included in the scope of SLR with a structural integrity (attached) function.

System Intended Functions

Safety-related functions (10 CFR 54.4(a)(1)):

- (1) Remove residual and sensible heat from the reactor coolant system, via the residual heat removal (RH) heat exchangers during the recirculation phase of safety injection (SI) to support long-term core cooling.
- (2) Remove heat from the RH heat exchangers to terminate the steam releases associated with the license basis dose analyses for the postulated rupture of a steam pipe (main steam line break (MSLB)), steam generator tube rupture (SGTR), and reactor cooling pump locked rotor accidents.
- (3) Remove heat from the RH, SI, and containment spray pump seal coolers to maintain the integrity of the pump seals.

[Change 2]

SLRA Section 3.2 (Table 3.2.2-2), pages 3.2-63 through 3.2-65 is revised as follows:

Table 3.2.2-2: Containment Spray – Summary of Aging Management Evaluation								
Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Program	NUREG-2191 Item	Table 1 Item	Notes
Piping	Leakage boundary (spatial)	Stainless steel	Treated borated water (int)	Loss of material	Water Chemistry (B.2.3.2) One-Time Inspection (B.2.3.20)	V.A.EP-41	3.2-1, 022	B A
Piping	Pressure boundary	Stainless steel	Air – indoor uncontrolled (ext)	Cracking	External Surfaces Monitoring of Mechanical Components (B.2.3.23)	V.A.EP-103c	3.2-1, 007	A
Piping	Pressure Boundary	Stainless steel	Air – indoor uncontrolled (ext)	Loss of material	External Surfaces Monitoring of Mechanical Components (B.2.3.23)	V.D1.EP-107b	3.2-1, 004	A
<u>Piping</u>	<u>Pressure boundary</u>	<u>Stainless steel</u>	<u>Air – indoor uncontrolled (int)</u>	<u>Cracking</u>	<u>Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components (B.2.3.25)</u>	<u>V.A.EP-103d</u>	<u>3.2-1, 007</u>	<u>A</u>
<u>Piping</u>	<u>Pressure boundary</u>	<u>Stainless steel</u>	<u>Air – indoor uncontrolled (int)</u>	<u>Loss of material</u>	<u>Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components (B.2.3.25)</u>	<u>V.A.EP-81c</u>	<u>3.2-1, 048</u>	<u>A</u>
Piping	Pressure boundary	Stainless steel	Treated borated water (int)	Loss of material	Water Chemistry (B.2.3.2) One-Time Inspection (B.2.3.20)	V.A.EP-41	3.2-1, 022	B A
Piping	Pressure boundary	Stainless steel	Treated water (int)	Loss of material	Water Chemistry (B.2.3.2) One-Time Inspection (B.2.3.20)	V.C.EP-63	3.2-1, 022	B A

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Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Program	NUREG-2191 Item	Table 1 Item	Notes
Piping and piping components	Structural integrity (attached)	Stainless steel	Air – indoor uncontrolled (ext)	Cracking	External Surfaces Monitoring of Mechanical Components (B.2.3.23)	V.D1.EP-103c	3.2-1, 007	A
Piping and piping components	Structural integrity (attached)	Stainless steel	Air – indoor uncontrolled (ext)	Loss of material	External Surfaces Monitoring of Mechanical Components (B.2.3.23)	V.D1.EP-107b	3.2-1, 004	A
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Piping and piping components	Structural integrity (attached)	Stainless steel	Treated water (int)	Loss of material	Water Chemistry (B.2.3.2) One-Time Inspection (B.2.3.20)	V.C.EP-63	3.2-1, 022	B A
Pump casing	Pressure boundary	CASS	Air – indoor uncontrolled (ext)	Cracking	External Surfaces Monitoring of Mechanical Components (B.2.3.23)	V.A.EP-103c	3.2-1, 007	A
Pump casing	Pressure boundary	CASS	Air – indoor uncontrolled (ext)	Loss of material	External Surfaces Monitoring of Mechanical Components (B.2.3.23)	V.D1.EP-107b	3.2-1, 004	A
Pump casing	Pressure boundary	CASS	Treated borated water (int)	Loss of material	Water Chemistry (B.2.3.2) One-Time Inspection (B.2.3.20)	V.A.EP-41	3.2-1, 022	B A
Steel components	Pressure boundary	Steel	Air with borated water leakage	Loss of material	Boric Acid Corrosion (B.2.3.4)	V.E.E-28	3.2-1, 009	A
Tank (spray additive)	Pressure boundary	Carbon steel with stainless steel cladding	Air – indoor uncontrolled (ext)	Loss of material	External Surfaces Monitoring of Mechanical Components (B.2.3.23)	V.E.E-44	3.2-1, 040	A
<u>Tank (spray additive)</u>	<u>Pressure boundary</u>	<u>Carbon steel with stainless steel cladding</u>	<u>Air – indoor uncontrolled (int)</u>	<u>Cracking</u>	<u>Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components (B.2.3.25)</u>	<u>V.A.EP-103e</u>	<u>3.2-1, 007</u>	<u>A</u>

