

January 29, 2010

NRC 2010-0008 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>
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 letter to NextEra Energy Point Beach, LLC, dated
  January 13, 2010, Point Beach Nuclear Plant, Units 1 and 2 Request
  for Additional Information from Balance of Plant Branch Re: Extended
  Power Uprate (TAC Nos. ME1044 and ME1045) (ML100080081)

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.

The NRC staff determined that additional information is required (Reference 2). Enclosure 1 provides the NextEra response to the request for additional information (RAI).

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.

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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 29, 2010.

Very truly yours,

NextEra Energy Point Beach, LLC

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 is required (Reference 1) to enable the Balance of Plant Branch to continue 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.

## <u>RAI 1</u>

## **BACKGROUND:**

Section 2.5.1.3.2 of the Extended Power Uprate (EPU) Licensing Report states: "The HELB was reconstituted to ensure documentation existed to demonstrate compliance with all related prior licensing commitments and to reconstitute missing documentation."

## **ISSUE:**

The staff should review selected "reconstituted" documentation to evaluate the licensee's process in ensuring compliance with prior licensing commitments.

## **REQUEST:**

Provide a list of all "reconstituted" documentation.

## NextEra Response

The following documentation, with supporting calculations, forms the high energy line break (HELB) reconstitution effort:

- High Energy System Selection Evaluation
- System Operating Parameter Selection
- Pipe Break Location Evaluation
- Pipe Break and Crack Size and Location Selection
- HELB Outside Containment Mass and Energy Release Evaluation
- Pressure Analysis using GOTHIC model

- Temperature Analysis using GOTHIC model
- Jet Impingement Evaluation
- Operator Response Time Evaluation
- Required Equipment List Determination
- HELB Outside Containment Structural Integrity Evaluation

Implementation of the reconstituted HELB program, including updates to Point Beach Nuclear Plant (PBNP) Final Safety Analysis Report (FSAR) and the associated HELB Design Basis Document (DBD), is currently scheduled to be completed as part of the implementation of PBNP Unit 2 EPU.

#### RAI 2

## BACKGOUND:

Section 2.5.1.3 of the EPU Licensing Report states:

For those high energy systems that did not have a dynamic seismic analysis, a break was postulated at the weld to every fitting, valve and welded attachment. Rather than determine all of these locations, a break was postulated in every compartment the piping run traverses. In addition, a crack was postulated to occur any where along the run of pipe at the most adverse location.

## ISSUE:

A review of the EPU Licensing Report indicates the following systems are those for which breaks and cracks are postulated to occur anywhere along the piping run:

- Extraction Steam System
- Condensate
- Chemical and Volume Control System Charging and Letdown Lines
- Heater Pump Drain Discharge

The staff requires information regarding the routing of these lines in order to perform our review.

## **REQUEST:**

- a. Confirm the above systems are all the systems for which breaks and cracks are postulated to occur anywhere along the piping run.
- b. Identify the compartments through which each of these lines runs through.

## NextEra Response

The HELB analysis assumes a break occurs anywhere along the piping run for the following systems:

- Chemical and Volume Control (CVCS) Letdown Line
- Steam Generator Blowdown System
- Extraction Steam System
- Condensate System
- Heater Drain System
- Reheater Drain System
- Non-Seismic Portion of Feedwater System

A single crack must also be postulated for each of the above at the most adverse location. However, the crack is bounded by the postulated break locations for each room/area the pipes traverse.

CVCS charging lines are not considered high energy lines per PBNP FSAR Appendix A.2 because temperature conditions of the charging lines are less than 200°F. CVCS charging lines were not identified as high energy lines in EPU LAR 261 (Reference 2), Attachment 5, Page 2.5.1.3-14, Table 2.5.1.3-1, List of High Energy Lines and the Change in Operating Conditions.

The above system pipes are routed through the rooms/areas as noted below.

- CVCS Letdown Line
  - o Unit 1
    - Valve Gallery in Primary Auxiliary Building (PAB)
    - South Non-Regenerative Heat Exchanger Room in PAB
    - South Seal Water Heat Exchanger Room in PAB
  - o Unit 2
    - Valve Gallery in PAB
    - North Non-Regenerative Heat Exchanger Room in PAB
    - North Seal Water Heat Exchanger Room in PAB
- Steam Generator Blowdown System
  - o Unit 1
    - Unit 1 Facade
  - o Unit 2
    - Unit 2 Facade

- Extraction Steam System
  - o Unit 1
    - Unit 1 Turbine Hall
  - o Unit 2
    - Unit 2 Turbine Hall
- Condensate System
  - o Unit 1
    - Unit 1 Turbine Hall
    - Unit 1 Facade
    - South Service Building
  - o Unit 2
    - Unit 2 Turbine Hall
    - Unit 2 Facade
    - Appendix R Alternate Shutdown Panel Area in Turbine Building
    - Water Treatment Equipment Area in Turbine Building
- Heater Drain System
  - o Unit 1
    - Unit 1 Turbine Hall
  - o Unit 2
    - Unit 2 Turbine Hall
- Reheater Drain System
  - o Unit 1
    - Unit 1 Turbine Hall
  - o Unit 2
    - Unit 2 Turbine Hall
- Non-Seismic Portion of Feedwater System
  - o Unit 1
    - Unit 1 Turbine Hall
  - o Unit 2
    - Unit 2 Turbine Hall

### References

- (1) NRC letter to NextEra Energy Point Beach, LLC, dated January 13, 2010, Point Beach Nuclear Plant, Units 1 and 2 Request for Additional Information from Balance of Plant Branch Re: Extended Power Uprate (TAC Nos. ME1044 and ME1045) (ML100080081)
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