NEXTera® ENERGY POINT BEACH

April 27, 2012

NRC 2012-0032
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

ECCS Evaluation Model Changes

In accordance with 10CFR50.46(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 ECCS evaluation model changes and errors identified since the previous annual report dated May 11, 2011 to December 31, 2011. For consistency with fleet practices, annual reports will now be for the preceding calendar year instead of the period from previous annual report to the next annual report.

Enclosure 1 describes the ECCS evaluation model changes and errors for the large and small break loss of coolant accident (LOCA). Table 1 provides the large break LOCA margin summary sheet for 2011. Table 2 provides the small break LOCA margin summary sheet for 2011.

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 cladding temperature (PCT) for PBNP.

NextEra is aware of an ECCS evaluation model error being investigated by Westinghouse and will provide an updated 10CFR50.46 letter within 30 days of finalization of that investigation.

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

Very truly yours,

NextEra Energy Point Beach, LLC

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

LARGE BREAK LOCA MARGIN SUMMARY SHEET FOR 2011

References:

1. NRC 2011-0050, J. Costedio (NextEra Energy) to US NRC Document Control Desk, "Point Beach Nuclear Plant, Units 1 and 2, Dockets 50-266 and 50-301, Renewed License Nos. DPR-24 and DPR-27, ECCS Evaluation Model Changes," May 5, 2011.

2. T. A. Beltz (USNRC) to L. Meyer (NextEra Energy), "Point Beach Nuclear Plant (PBNP), Units 1 and 2 - Issuance of License Amendments Regarding Extended Power Uprate (TAC NOS. ME1044 and ME1045)," May 3, 2011.

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, for the Year 2011 is provided pursuant to 10CFR50.46(a)(3)(ii). The report provides a summary of ECCS evaluation model changes and errors identified since the previous annual report (Reference 1) until December 31, 2011. Westinghouse Electric Company is the analysis of record holder for PBNP Units 1 and 2 large break and small break loss of coolant accident (LOCA) analyses. Large break LOCA analysis is performed using the Westinghouse Realistic Large Break LOCA Evaluation Model using ASTRUM. The small break LOCA analysis is performed using the Westinghouse Small Break LOCA Evaluation Model with NOTRUMP.

LARGE BREAK LOCA ECCS EVALUATION MODEL CHANGES AND ERRORS

There were no changes or errors in the Large Break LOCA analysis during this reporting period that resulted in a change to the calculated peak cladding temperature (PCT) for the Point Beach Nuclear Plant (PBNP). Table 1 provides a summary of PCT changes for PBNP Units 1 and 2.

SMALL BREAK LOCA ECCS EVALUATION MODEL CHANGES AND ERRORS

The Small Break LOCA was reanalyzed and was approved in 2011 in amendment No. 241 for Unit 1 and Amendment No. 245 for Unit 2 as part of the EPU approval (Reference 2). 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. Table 2 provides a summary of PCT changes for PBNP Units 1 and 2.

Table 1

LARGE BREAK LOCA MARGIN SUMMARY SHEET - 2011 ANNUAL REPORT

Plant Name: Point Beach Units 1 and 2

Utility Name: NextEra Energy

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

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

			Net PCT Effect	**Absolute PCT Effect**
			Unit 1/Unit 2	Unit 1/Unit 2
A	Prior 10 CFR 50.46 Changes or Error Corrections – up to Year 2010	ΔPCT	0°F/0°F	0°F/0°F
B	Prior 10 CFR 50.46 Changes or Errors Corrections – Year 2011	ΔPCT	0°F/0°F	0°F/0°F
C	10 CFR 50.46 Changes in Year 2011 Since Item B		None	None
D	Absolute Sum of 10 CFR 50.46 Changes	ΔPCT	N/A	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	

Table 2

SMALL BREAK LOCA MARGIN SUMMARY SHEET - 2011 ANNUAL REPORT

Plant Name: Point Beach Units 1 and 2

Utility Name: NextEra Energy

Evaluation Model: Westinghouse Small Break LOCA Evaluation Model with NOTRUMP

Evaluation Model PCT (Unit 1/Unit 2): **1049°F/1103°F**

			Net PCT Effect Unit 1/Unit 2	**Absolute PCT Effect** Unit 1/Unit 2
A	New Small Break LOCA Analysis approved in year 2011	N/A	N/A	N/A
B	Prior 10 CFR 50.46 Changes or Errors Corrections – Year 2011	ΔPCT	+0°F/+0°F	+0°F/+0°F
C	10 CFR 50.46 Changes in Year 2011 Since Item B		None	None
D	Absolute Sum of 10 CFR 50.46 Changes	ΔPCT	N/A	+0°F/+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			1049°F/1103°F < 2200 °F	