

January 7, 2011

NRC 2011-0002  
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 Clarification

- References: (1) FPL Energy Point Beach, LLC letter to NRC, dated April 7, 2009, License Amendment Request 261, Extended Power Uprate (ML091250564)
- (2) NextEra Energy Point Beach, LLC letter to NRC, dated December 10, 2010, License Amendment Request 261, Extended Power Uprate, Response to Request for Additional Information (ML103440557)

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.

During an NRC desk audit of the Extended Power Uprate (EPU) boron precipitation analysis at Westinghouse's Rockville, MD. Offices on December 29, 2010, additional supporting information for the request for additional information responses provided in Reference (2) was requested. Enclosures 1 and 2 provide the additional information requested by the NRC.

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 January 7, 2011.

Very truly yours,

NextEra Energy Point Beach, LLC

A handwritten signature in black ink, appearing to read "Larry Meyer" with a stylized flourish at the end.

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 CLARIFICATION

During an NRC desk audit of the Extended Power Uprate (EPU) boron precipitation analysis at Westinghouse's Rockville, MD. Offices on December 29, 2010, additional supporting information for the request for additional information responses provided in Reference (1) was requested. The following information is provided by NextEra Energy Point Beach, LLC, (NextEra) in response to the NRC staff's request for clarification.

#### Clarification Request 1

*Based on the LBLOCA boron precipitation analysis provided in LAR 261, Attachment 5, page 2.8.5.6.3-11, operators would need to re-establish cold leg injection no later than 4 hours and 30 minutes from the termination of safety injection to the cold legs, or 4 hours and 50 minutes from initiation of a LBLOCA event assuming maximum safeguards flow during the injection phase, to prevent boric acid precipitation. Considering Containment Spray operation during the recirculation phase could take 3 hours, and cold leg injection cannot be re-established until termination of Containment Spray, cold leg injection would have to be initiated within 30 minutes of termination of Containment Spray on recirculation to prevent boric acid precipitation. Please confirm that termination of Containment Spray and re-initiation of cold leg injection during the recirculation phase can be accomplished well within 30 minutes.*

#### NextEra Response

Per the proposed revision to Emergency Operating Procedure EOP-1.3, "Transfer to Containment Sump Recirculation – Low Head Injection," in support of LAR 241, Alternative Source Term, the steps required to terminate Containment Spray system operation and re-initiate cold leg injection during the recirculation phase following a large break loss of coolant accident (LBLOCA) are as follows:

1. Stop the containment spray pump
2. Shut the containment spray pump residual heat removal (RHR) suction motor-operated valve (MOV)
3. Ensure the RHR pump core deluge valve is throttled
4. Ensure the safety injection pump suction from the refueling water storage tank (RWST) isolation valve is shut
5. Open RHR heat exchanger outlet to the safety injection pump suction valve

6. Start the safety injection pump

These steps can be accomplished from the control room in less than 10 minutes. This is well within the worst case required time of 30 minutes to prevent boric acid precipitation.

### **Clarification Request 2**

*Please provide a copy of backup information related to the boric acid precipitation analysis requested during the NRC desk audit on December 29, 2010.*

### **NextEra Response**

The information requested during the NRC desk audit is provided in Enclosure 2.

### **References**

- (1) NextEra Energy Point Beach, LLC letter to NRC, dated December 10, 2010, License Amendment Request 261, Extended Power Uprate, Response to Request for Additional Information (ML103440557)

