



NRC 2019-0007  
10 CFR 50.90

March 13, 2019

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

Point Beach Nuclear Plant, Units 1 and 2  
Dockets 50-266 and 50-301

Subject: Point Beach Nuclear Plant, Units 1 and 2, License Conditions and Implementation  
Items Required to Resolve Construction Truss Design Code Nonconformances

References:

1. NextEra Energy Point Beach, LLC letter NRC 2017-0017, "License Amendment Request 278, Risk-Informed Approach to Resolve Construction Truss Design Code Nonconformances," March 31, 2017 (ML17090A511)
2. NRC Letter, Point Beach Nuclear Plant, Units 1 and 2 – Request for Additional Information for Point Beach Nuclear Plant, Units 1 and 2, Regarding License Amendment Request to Resolve Nonconformances Relating to Containment Dome Truss (EPID L-2017-LLA-0209), January 31, 2018 (ML18025C043)
3. NextEra Energy Point Beach, LLC letter NRC 2018-0014, "Construction Truss License Amendment Request 278, Response to Request for Additional Information," April 12, 2018 (ML18102B164)
4. NextEra Energy Point Beach, LLC letter NRC 2018-0030, "Construction Truss License Amendment Request 278 Draft Updated Final Safety Analysis Report (UFSAR) Revision," May 29, 2018 (ML18149A466)
5. NRC e-mail, "Final - Second Round RAIs - Point Beach Nuclear Plant, Units 1 and 2 - License Amendment Request to Resolve Non-conformances Relating to Containment Dome Truss - EPID L-2017-LLA-0209," August 1, 2018 (ML18214A153)
6. NextEra Energy Point Beach, LLC letter NRC 2018-0041, "Response to Second Round Request for Additional Information Regarding Point Beach Nuclear Plant, Units 1 and 2, License Amendment Request for Risk-Informed Approach to Resolve Construction Truss Design Code Nonconformances, (EPID L 2017-LLA-0209)," August 30, 2018 (ML18242A572)

In Reference 1, supplemented by References 3, 4 and 6, NextEra Energy Point Beach, LLC (NextEra) submitted License Amendment Request (LAR) 278 to resolve legacy design code nonconformances associated with the Point Beach Units 1 and 2 containment dome construction trusses.

In Reference 6, Attachment 2, NextEra proposed new License Conditions for the resolution of the legacy design code nonconformances. The proposed License Conditions required NextEra to complete the comprehensive list of Implementation Items identified in Reference 6, Attachment 3.

On February 14, 2019 a teleconference was held between NRC staff and NextEra to discuss the proposed License Conditions. NRC provided comments to the proposed language of the License Conditions and the list of Implementation Items. NRC also proposed the addition of a new Implementation Item to incorporate NextEra's response to RAI-1a. and RAI 17 in Reference 3. Following this discussion, NextEra agreed to incorporate NRC's comments and to include an additional Implementation Item.

Attachment 1 to this letter contains mark-ups for the proposed revised License Conditions incorporated into Paragraph 4.I of Renewed Facility Operating License No. DPR 24 and Paragraph 4.H of Renewed Facility Operating License No. DPR 27. Once approved, the amended Licenses will be effective as of the date of issuance and shall be implemented in accordance with the requirements specified in proposed Paragraphs 4.I (DPR 24) and 4.H (DPR 27), respectively. Attachment 2 provides the corresponding "clean" License pages. Attachment 3 provides the comprehensive list of Implementation Items with the additional Item requested by NRC. Attachments 1 and 3 of this letter supersede Attachments 2 and 3 of Reference 6.

This supplement does not alter the conclusions in Reference 1 that the proposed change does not involve a significant hazards consideration pursuant to 10 CFR 50.92, and there are no significant environmental impacts associated with the change.

This letter contains no new or revised regulatory commitments.

Should you have any questions regarding this submittal, please contact Mr. Eric Schultz, Licensing Manager, at 920-755-7854.

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

Executed on Mar 13, 2019

Sincerely,



Robert Craven  
Site Director  
NextEra Energy Point Beach, LLC

Attachment 1: Point Beach Units 1 and 2 Operating Licenses - Mark-ups

Attachment 2: Point Beach Units 1 and 2 Operating Licenses - Clean Pages

Attachment 3: Implementation Items Required to Resolve the Construction Truss Design Code Nonconformances

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

Attachment 1

**Point Beach Units 1 and 2 Operating Licenses - Mark-ups**

(3 pages follow)

G. Secondary Water Chemistry Monitoring Program

NextEra Energy Point Beach shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

1. Identification of a sampling schedule for the critical parameters and control points for these parameters;
2. Identification of the procedures used to quantify parameters that are critical to control points;
3. Identification of process sampling points;
4. Procedure for the recording and management of data;
5. Procedures defining corrective actions for off control point chemistry condition; and
6. A procedure for identifying the authority responsible for the interpretation of the data, and the sequence and timing of administrative events required to initiate corrective action.

