

NRC 2003-0036

10 CFR 50.46

April 11, 2003

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  
ECCS EVALUATION MODEL CHANGES, 10 CFR 50.46

As required by 10 CFR 50.46(a)(3)(ii), Nuclear Management Corporation, LLC (Licensee) 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 is intended to provide a summary of ECCS evaluation model changes and errors identified since our previous annual report dated May 10, 2002. Model changes include changes to the large break loss of coolant accident (LOCA) model and the small break LOCA model. Any changes are summarized below with additional details and a summary sheet of peak cladding temperature (PCT) margin provided in the attachment.

For PBNP Units 1 and 2, there were no changes or errors to the Best Estimate LOCA methodology since the last reporting period that resulted in a change to the PCT. In addition, there were no changes or errors in the small break LOCA evaluation model that resulted in a change to the PCT.

Current PCT rack-up sheets are provided in the attachment to this letter.

This letter contains no new commitments.

  
A. J. Cayia  
Site Vice President  
JRO/kmd

Attachment

cc: NRC Regional Administrator  
NRC Resident Inspector

NRR Project Manager  
PSCW

ADD 1

## **ECCS EVALUATION MODEL CHANGES AND ERRORS**

### **Large Break LOCA Evaluation Model**

There were no changes or errors during this reporting period that resulted in a change to the calculated PCT for Point Beach Nuclear Plant.

### **Small Break LOCA Evaluation Model**

There were no changes or errors during this reporting period that resulted in a change to the calculated PCT for Point Beach Nuclear Plant.

**LARGE BREAK PEAK CLADDING TEMPERATURE MARGIN UTILIZATION FOR BELOCA**

**PBNP Units 1 & 2:**

A.	Analysis of Record (11/2000)	PCT =	2128°F
B.	Prior Permanent ECCS Model Assessments		
	1. MONTECF Decay Heat Uncertainty Factor	$\Delta$ PCT =	4°F
C.	10 CFR 50.59 Safety Evaluations (none)	$\Delta$ PCT =	0°F
D.	2002 10 CFR 50.46 Model Assessments (none)	$\Delta$ PCT =	0°F
E.	Temporary ECCS Model Issues (none)	$\Delta$ PCT =	0°F
F.	Other Margin Allocations (none)	$\Delta$ PCT =	0°F
	<b>Licensing Basis PCT + Margin Allocations</b>	<b>PCT =</b>	<b>2132°F</b>

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**SMALL BREAK PEAK CLADDING TEMPERATURE MARGIN UTILIZATION**  
**(Three Inch Cold Leg)**

**PBNP Units 1 / 2:**

A.	Analysis of Record (11/2000)**	PCT =	1157°F / 1046°F
B.	Prior Permanent ECCS Model Assessments		
	1. NOTRUMP Mixture Level Tracking/Region Depletion	$\Delta$ PCT =	13°F
C.	10 CFR 50.59 Safety Evaluations (none)	$\Delta$ PCT =	0°F
D.	2002 10 CFR 50.46 Model Assessments (none)	$\Delta$ PCT =	0°F
E.	Temporary ECCS Model Issues (none)	$\Delta$ PCT =	0°F
F.	Other Margin Allocations (none)	$\Delta$ PCT =	0°F
	<b>Licensing Basis PCT + Margin Allocations</b>	<b>PCT =</b>	<b>1170°F / 1059°F</b>

\*\* Unit 1/Unit 2