**ENCLOSURE 2**

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

**LICENSE AMENDMENT REQUEST 261  
EXTENDED POWER UPRATE  
RESPONSE TO REQUEST FOR CLARIFICATION**

**WESTINGHOUSE SUPPORTING INFORMATION FOR  
BORIC ACID PRECIPITATION ANALYSIS**

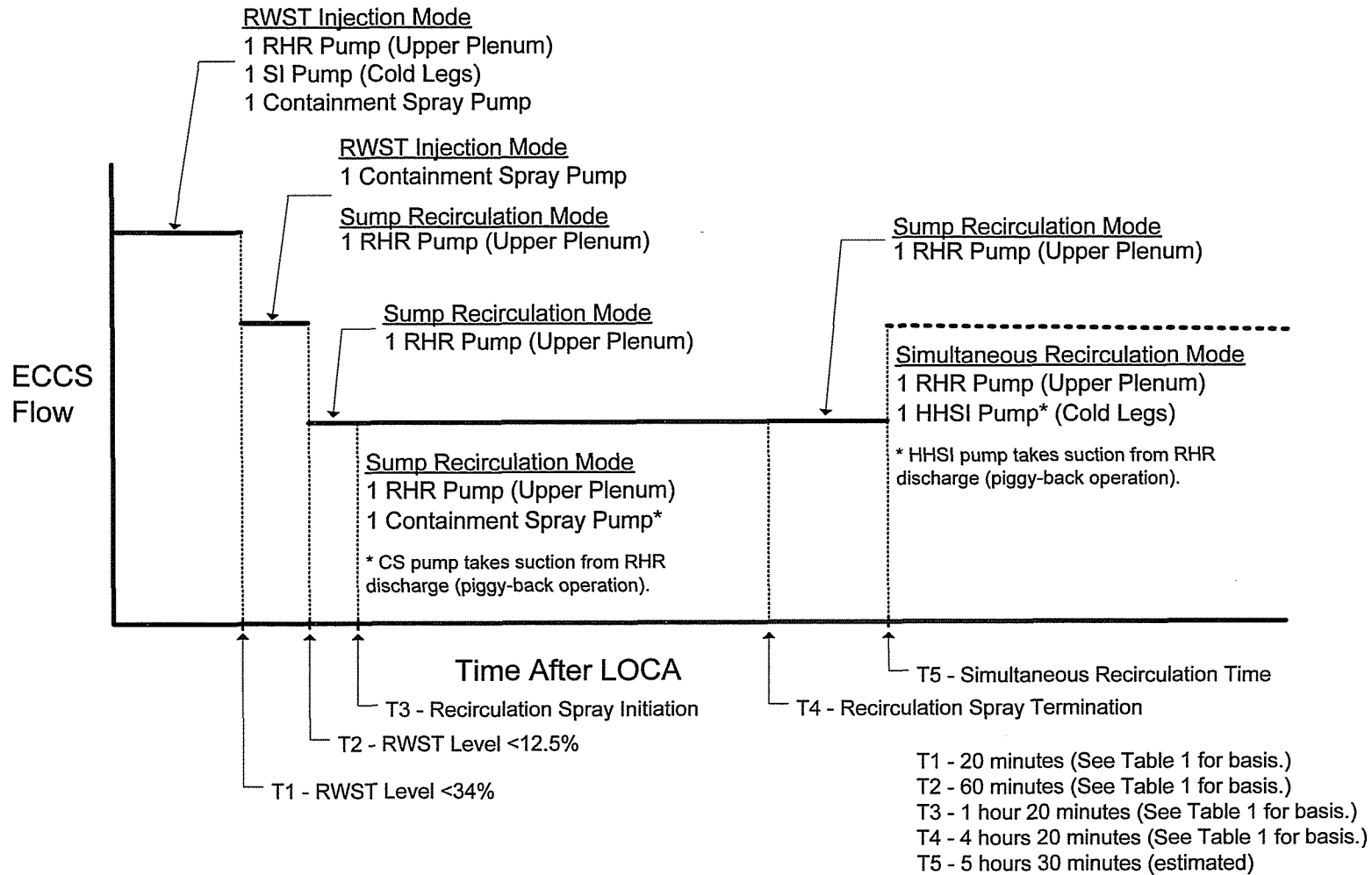


Figure 1 Point Beach Extended Power Uprate ECCS Alignment Sequence with AST Modifications

Table 1 ECCS Flow and Temperature/Enthalpy Modeling – Injection and Recirculation Modes

