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August 22, 2017
L-17-041

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

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

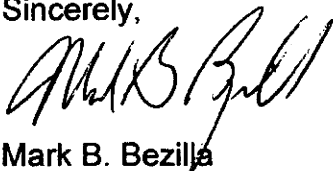
SUBJECT:

Davis-Besse Nuclear Power Station, Unit No. 1
Docket No. 50-346, License No. NPF-3
2016 Annual 10 CFR 50.46 Report of Changes to or Errors in Emergency Core Cooling
System Evaluation Models

In accordance with Title 10 of the *Code of Federal Regulations*, Part 50, Section 50.46(a)(3)(ii), FirstEnergy Nuclear Operating Company (FENOC) hereby submits the 2016 annual report of changes to or errors in an emergency core cooling system (ECCS) evaluation model, or in the application of such a model, for the Davis-Besse Nuclear Power Station, Unit No. 1. The attached report covers the period from January 1, 2016 to December 31, 2016.

There are no regulatory commitments contained in this submittal. If there are any questions or if additional information is required, please contact Mr. Thomas A. Lentz, Manager – Fleet Licensing at (330) 315-6810.

Sincerely,



Mark B. Bezilla

Attachment:

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

cc: NRC Region III Administrator
NRC Resident Inspector
NRC Project Manager
Utility Radiological Safety Board

**Attachment
L-17-041**

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

Page 1 of 2

Title 10 of the *Code of Federal Regulations*, Part 50, Section 50.46(a)(3) states that each holder of an operating license shall report to the Nuclear Regulatory Commission (NRC), at least annually, each change to 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). The nature of the change or error and its estimated effect on the limiting ECCS analysis is to be included in the report.

In the 2016 calendar year, there were no error corrections or changes to the EM or its application to the plant incurred for either the large break loss of coolant accident (LBLOCA) or the small break loss of coolant accident (SBLOCA) analyses. Therefore, no PCT effect is reported for 2016, and a net PCT change of 0°F from 2015 is reported for both LBLOCA and SBLOCA analyses.

The estimated effects on the peak cladding temperatures for this reporting period are summarized in Table 1.

Table 1
10 CFR 50.46 Summary for 2016

Plant Name:		Davis-Besse Nuclear Power Station, Unit No. 1	LOCA Spectrum	
Utility Name:		FirstEnergy	Mark-B-HTP LBLOCA <i>Full-Core</i>	Mark-B-HTP SBLOCA <i>Full-Core</i>
			PCT or PCT Change (Δ)	
Licensing Basis at Beginning of 2016			2,119°F Estimated	1,780°F Estimated
2016 Licensing Activity				
Item #	Reporting Category	Description	PCT or PCT Change (Δ)	
1	EM Error	None	$\Delta = 0^\circ\text{F}$	$\Delta = 0^\circ\text{F}$
2	EM Change	None	$\Delta = 0^\circ\text{F}$	$\Delta = 0^\circ\text{F}$
Licensing Basis at End of 2016			2,119°F Estimated	1,780°F Estimated