



May 5, 2011

NRC 2011-0050
10 CFR 50.46(a)(3)(ii)

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

Emergency Core Cooling System Evaluation Model Changes

In accordance with 10 CFR 50.46(a)(3)(ii), NextEra Energy Point Beach (NextEra), LLC, is submitting this annual report of changes to, and errors discovered in, emergency core cooling system (ECCS) evaluation models for Point Beach Nuclear Plant (PBNP), Units 1 and 2. This letter provides a summary of the ECCS evaluation model changes and errors identified since the previous annual report dated June 21, 2010.

Enclosure 1 describes the ECCS evaluation model changes and errors for the large and small break loss of coolant accident (LOCA). Enclosure 2 provides the large break LOCA margin summary sheet for 2010. Enclosure 3 provides the small break LOCA margin summary sheet for 2010.

There were no changes or errors to the large break or small break LOCA evaluation models during this reporting period that resulted in a change to the calculated peak clad temperature.

This submittal contains no new commitments or revisions to existing commitments.

Very truly yours,

NextEra Energy Point Beach, LLC

A handwritten signature in black ink, appearing to read "James Costedio". The signature is fluid and cursive, written over the printed name.

James Costedio
Licensing Manager
Point Beach Nuclear Plant

Enclosures

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

ENCLOSURE 1

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

ECCS EVALUATION MODEL CHANGES AND ERRORS

- References:
- (1) NextEra Energy Point Beach, LLC letter to NRC, dated June 21, 2010, ECCS Evaluation Model Changes (ML101740064)
 - (2) NRC letter to NextEra Energy Point Beach, LLC, dated October 29, 2009, Issuance of Amendment Re: Use of ASTRUM for LBLOCA (ML092931684)

This is the annual report of changes to, and errors discovered in, emergency core cooling system (ECCS) evaluation models for Point Beach Nuclear Plant (PBNP) Units 1 and 2, for 2010. The report provides a summary of ECCS evaluation model changes and errors identified since the previous annual report dated June 21, 2010 (Reference 1). Westinghouse Electric Company is the analysis of record holder for the large break and small break loss of coolant accident (LOCA) analyses for PBNP. The large break LOCA analysis is performed using the 2004 Westinghouse Realistic Large Break LOCA Evaluation Model using ASTRUM. The small break LOCA analysis is performed using the 1985 Westinghouse Small Break LOCA Evaluation Model with NOTRUMP.

LARGE BREAK LOCA ECCS EVALUATION MODEL CHANGES AND ERRORS

The large break LOCA analysis was reanalyzed using the 2004 Westinghouse Realistic Large Break LOCA Evaluation Model using ASTRUM, as approved by the NRC via Amendments 235 and 239 to DPR-24 and DPR-27, respectively dated October 29, 2009 (Reference 2). There were no changes or errors in the new analysis during this reporting period that resulted in a change to the calculated peak clad temperature (PCT). Enclosure 2 provides a summary of PCT changes for Units 1 and 2.

SMALL BREAK LOCA ECCS EVALUATION MODEL CHANGES AND ERRORS

There were no changes or errors to the small break LOCA evaluation model during this reporting period that resulted in a change to the calculated PCT for PBNP. Enclosure 3 provides a summary of PCT changes for PBNP Units 1 and 2.

ENCLOSURE 2

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

LARGE BREAK LOCA MARGIN SUMMARY SHEET FOR 2010

Evaluation Model: 2004 Westinghouse Realistic Large Break LOCA Evaluation Model using ASTRUM.

Evaluation Model PCT (Unit 1/Unit 2): 1975°F/1810°F

			<u>Net PCT Effect</u>	<u>Absolute PCT Effect</u>
			Unit 1/Unit 2	Unit 1/Unit 2
A	Prior 10 CFR 50.46 Changes or Error Corrections – up to Year 2009	ΔPCT	0°F/0°F	0°F/0°F
B	Prior 10 CFR 50.46 Changes or Errors Corrections – Year 2010	ΔPCT	0°F/0°F	0°F/0°F
C	10 CFR 50.46 Changes in Year 2010 Since Item B		None	None
D	Absolute Sum of 10 CFR 50.46 Changes	ΔPCT		0°F

The sum of the PCT from the most recent analysis using an acceptable evaluation model and the estimates of PCT impact for changes and errors identified since this analysis

1975°F/1810°F < 2200°F

ENCLOSURE 3

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

SMALL BREAK LOCA MARGIN SUMMARY SHEET FOR 2010

Evaluation Model: 1985 Westinghouse Small Break LOCA Evaluation Model with NOTRUMP

Evaluation Model PCT (Unit 1/Unit 2): 1157°F/1046°F

			<u>Net PCT Effect</u>	<u>Absolute PCT Effect</u>
			Unit 1/Unit 2	Unit 1/Unit 2
A	Prior 10 CFR 50.46 Changes or Error Corrections – up to Year 2009	ΔPCT	+48°F/+48°F	+48°F/+48°F
B	Prior 10 CFR 50.46 Changes or Errors Corrections – Year 2010	ΔPCT	+0°F/+0°F	+0°F/+0°F
C	10 CFR 50.46 Changes in Year 2010 Since Item B		None	None
D	Absolute Sum of 10 CFR 50.46 Changes	ΔPCT		+48°F/+48°F

The sum of the PCT from the most recent analysis using an acceptable evaluation model and the estimates of PCT impact for changes and errors identified since this analysis

1205°F/1094°F < 2200 °F