Period	ECCS Pumps in Operation	ECCS Pump Operating Mode	ECCS Pump Flow Rate	ECCS Fluid Temperature/ Enthalpy Basis	Notes
Up to T1	RHR	Injection	WeCAIR <sup>(5)</sup> Item 16.1.739	RWST	Typical injection phase modeling used in the ASTRUM analysis. Modeling T1 = 20 minutes conservatively bounds the WeCAIR <sup>(6)</sup> Item 17.6.779 minimum value of 1646 seconds (RWST level ≤34%). SI pump(s) are stopped at Step 29 of Unit 1 and Step 30 of Unit 2 EOP-1.3 Rev. 39 when RWST level is ≤34%. (If two ECCS trains operate during the injection phase, one train is stopped in either Step 4 or 5 of both Unit 1 and Unit 2 EOP-1.3 Rev. 39 when RWST level is ≤60%.)
	SI	Injection	WeCAIR <sup>(5)</sup> Item 16.1.739	RWST	
T1 to T2	RHR	Recirculation	WeCAIR <sup>(5)</sup> Item 16.1.739 <sup>(1)</sup>	Sump	RHR flow rate is unchanged but enthalpy increases upon switching suction to sump "B" when RWST level is ≤34%. Modeling T2 = 60 minutes conservatively bounds the WeCAIR <sup>(6)</sup> Item 5.8.192 minimum value of 4000 seconds (RWST level ≤12.5%).
T2 to T3	RHR	Reduced Recirculation	500 gpm <sup>(1,2)</sup>	Sump	RHR flow to RCS reduced using limit switch position on SI-852 valve(s). 20 minute (1200 second) maximum duration per WeCAIR <sup>(6,8)</sup> Item 9.9.929.

WESTINGHOUSE NON-PROPRIETARY CLASS 3

Period	ECCS Pumps in Operation	ECCS Pump Operating Mode	ECCS Pump Flow Rate	ECCS Fluid Temperature/ Enthalpy Basis	Notes
T3 to T4	RHR	Reduced Recirculation	500 gpm <sup>(2,3)</sup>	Sump	3 hour duration per WeCAIR <sup>(9)</sup> Item 16.2.895. The minimum recirculation spray flow rate is 900 gpm (WeCAIR <sup>(7)</sup> Item 5.8.178).
T4 to T5	RHR	Reduced Recirculation	500 gpm <sup>(2,3)</sup>	Sump	It may be best to simplify the EOPs by eliminating this period and instructing the operations staff to restart cold leg SI recirculation immediately after terminating recirculation spray.
Beyond T5	RHR  SI	Reduced Recirculation  Piggy-Back Recirculation	500 gpm <sup>(2,3)</sup>  WeCAIR <sup>(5)</sup> Item 16.1.739 <sup>(4)</sup>	Sump  Sump	This alignment is assumed to continue indefinitely. The true mission time is determined in the evaluations supporting the response to GL 2004-02.

1. Acceptability to be confirmed by WCOBRA/TRAC ECCS recirculation analysis.
2. It is assumed that recirculation spray will be required for all LOCAs that meet the entry conditions for EOP-1.3.
3. Acceptability at time T2 = 60 minutes ensures acceptability at later times since decay heat decreases with time.
4. Acceptability to be confirmed by simplified hand calculations using established generic methods.
5. PB-EPU-08-0126, "WeCAIR Update DIT-PB-EPU-08-WEC-0011, Revision 5," 4/9/08.
6. PB-EPU-08-0021. "Final Transmittal of WeCAIR Data Input Requested by Westinghouse for the Point Beach Extended Power Uprate," 2/15/08.
7. PB-EPU-08-0219, "WeCAIR Update DIT-PB-EPU-08-WEC-0011 Revision 9," 4/29/08.
8. PB-EPU-08-0233, "WeCAIR Update DIT-PB-EPU-08-WEC-0011 Revision 10," 5/5/08.
9. PB-EPU-08-0466, "WeCAIR Update DIT-PB-EPU-08-WEC-0011, Revision 16," 6/24/08.