

Barry S. Allen Vice President - Nuclear 5501 North State Route 2 Oak Harbor, Ohio 43449

> 419-321-7676 Fax: 419-321-7582

May 27, 2010 L-10-139

10 CFR 50.46(a)(3)(ii)

ATTN: Document Control Desk U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

SUBJECT: Davis-Besse Nuclear Power Station, Unit No. 1 Docket No. 50-346, License No. NPF-3 10 CFR <u>50.46</u> Report of Changes or Errors in ECCS Evaluation Models

In accordance with 10 CFR 50.46(a)(3)(ii), FirstEnergy Nuclear Operating Company (FENOC) hereby submits the annual report for changes and errors in the Emergency Core Cooling System (ECCS) evaluation model (EM) and in the application of the model used at the Davis-Besse Nuclear Power Station, Unit No. 1. The attached concludes that there were no changes or errors in the EM or in the application of the model. The report covers the period of January 1, 2009 to December 31, 2009.

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Thomas A. Lentz, Manager – Fleet Licensing, at (330) 761-6071.

Sincerely,

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Barry Allen

Attachment: Annual Report of Changes to the 10 CFR 50.46 Emergency Core Cooling System Evaluation Model and in the Application of the Model for the Davis-Besse Nuclear Power Station, Unit No. 1

cc: NRC Region III Administrator NRR Project Manager – Davis-Besse Nuclear Power Station NRC Resident Inspector – Davis-Besse Nuclear Power Station Utility Radiological Safety Board

#### Attachment L-10-139

#### Annual Report of Changes to the 10 CFR 50.46 Emergency Core Cooling System Evaluation Model and in the Application of the Model for the Davis-Besse Nuclear Power Station, Unit No. 1 Page 1 of 2

10 CFR 50.46 (a)(3)(ii) states that each holder of an operating license shall report to the Nuclear Regulatory Commission (NRC), at least annually, each change or error in an acceptable Emergency Core Cooling System (ECCS) evaluation model (EM) or in the application of such a model that affects the calculation of peak cladding temperature (PCT).

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

Babcock & Wilcox Nuclear Technologies (BWNT) Loss of Coolant Accident (LOCA) Evaluation Model

No errors were identified and no changes were implemented during the reporting period.

CRAFT2 LOCA Evaluation Model

No errors were identified and no changes were implemented during the reporting period.

## **EVALUATION MODEL APPLICATION CHANGES AND ERRORS**

No errors were identified and no changes were implemented during the reporting period.

### Summary

A summary of the PCTs at the end of the reporting period are provided in Table 1.

## Table 1

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# 10 CFR 50.46 Summary for 2009

Plant Name:		Davis-Besse Unit 1		LOCA Spectrum				
Utility Name:		FirstEnergy	Mk-B10M LBLOCA	Mk-B10K LBLOCA	Mk-B12 LBLOCA	Mk-B-HTP LBLOCA Mixed- Core	SBLOCA	
Item #	Reporting Category	Description		PCT or (Delta PCT)				
Licensing Basis at Beginning of 2009			<2,102 °F	2,102 °F	2,099 °F	2,098 °F	1,555 °F	
			Estimated	Analyzed	Analyzed	Estimated	Analyzed	
		· · ·	EM R0.6 <sup>1</sup>	EM R0.6	EM R0.6	EM R0.9	EM R0.9	
2009 Licensing Activity								
N/A	N/A	N/A	· N/A	N/A	N/A	N/A	N/A	
Licensing Basis at End of 2009			<2,102 °F	2,102 °F	2,099 °F	2,098 °F	1,555 °F	
			Estimated	Analyzed	Analyzed	Estimated	Analyzed	
			EM R0.6	EM R0.6	EM R0.6	EM R0.9	EM R0.9	

Footnotes: (1) Evaluation Model revision number.