H. The licensee is authorized to repair Unit 1 steam generators by replacement of major components. Repairs shall be conducted in accordance with the licensee's commitments identified in the Commission approved Point Beach Nuclear Plant Unit No. 1 Steam Generator Repair Report dated August 9, 1982 and revised March 1, 1983 and additional commitments identified in the staff's related safety evaluation.

I. Deleted ← PB Unit 1 License Insert

J. Deleted

K. All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of American Society for Testing and Materials (ASTM) E 185-82 to the extent practicable for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion. Any changes to storage requirements must be approved by the NRC, as required by 10 CFR Part 50, Appendix H.

L. Mitigation Strategy

Strategies shall be developed and maintained for addressing large fires and explosions that include the following key areas:

1. Fire fighting response strategy with the following elements:
  - a. Pre-defined coordinated fire response strategy and guidance
  - b. Assessment of mutual aid fire fighting assets
  - c. Designated staging areas for equipment and materials
  - d. Command and control
  - e. Training of response personnel

H. Deleted ← [PB Unit 2 License Insert]

I. Deleted

J. All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of American Society for Testing and Materials (ASTM) E 185-82 to the extent practicable for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion. Any changes to storage requirements must be approved by the NRC, as required by 10 CFR Part 50, Appendix H.

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Strategies shall be developed and maintained for addressing large fires and explosions that include the following key areas:

1. Fire fighting response strategy with the following elements:
  - a. Pre-defined coordinated fire response strategy and guidance
  - b. Assessment of mutual aid fire fighting assets
  - c. Designated staging areas for equipment and materials
  - d. Command and control
  - e. Training of response personnel
2. Operations to mitigate fuel damage considering the following:
  - a. Protection and use of personnel assets
  - b. Communications
  - c. Minimizing fire spread
  - d. Procedures for implementing integrated fire response strategy
  - e. Identification of readily-available pre-staged equipment
  - f. Training on integrated fire response strategy
  - g. Spent fuel pool mitigation measures
3. Actions to minimize release to include consideration of:
  - a. Water spray scrubbing
  - b. Dose to onsite responders

**PB Unit 1 License Insert**

Containment Building Construction Truss

NextEra Energy Point Beach shall complete implementation items 1, 2, 3, 5, and 6 included in Attachment 3 of licensee letter NRC 2019-0007, dated March 13, 2019, by the completion date specified in the Attachment.

**PB Unit 2 License Insert**

Containment Building Construction Truss

NextEra Energy Point Beach shall complete implementation items 3, 4, 5, and 6 included in Attachment 3 of licensee letter NRC 2019-0007, dated March 13, 2019, by the completion date specified in the Attachment.

Attachment 2

**Point Beach Units 1 and 2 Operating Licenses - Clean Pages**

(4 pages follow)

G. Secondary Water Chemistry Monitoring Program

NextEra Energy Point Beach shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

1. Identification of a sampling schedule for the critical parameters and control points for these parameters;
2. Identification of the procedures used to quantify parameters that are critical to control points;
3. Identification of process sampling points;
4. Procedure for the recording and management of data;
5. Procedures defining corrective actions for off control point chemistry condition; and
6. A procedure for identifying the authority responsible for the interpretation of the data, and the sequence and timing of administrative events required to initiate corrective action.

H. The licensee is authorized to repair Unit 1 steam generators by replacement of major components. Repairs shall be conducted in accordance with the licensee's commitments identified in the Commission approved Point Beach Nuclear Plant Unit No. 1 Steam Generator Repair Report dated August 9, 1982 and revised March 1, 1983 and additional commitments identified in the staff's related safety evaluation.

I. Containment Building Construction Truss

NextEra Energy Point Beach shall complete implementation items 1, 2, 3, 5, and 6 included in Attachment 3 of licensee letter NRC 2019-0007, dated March 13, 2019, by the completion date specified in the Attachment.

J. Deleted

K. All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of American Society for Testing and Materials (ASTM) E 185-82 to the extent practicable for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion. Any changes to storage requirements must be approved by the NRC, as required by 10 CFR Part 50, Appendix H.