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<u>Tank (spray additive)</u>	<u>Pressure boundary</u>	<u>Carbon steel with stainless steel cladding</u>	<u>Air – indoor uncontrolled (int)</u>	<u>Loss of material</u>	<u>Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components (B.2.3.25)</u>	<u>V.A.EP-81d</u>	<u>3.2-1, 048</u>	<u>A</u>
Tank (spray additive)	Pressure boundary	Carbon steel with stainless steel cladding	Treated water (int)	Loss of material	Water Chemistry (B.2.3.2) One-Time Inspection (B.2.3.20)	V.C.EP-63	3.2-1, 022	B A
Valve body	Leakage boundary (spatial)	Stainless steel	Air – indoor uncontrolled (ext)	Cracking	External Surfaces Monitoring of Mechanical Components (B.2.3.23)	V.A.EP-103c	3.2-1, 007	A
Valve body	Leakage boundary (spatial)	Stainless steel	Air – indoor uncontrolled (ext)	Loss of material	External Surfaces Monitoring of Mechanical Components (B.2.3.23)	V.D1.EP-107b	3.2-1, 004	A
Valve body	Leakage boundary (spatial)	Stainless steel	Treated borated water (int)	Loss of material	Water Chemistry (B.2.3.2) One-Time Inspection (B.2.3.20)	V.A.EP-41	3.2-1, 022	B A
Valve body	Leakage boundary (spatial)	Stainless steel	Treated water (int)	Loss of material	Water Chemistry (B.2.3.2) One-Time Inspection (B.2.3.20)	V.C.EP-63	3.2-1, 022	B A
Valve body	Pressure boundary	CASS	Air – indoor uncontrolled (ext)	Cracking	External Surfaces Monitoring of Mechanical Components (B.2.3.23)	V.A.EP-103c	3.2-1, 007	A
Valve body	Pressure boundary	CASS	Air – indoor uncontrolled (ext)	Loss of material	External Surfaces Monitoring of Mechanical Components (B.2.3.23)	V.D1.EP-107b	3.2-1, 004	A
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Valve body	Pressure boundary	CASS	Treated borated water (int)	Loss of material	Water Chemistry (B.2.3.2) One-Time Inspection (B.2.3.20)	V.A.EP-41	3.2-1, 022	B A
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<u>Valve body</u>	<u>Pressure boundary</u>	<u>Stainless steel</u>	<u>Air – indoor uncontrolled (int)</u>	<u>Loss of material</u>	<u>Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components (B.2.3.25)</u>	<u>V.A.EP-81c</u>	<u>3.2-1, 048</u>	<u>A</u>

[Change 3]

SLRA Section B.2.3.7, pages B-75 and B-76 is revised as follows:

unit by at least one additional outage. ~~The re-inspection of the guide cards is currently scheduled during 2022 and 2023.~~ These inspections are subject to this interim guidance.

