

NEXTERA ENERGY POINT BEACH, LLC

DOCKET NO. 50-301

RENEWED FACILITY OPERATING LICENSE

Renewed License No. DPR-27

1. The Nuclear Regulatory Commission (NRC or the Commission), having previously made the findings set forth in License DPR-27 issued on March 8, 1973, has now found that:
 - A. The application to renew operating License No. DPR-27 filed by Nuclear Management Company, LLC (NMC) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter 1, and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Point Beach Nuclear Plant Unit 2 (the facility) has been substantially completed, in conformity with Provisional Construction Permit No. CPPR-47, the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - C. Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1); and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by the renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for the facility, and that any changes made to the facility's current licensing basis in order to comply with 10 CFR 54.29(a) are in accordance with the Act and the Commission's regulations;
 - D. The facility will operate in conformity with the application as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - E. There is reasonable assurance (1) that the activities authorized by the renewed operating license can be conducted without endangering the health and safety of the public, and (2) that such activities will be conducted in compliance with the rules and regulations of the Commission;

- F. NextEra Energy Point Beach is technically and financially qualified to engage in the activities authorized by this renewed operating license in accordance with the rules and regulations of the Commission;
 - G. NextEra Energy Point Beach has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements" of the Commission's regulations;
 - H. The issuance of this renewed operating license will not be inimical to the common defense and security or to the health and safety of the public; and
 - I. In accordance with the requirements of 10 CFR Part 51 (formerly Appendix D to Part 50), the renewed operating license should be issued subject to conditions for protection of the environment set forth in the Technical Specifications incorporated herein.
- 2. This renewed operating license applies to the Point Beach Nuclear Plant Unit 2, a closed cycle, pressurized, light water moderated and cooled reactor, and associated steam generators and electric generating equipment (the facility). The facility is located on the Point Beach site, in the Town of Two Creeks, Manitowoc County, Wisconsin, and is described in the Final Safety Analysis Report (FSAR), as supplemented and amended.
 - 3. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - A. Pursuant to Section 104b of the Act and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," NextEra Energy Point Beach to possess, use and operate the facility at the designated location on the Point Beach site in accordance with the procedures and limitations set forth in this renewed operating license;
 - B. Pursuant to the Act and 10 CFR Part 70, NextEra Energy Point Beach to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in Final Facility Description and Safety Analysis Report, as supplemented and amended as of March 17, 1976;

- C. Pursuant to the Act and 10 CFR Parts 30, 40 and 70, NextEra Energy Point Beach to receive, possess and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed source for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - D. Pursuant to the Act and 10 CFR Parts 30, 40 and 70, NextEra Energy Point Beach to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - E. Pursuant to the Act and 10 CFR Parts 30 and 70, NextEra Energy Point Beach to possess such byproduct and special nuclear materials as may be produced by the operation of the facility, but not to separate such materials retained within the fuel cladding.
4. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations: 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Sections 50.54 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified below:
- A. Maximum Power Levels

NextEra Energy Point Beach is authorized to operate the facility at reactor core power levels not in excess of 1800 megawatts thermal.
 - B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 261, are hereby incorporated in the renewed operating license. NextEra Energy Point Beach shall operate the facility in accordance with Technical Specifications.
 - C. Spent Fuel Pool Modification

The licensee is authorized to modify the spent fuel storage pool to increase its storage capacity from 351 to 1502 assemblies as described in licensee's application dated March 21, 1978, as supplemented and amended. In the event that the on-site verification check for poison material in the poison assemblies discloses any missing boron plates, the NRC shall be notified and an on-site test on every poison assembly shall be performed.

D. Physical Protection

NextEra Energy Point Beach shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans, including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Point Beach Nuclear Plant Physical Security Plan, (Revision 4)," submitted by letter dated May 10, 2006. NextEra Energy Point Beach, LLC shall fully implement and maintain in effect all provisions of the Commission-approved Point Beach Nuclear Plant Cyber Security Plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The NextEra Energy Point Beach CSP was approved by License Amendment No. 247 as supplemented by changes approved by License Amendment No. 251 and License Amendment No. 256.