L. Mitigation Strategy

Strategies shall be developed and maintained for addressing large fires and explosions that include the following key areas:

1. Fire fighting response strategy with the following elements:
  - a. Pre-defined coordinated fire response strategy and guidance
  - b. Assessment of mutual aid fire fighting assets



- c. Designated staging areas for equipment and materials
  - d. Command and control
  - e. Training of response personnel
2. Operations to mitigate fuel damage considering the following:
- a. Protection and use of personnel assets
  - b. Communications
  - c. Minimizing fire spread
  - d. Procedures for implementing integrated fire response strategy
  - e. Identification of readily-available pre-staged equipment
  - f. Training on integrated fire response strategy
  - g. Spent fuel pool mitigation measures
3. Actions to minimize release to include consideration of:
- a. Water spray scrubbing
  - b. Dose to onsite responders

M. Additional Conditions

The additional conditions contained in Appendix C, as revised through Amendment No. 241, are hereby incorporated into this license. NextEra Energy Point Beach shall operate the facility in accordance with the additional conditions.

- 5. The issuance of this renewed operating license is without prejudice to subsequent licensing action which may be taken by the Commission with regard to the ongoing rulemaking hearing on the Interim Acceptance Criteria for Emergency Core Cooling Systems (Docket No. RM 50-1).
- 6. This renewed operating license is effective as of the date of issuance, and shall expire at midnight on October 5, 2030.

FOR THE NUCLEAR REGULATORY COMMISSION

***Original Signed By***

R. W. Borchardt, Deputy Director  
Office of Nuclear Reactor Regulation

Attachments:

- 1. Appendix A - Technical Specifications
- 2. Appendix B - Environmental Technical Specifications
- 3. Appendix C - Additional Conditions

Date of Issuance: December 22, 2005

Renewed License No. DPR-24  
Amendment No. 258

H. Containment Building Construction Truss

NextEra Energy Point Beach shall complete implementation items 3, 4, 5, and 6 included in Attachment 3 of licensee letter NRC 2019-0007, dated March 13, 2019, by the completion date specified in the Attachment.

I. Deleted

- J. All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of American Society for Testing and Materials (ASTM) E 185-82 to the extent practicable for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion. Any changes to storage requirements must be approved by the NRC, as required by 10 CFR Part 50, Appendix H.

K. Mitigation Strategy

Strategies shall be developed and maintained for addressing large fires and explosions that include the following key areas:

1. Fire fighting response strategy with the following elements:
  - a. Pre-defined coordinated fire response strategy and guidance
  - b. Assessment of mutual aid fire fighting assets
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  - d. Command and control
  - e. Training of response personnel
2. Operations to mitigate fuel damage considering the following:
  - a. Protection and use of personnel assets
  - b. Communications
  - c. Minimizing fire spread
  - d. Procedures for implementing integrated fire response strategy
  - e. Identification of readily-available pre-staged equipment
  - f. Training on integrated fire response strategy
  - g. Spent fuel pool mitigation measures
3. Actions to minimize release to include consideration of:
  - a. Water spray scrubbing
  - b. Dose to onsite responders

L. Additional Conditions

The additional conditions contained in Appendix C, as revised through Amendment No. 245, are hereby incorporated into this license. NextEra Energy Point Beach shall operate the facility in accordance with the additional conditions.

5. The issuance of this renewed operating license is without prejudice to subsequent licensing action which may be taken by the Commission with regard to the ongoing rulemaking hearing on the Interim Acceptance Criteria for Emergency Core Cooling Systems (Docket No. RM 50-1).
6. This renewed operating license is effective as of the date of issuance, and shall expire at midnight on March 8, 2033.

FOR THE NUCLEAR REGULATORY COMMISSION

***Original Signed By***

R. W. Borchardt, Deputy Director  
Office of Nuclear Reactor Regulation

Attachments:

1. Appendix A - Technical Specifications
2. Appendix B - Environmental Technical Specifications
3. Appendix C - Additional Conditions

Date of Issuance: December 22, 2005

Renewed License No. DPR-27  
Amendment No. 262

Attachment 3

**Implementation Items Required to Resolve the Construction Truss Design Code  
Nonconformances**

(2 pages follow)

## IMPLEMENTATION ITEMS

The following table identifies the regulatory items that must be completed to support implementation of the license amendment to resolve the construction truss design code nonconformances.