Clevis Insert

Westinghouse technical bulletin, TB 14-5, was issued to communicate industry operating experience regarding clevis insert cap screw degradation observed during ASME Section XI inspections. This was evaluated by PBN and the site updated the implementing procedure to incorporate the guidance in TB 14-5.

EPRI released a notification of industry operating experience regarding clevis insert bolting in MRP 2017-024. This letter identified degradation of the clevis insert bolting at Salem Unit 2 during its spring 2017 outage. PBN evaluated this OE and determined there were no changes needed to the PBN Reactor Vessel Internals AMP.

EPRI issued a notification of recent operating experience, MRP 2020-011 to document a partial displacement observed at one lower radial support clevis insert. PBN evaluated this OE and determined there are no recommended actions to implement changes in the aging management program for the initial license renewal period. For subsequent license renewal, the clevis insert bolts, dowels, and clevis bearing Stellite wear surface are added to the Primary Components inspection category per the results of the gap analysis (Appendix C to this SLRA).

Developing Industry Operating Experience

Westinghouse technical bulletin TB 19-5 and corresponding MRP 2019-017 were issued to document a developing asset management concern of cracking in thermal shield support structures. These notices were identified as applicable to PBN. This is a developing issue which will continue to be followed by PBN.

EPRI issued industry letter MRP 2019-009, which communicates the issuance of NEI 03-08 "Good Practice" guidance for the core barrels in Westinghouse plants and was transmitted to the NRC through MRP 2019-023. The recommended good practice is to inspect the core barrel axial welds (middle axial weld and lower axial weld). PBN noted that the baseline inspections of the core barrel have already been performed, and the next planned inspections are during the Spring 2022 and Spring 2023 refueling outages for Unit 1 and Unit 2, respectively. PBN implements all NEI 03-08 "Good Practices" when feasible. Note that implementation of MRP-227 Revision 1-A will incorporate these welds as Expansion components prior to the scheduled outages.

Plant Specific Operating Experience

- PBN has inspected 100 percent of CRGT guide cards on both units as a part of its baseline inspections. The results of these inspections were evaluated based on the methodology described in WCAP-17451 Revision 1 and reinspection or repair of one limiting guide tube within each tube was recommended for the 2020 refueling outages. The publishing of WCAP-17451 Revision 2 prompted a re-evaluation to ~~potentially extend the reinspection interval of the limiting guide tube to align with the re-inspection timing of the other guide tubes. Re-evaluation was performed using both methods (WCAP-17451-P Revision 1 and Revision 2) and only the results applying WCAP-17451 Revision 1 were used because the methodology in WCAP-17451 Revision 2 has not been endorsed by the NRC at this time~~ **(Reference ML22053A149)**. Additionally, PBN has spare CRGTs to support any repair activities if needed.
- PBN Units 1 and 2 have completed all MRP-227-A initial license renewal required inspections with no inspection deferrals and no deviations to NEI 03-08. All baseline inspections completed were performed prior to loss of safety function which demonstrates that the inspection timing defined in MRP-227-A has been adequate and the PBN Water Chemistry AMP (Section B.2.3.2) has sufficiently prevented or mitigated accelerated aging effects. All degradation identified has been consistent with industry experience resulting in acceptable results for all inspections. There has not been an examination which required Expansion Components inspections.
- Program Assessments and Evaluations
 - Phase 2 Point Beach Nuclear Plant, Unit 1 and Unit 2 NRC Post-Approval Site Inspection Reports for License Renewal (ADAMS Accession no. ML102850469 and ML13077A472)

In 2010 and 2013, the NRC performed the 71003 Phase 2 Inspections at PBN Units 1 and 2, respectively. The inspectors reviewed the licensing basis, program basis document, implementing procedures, and related ARs; and interviewed the plant personnel responsible for the PBN Reactor Vessel Internals AMP. The inspectors verified that the program meets current industry guidance and tracking is in place for incorporating any changes resulting from NRC review of the industry guidance. Based on review of the timeliness and adequacy of PBN's actions, the inspectors determined that the PBN had met all commitments.