

November 12, 2010

NRC 2010-0179 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

<u>License Amendment Request 261</u> <u>Extended Power Uprate</u> <u>Response to Request for Additional Information</u>

- 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 November 3, 2010, Point Beach Nuclear Plant, Units 1 and 2 - Request for Additional Information re: LAR 261 re: AFW Modification -Containment and Ventilation Branch Review (ML103090157)

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 license 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 was required to enable the staff's continued review of the request. Enclosure 1 provides the NextEra response to the NRC staff's request for additional information.

### Summary of Regulatory Commitments

The following new Regulatory Commitment is proposed:

 Validation of the time requirement to restore Primary Auxiliary Building Ventilation (VNPAB) will be completed as part of implementation of the revised operating procedures and training associated with the installation of the new Auxiliary Feedwater (AFW) system no later than the Unit 2 (2011) refueling outage. Document Control Desk Page 2

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 November 12, 2010.

Very truly yours,

NextEra Energy Point Beach, LLC

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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 Containment and Ventilation Branch to complete the 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.

# Primary Auxiliary Building Ventilation (VNPAB)

## SCVB-1

The response to SCVB-1 in Reference 1 states that "the time requirement to restore VNPAB will be validated prior to procedure implementation."

Does NextEra expect to validate this information prior to staff approval of the AFW modification?

### NextEra Response

NextEra does not anticipate that the time requirement to restore Primary Auxiliary Building Ventilation (VNPAB) will be validated by NextEra's Point Beach Nuclear Plant operations staff prior to NRC approval of the auxiliary feedwater (AFW) modification. Validation of this action will be completed as part of implementation of the revised operating procedures and training associated with installation of the new AFW system. Installation of the new AFW system is scheduled to be complete by the end of the Spring 2011 refueling outage on Unit 2. NextEra has proposed a Regulatory Commitment to track this action.

### Containment Response to Main Steam Line Break (MSLB)

# <u>SCVB-2</u>

The numbers quoted in response to SCVB-5 in Reference 1 do not agree with the current licensing basis analysis in FSAR Section 14.2.5.

Please explain this discrepancy and provide the maximum calculated containment temperature during a MSLB in the current licensing basis.

### NextEra Response

The NRC staff agreed to withdraw SCVB-2. Accordingly, no response is required.

# SCVB-3

In Reference 2 (page 10 of 13), it is stated that MSLB is reanalyzed for AFW system modifications. However, very few details were provided.

Please explain the differences between the current licensing basis analysis and the AFW modifications analysis. In particular, the staff would like to know:

- a) All changes in the inputs, assumptions, single failures, AFW flow rates, AFW pump start times, and codes used in the analyses.
- b) Indicate if the flow control valves being installed to each SG under the AFW modifications are taken credit for or not.

### NextEra Response

a) All codes, assumptions, AFW pump start times, and single failures remained the same in the Main Steam Line Break (MSLB) analysis addressing implementation of the new AFW system modifications when compared to the MSLB analysis in the current licensing basis. The AFW pumps were assumed to start conservatively early at the time of the safety injection (SI) signal consistent with the current licensing basis. The only input change made was to the AFW flows. The table below shows the difference between the current and new AFW flows assumed in the MSLB analysis.

	Current AFW Flows	New AFW Flows	Current AFW Flows	New AFW Flows
Faulted Steam Generator Pressure (psia)	Flow to Faulted Steam Generator (gpm)		Flow to Intact Steam Generator (gpm)	
824	399.70	391.69	377.00	374.06
724	421.70	416.05	373.00	370.64
624	442.00	439.17	369.00	364.36
524	460.40	460.85	365.00	358.21
424	478.40	481.31	362.00	352.12
324	495.00	500.81	358.00	346.20
224	510.90	519.49	355.00	340.42
124	525.80	537.51	352.00	332.10
24	540.00	554.65	349.00	326.34

The transient changed slightly due to the new AFW flows which led to changes in two transient-dependent boundary conditions. These transient-dependent boundary conditions, the containment back pressure and main feedwater flowrates (which are dependent on Steam Generator depressurization), were adjusted more accurately than had been done in the previous analysis. This resulted in a net benefit in the results of the MSLB analysis for implementation of the new AFW system under the current licensing basis as noted in the response to SCVB-4.a below.

b) The AFW safety-related flow control valves are credited for limiting AFW flow. However, the limiting single failure in the MSLB analysis is failure of one of the Feedwater Regulating Valves to close. Thus, credit for the AFW safety related flow control valves is appropriate.

# SCVB-4

Reference 2 states that the consequences of the accidents previously evaluated for the current licensed power level are not significantly increased.

- a) Did the analysis result in an increase in the maximum containment pressure and temperature? Provide us with the calculated values for maximum containment pressure and temperature.
- b) Is the analysis documented, checked and formalized?

## NextEra Response

- a) MSLB analysis with the new AFW system flows, as described in the NextEra's response to RAI 3.a) above, resulted in decreased maximum containment pressure and temperature. The peak containment pressure was 59.58 psig and the peak containment temperature was 284.9°F, both occurring at 277 seconds. Thus, the current licensing basis MSLB analysis remains bounding following installation of the new AFW system.
- b) The MSLB analysis addressing the new AFW system flows described above was documented and verified consistent with the Westinghouse Quality Management System. The analysis has also been owner accepted by NextEra.

### **References**

- NRC electronic mail to NextEra Energy Point Beach, LLC, dated November 3, 2010, Point Beach Nuclear Plant, Units 1 and 2 - Request for Additional Information re: LAR 261 re: AFW Modification - Containment and Ventilation Branch Review (ML103090157)
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