IMPLEMENTATION ITEMS	COMPLETION DATE
<p>1. <u>Unit 1 Spatial Clearance</u></p> <p>Upon approval of LAR 278 (Amd. No. 263), a modification will be implemented to the Unit 1 construction truss to improve clearance between the truss and the containment liner. The modification includes trimming the top chord at the first panel point of six trusses, specifically trusses 1, 2, 3, 7, 8, and 15, as identified in NextEra Energy Point Beach, LLC letter NRC 2018-0014, "Construction Truss License Amendment Request 278, Response to Request for Additional Information," dated April 12, 2018 (ML18102B164).</p> <p>The spatial clearance modification requires approval of LAR 278 (Amd. No. 263) prior to implementation as the small amount of material removal modifies the sectional properties of the construction truss, which impacts the available seismic margin.</p>	<p>The modification will be implemented during the fall 2020 Unit 1 refueling outage (U1R39).</p>
<p>2. <u>Unit 1 Containment Spray Pipe Support</u></p> <p>Unit 1 containment spray pipe support SI-301R-1-H202 will be modified to achieve additional seismic capacity. The modification will increase the size of the support's U-bolt diameter.</p>	<p>The modification will be implemented during the fall 2020 Unit 1 refueling outage (U1R39).</p>
<p>3. <u>Unit 1 and Unit 2 New Seismic Operating Limits</u></p> <p>NextEra will implement new seismic operating limits applicable to Unit 1 and Unit 2 to maintain stresses in the construction trusses within elastic stress limits. The applicable bounding limits are:</p> <p>Horizontal: 0.05g Peak Ground Acceleration Vertical: 0.04g Peak Ground Acceleration</p> <p>The existing seismic monitors will be used to detect the new operating seismic limits.</p> <p>Site procedures will be revised to initiate actions to commence a controlled dual Unit backdown to hot shutdown upon reaching the specified peak ground acceleration limits. The procedure will specify that the Units may be reduced in power individually in series, rather than concurrently, to ensure station staff have the proper resources and focus on each Unit for maximum safety and operational excellence during this off-normal operation. The procedure will also initiate inspection and/ or evaluation actions for the construction trusses, equipment supported by the trusses, and the containment liners.</p>	<p>The procedure revisions will be performed by March 31, 2021, following implementation of the modifications noted in Items 1, 2, and 4.</p>

IMPLEMENTATION ITEMS	COMPLETION DATE
<p>4. <u>Unit 2 PORV Control Cable Protection</u></p> <p>NextEra will implement a new modification to reroute the control cables for the Unit 2 pressurizer power operated relief valve (PORV) 2RC-431C and associated block valve 2RC-515 to ensure they are protected from a postulated falling object.</p>	<p>The modification will be implemented during the spring 2020 Unit 2 refueling outage (U2R37).</p>
<p>5. <u>Unit 1 and Unit 2 New Thermal Operating Limits</u></p> <p>NextEra will implement new thermal operating limits applicable to Unit 1 and Unit 2 construction trusses and attached components for any thermal excursion or occurrence resulting in exceeding elastic stress limits. The proposed new operational containment temperature limits are:</p> <p>Unit 1: 227° F containment atmospheric temperature Unit 2: 236° F containment atmospheric temperature</p> <p>The station implementation of these new limits will include taking the affected Unit offline and performing an inspection and/ or evaluation, as necessary, to confirm that the construction truss' future stability during a postulated design basis accident was not compromised by the thermal occurrence.</p> <p>Detection of the thermal occurrence and initiation of actions to address the new limiting values will be addressed in site procedures. The site procedures will be revised to initiate inspection and/ or evaluation actions prior to Unit startup for the affected Unit's construction truss, equipment supported by the truss (as necessary), and the containment liner. No new instrumentation is required to support this change. Existing station instrumentation will be utilized for containment temperature identification.</p>	<p>The procedure revisions will be performed by March 31, 2021, following implementation of the modifications noted in Items 1, 2, and 4.</p>
<p>6. <u>Unit 1 and Unit 2 New Construction Truss Design Code Conformance Items</u></p> <p>NextEra will revise the Point Beach Units 1 and 2 UFSAR to include the evaluation methods and acceptance criteria identified in the Table in response to RAI-1.a, in NextEra letter NRC 2018-0014, dated April 12, 2018. NextEra will revise the Point Beach Units 1 and 2 UFSAR to reclassify the construction truss as stated in its response to RAI-17 in NextEra letter NRC 2018-0014.</p>	<p>The construction truss design code conformance items will be implemented by March 31, 2021.</p>