E. Safety Injection Logic

The licensee is authorized to modify the safety injection actuation logic and actuation power supplies and related changes as described in licensee's application for amendment dated April 27, 1979, as supplemented May 7, 1979. In the interim period until the power supply modification has been completed, should any DC powered safety injection actuation channel be in a failed condition for greater than one hour, the unit shall thereafter be shut down using normal procedures and placed in a block-permissive condition for safety injection actuation.

- F. NextEra Energy Point Beach shall implement and maintain in effect all provisions of the approved fire protection program as described in the FSAR for the facility and as approved in the Safety Evaluation Report dated August 2, 1979 (and Supplements dated October 21, 1980, January 22, 1981, and July 27, 1988) and the safety evaluation issued January 8, 1997, for Technical Specifications Amendment No. 174, subject to the following provision:

NextEra Energy Point Beach may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

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 FSAR supplement, dated February 25, 2004, as revised, submitted pursuant to 10 CFR 54.21(d), shall be included in the next scheduled update to the FSAR required by 10 CFR 50.71(e)(4) following the issuance of this renewed operating license. Until that update is complete, FPLE Point Beach* may make changes to the programs and activities described in the supplement without prior Commission approval, provided that FPLE Point Beach* evaluates such changes pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.
- I. The FSAR supplement, dated February 25, 2004, as revised, describes certain future activities to be completed prior to the period of extended operation. NextEra Energy Point Beach shall complete these activities no later than March 8, 2013, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.
- 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
 - c. Designated staging areas for equipment and materials
 - d. Command and control
 - e. Training of response personnel

* On April 16, 2009, the name "FPLE Point Beach, LLC" was changed to "NextEra Energy Point Beach, LLC."

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

Appendix A: Technical Specifications

Point Beach 2 uses the same Appendix A as Point Beach 1. Please refer to Point Beach 1 for Appendix A (ML053110031).

Appendix B: Environmental Technical Specifications

Point Beach 2 uses the same Appendix B as Point Beach 1. Please refer to Point Beach 1 for Appendix B (ML053110031).

APPENDIX C
ADDITIONAL CONDITIONS
OPERATING LICENSE DPR-27

NextEra Energy Point Beach, LLC shall comply with the following conditions and the schedules noted below:

<u>Amendment Number</u>	<u>Additional Conditions</u>	<u>Implementation Date</u>
478	Deleted	
178	This amendment is authorized contingent on compliance with commitments provided by the licensee to operate Point Beach Nuclear Plant in accordance with its service water system analyses and approved procedures. Specifically, each unit will utilize only one component cooling water heat exchanger until such time as analyses are completed and the service water system reconfigured as necessary to allow operation of one or both units with two heat exchangers in service. If two component cooling water heat exchangers are required in one or both units for maintaining acceptable component cooling water temperature prior to completion of necessary analyses to allow operation in the required configuration, the service water system will be considered in an unanalyzed condition, declared inoperable, and action taken as specified by TS LCO 3.0.3 except for short periods of time as necessary to effect procedurally controlled changes in system lineups and unit operating conditions.	Immediately
206	The licensee is authorized to relocate certain Technical Specification requirements previously included in Appendix A to licensee controlled documents, as described in Table R, Relocated Specifications and Removal of Details Matrix, attached to the NRC Staff's safety evaluation dated August 8, 2001. These requirements shall be relocated to the appropriate documents no later than December 31, 2001.	Immediately
206	<p>The schedule for performing Surveillance Requirements (SRs) that are new or revised in Amendment 206 shall be as follows:</p> <p>For SRs that are new in this amendment, the first performance is due at the end of the first surveillance interval that begins on the date of implementation of this amendment.</p> <p>For SRs that existed prior to this amendment, whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of this amendment.</p> <p>For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of this amendment.</p> <p>For SRs that existed prior to this amendment, whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to the implementation of this amendment.</p>	Immediately

APPENDIX C
ADDITIONAL CONDITIONS
OPERATING LICENSE DPR-27

NextEra Energy Point Beach, LLC shall comply with the following conditions and the schedules noted below:

<u>Amendment Number</u>	<u>Additional Conditions</u>	<u>Implementation Date</u>
244	<p>Upon implementation of Amendment Nos. 240/244 adopting TSTF-448, Revision 3, the determination of control room envelope (CRE) unfiltered air leakage as required by SR 3.7.9.6, in accordance with TS 5.5.18.c.(i), the assessment of CRE habitability as required by Specification 5.5.18.c.(ii), and the measurement of CRE pressure as required by Specification 5.5.18.d, shall be considered met. Following implementation:</p> <p>a. The first performance of SR 3.7.9.6, in accordance with Specification 5.5.18.c.(i), shall be within 18 months of implementation of this amendment.</p> <p>b. The first performance of the periodic assessment of CRE habitability, Specification 5.5.18.c.(ii), shall be within three (3) years of completion of the testing prescribed in item a. above.</p> <p>c. The first performance of the periodic measurement of CRE pressure, Specification 5.5.18.d, shall be within 18 months of implementation of this amendment.</p>	Immediately
244	NextEra Energy Point Beach, LLC shall modify the PBNP control room (CR) radiation shielding to ensure CR habitability requirements are maintained.	No later than the Unit 2 (2011) refueling outage
244	NextEra Energy Point Beach, LLC shall revise PBNP Emergency Operating Procedures (EOPs) to direct continued containment spray while on sump recirculation.	No later than the Unit 2 (2011) refueling outage
244	NextEra Energy Point Beach, LLC shall modify the control room emergency filtration system (CREFS) to create a new alignment for the accident mode that provides a combination of filtered outside air and filtered recirculation air. The modifications shall include redundancy for all CREFS active components that must reposition from their normal operating position, and auto-start capability on loss of offsite power in conjunction with a containment isolation or high control room radiation signal from an emergency diesel generator supplied source for the CREFS fans required for the new system alignment.	No later than the Unit 2 (2011) refueling outage
244	NextEra Energy Point Beach, LLC shall modify the primary auxiliary building (PAB) ventilation system (VNPAB) to ensure redundancy of active components needed to operate the PAB exhaust system. VNPAB components required to direct radioactive releases in the PAB to the vent stack shall be upgraded to an augmented quality status. No credit is taken by AST for the PAB charcoal filters. NextEra Energy Point Beach, LLC shall revise PBNP EOPs to address starting the VNPAB fans.	No later than the Unit 2 (2011) refueling outage

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<u>Amendment Number</u>	<u>Additional Conditions</u>	<u>Implementation Date</u>
244	NextEra Energy Point Beach, LLC shall perform Train B Emergency Diesel Generator load testing over a range of 2877 to 2950 kW at rated power factor. This license condition shall remain in effect until implementation of LAR 261 for Unit 2.	No later than the Unit 2 (2011) refueling outage
244	NextEra Energy Point Beach, LLC shall install and support CREFS mitigating filtration unit(s) and associated ductwork and bubble tight dampers to Seismic Class I requirements as defined in FSAR Appendix A.5. The mitigating filtration unit(s) shall be seismically qualified in accordance with the guidelines provided in the Seismic Qualification Utility Group (SQUG) Generic Implementation Procedure for Seismic Verification of Nuclear Plant Equipment, Revision 2, as corrected on February 14, 1992, and in the December 2006, Electric Power Research Institute (EPRI) Final Report 1014608, "Seismic Evaluation Guidelines for HVAC Duct and Damper Systems: Revision to 1007896," as applicable.	No later than the Unit 2 (2011) refueling outage
244	NextEra Energy Point Beach, LLC shall procure mitigating filtration unit motors equivalent to W-14A/B (equivalent HP, efficiency, power factor, and voltage requirements).	No later than the Unit 2 (2011) refueling outage
245	NextEra Energy Point Beach, LLC shall eliminate the reliance on local manual action to gag the Motor-Driven and Turbine Driven AFW pump mini-recirculation valves open.	Prior to Operation of Either Unit at EPU Conditions
245	NextEra Energy Point Beach, LLC shall install a self-cooled (i.e., air-cooled) air compressor capable of supplying Instrument Air. The compressor shall be independent of Service Water cooling and normally aligned for automatic operation.	Prior to Operation of Either Unit at EPU Conditions