



August 9, 2010

NRC 2010-0117  
10 CFR 50.90

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

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

License Amendment Request 261  
Extended Power Uprate  
Response to Request for Additional Information

- References:
- (1) FPL Energy Point Beach, LLC letter to NRC, dated April 7, 2009, License Amendment Request 261, Extended Power Uprate (ML091250564)
  - (2) NRC electronic mail to NextEra Energy Point Beach, LLC, dated July 19, 2010, Point Beach Nuclear Plants, Units 1 and 2 - Draft RAIs re: HELB Reconstitution Associated with the EPU License Amendment Request (TAC Nos. ME1044 & ME1045) (ML102020285 and ML102020296)

NextEra Energy Point Beach, LLC (NextEra) submitted License Amendment Request (LAR) 261 (Reference 1) to the NRC pursuant to 10 CFR 50.90. The proposed amendment would increase each unit's licensed thermal power level from 1540 megawatts thermal (MWt) to 1800 MWt, and revise the Technical Specifications to support operation at the increased thermal power level.

Via Reference (2), the NRC staff determined that additional information is required to enable the staff's continued review of LAR 261. The Enclosure provides the NextEra response to the NRC staff's request for additional information.

This letter contains no new Regulatory Commitments and no revisions to existing Regulatory Commitments.

The information contained in this letter does not alter the no significant hazards consideration contained in Reference (1) and continues to satisfy the criteria of 10 CFR 51.22 for categorical exclusion from the requirements of an environmental assessment.

In accordance with 10 CFR 50.91, a copy of this letter is being provided to the designated Wisconsin Official.

I declare under penalty of perjury that the foregoing is true and correct.  
Executed on August 9, 2010.

Very truly yours,

NextEra Energy Point Beach, LLC

A handwritten signature in black ink, appearing to read "Larry Meyer", with a long horizontal flourish extending to the right.

*For*  
Larry Meyer  
Site Vice President

Enclosure

cc: Administrator, Region III, USNRC  
Project Manager, Point Beach Nuclear Plant, USNRC  
Resident Inspector, Point Beach Nuclear Plant, USNRC  
PSCW

## ENCLOSURE 1

### NEXTERA ENERGY POINT BEACH, LLC POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

#### LICENSE AMENDMENT REQUEST 261 EXTENDED POWER UPRATE RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

The NRC staff determined that additional information was required (Reference 1) to enable the Balance of Plant Branch to complete its review of License Amendment Request (LAR) 261, Extended Power Uprate (EPU) (Reference 2). The following information is provided by NextEra Energy Point Beach, LLC (NextEra) in response to the NRC staff's request.

#### **SBPB (HELB) – 1**

*Attachment 1 of the LAR submittal, Section 3.2.2 d), "Jet impingement from streams following a high energy line break (HELB) event," states:*

*...The analysis determined new jet impingement centerline pressures and temperatures versus distances utilizing the methodology contained in the American National Standards Institute standard and the break and crack sizes and operating parameters identified in other emergency power unit HELB calculations. **This analysis supersedes the discussion of jet impingement methodology provided in final safety analysis report (FSAR) Appendix A.2, Addendum 1 to reflect changes in methodologies used to determine HELB parameters, including those used for environmental qualifications of equipment outside containment [emphasis added].***

*There is no detailed discussion in Attachment 1 of LAR 261 or Attachment 5 of LAR 261 of the new analysis similar to that provided in the Appendix A.2, Addendum 1, of the FSAR.*

*Please provide information similar to Appendix A.2, Addendum 1 describing the new analysis.*

#### **NextEra Response**

As stated above, the current jet impingement methodology for high energy line break (HELB) events at Point Beach Nuclear Plant (PBNP) are described in the Final Safety Analysis Report (FSAR) Appendix A.2, High Energy Pipe Failure Outside Containment, Addendum 1, Jet and Fluid Forces. As stated in the NextEra Response to Branch Technical Position 3-3, Appendix B, Question 5 (Reference 3), the calculation of jet impingement centerline pressure and temperature versus distance utilized the guidance in ANSI/ANS 58.2 for the break and crack size operating parameters determined for EPU conditions. Use of this methodology for calculation of jet impingement is a change to the current HELB licensing basis for which NRC approval is requested in the EPU LAR (Reference 2). A detailed discussion of the new jet impingement analysis for EPU conditions is included in Calculation PBNP-994-21-12, Task 12 Jet Impingement Calculations, which was transmitted as Attachment 12 of Reference (3).

## **SBPB (HELB) – 2**

Section 2.5.1.3, "Technical Evaluation," of LAR 261 states:

*The HELB program was reconstituted to ensure documentation existed to demonstrate compliance with all related prior licensing commitments and to reconstitute missing documentation. A new licensing basis is established which requires the U. S. Nuclear Regulatory Commission approval prior to implementation. The new licensing basis is described in this LR section and in LR Section 2.2.1, Pipe Rupture Locations and Associated Dynamic Effects.*

*Discussions with the licensee indicate that portions of the current licensing basis contained in Appendix A.2 of the FSAR are included in the reconstituted licensing basis. However, the sections of Appendix A.2 to be included in the reconstituted licensing basis are not identified.*

*Identify the information contained in Appendix A.2 of the FSAR that is included in the reconstituted HELB licensing basis.*

### **NextEra Response**

The sections of FSAR Appendix A.2, High Energy Pipe Failure Outside Containment, that will be included in the reconstituted HELB licensing basis at EPU conditions are:

- Appendix A.2.2 Criteria to be retained:
  - (1) Definition of high energy piping systems where the combined pressure and temperature conditions of the fluid exceeds 275 psig and 200°F
  - (2) Normally depressurized lines which are pressurized only for infrequent periodic testing under controlled diagnostic conditions are not considered in this analysis
  - (3) Coincident or compounded accidents are not considered in the analysis unless the compound accident can be directly caused by the pipe break
  - (4) Pipe motion and jet forces resulting from breaks shall not:
    - a. Impair the ability to shut down the reactor,
    - b. Impair the ability for cooling the reactor core
  - (5) Critical cracks are located and oriented to cause worst effects
- Addendum 4, Conditions for Pipe Whip, including Figures A.2-3 (Cable Spreading Room Wall Barrier), A.2-4 (Non-Vital Switchgear Room Wall Barrier), A.2-5 (Control Room Window Impingement), A.2-7 (Restraint R1), A.2-8 (Restraint R2), A.2-9 (Restraint R3), A.2-10 (Restraint R4)

## **References**

- (1) NRC electronic mail to NextEra Energy Point Beach, LLC, dated July 19, 2010, Point Beach Nuclear Plant, Units 1 and 2 - Draft RAls re: HELB Reconstitution Associated with the EPU License Amendment Request (TAC Nos. ME1044 & ME1045) (ML102020285 and ML102020296)
- (2) FPL Energy Point Beach, LLC letter to NRC, dated April 7, 2009, License Amendment Request 261, Extended Power Uprate (ML091250564)
- (3) NextEra Energy Point Beach, LLC letter to NRC, dated July 8, 2010, License Amendment Request 261, Extended Power Uprate, Response to Request for Additional Information (ML101940363)