



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

January 18, 2012

Mr. Barry S. Allen  
Site Vice President  
FirstEnergy Nuclear Operating Company  
Davis-Besse Nuclear Power Station  
Mail Stop A-DB-3080  
5501 North State Route 2  
Oak Harbor, OH 43449-9760

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1 - REQUEST FOR  
ADDITIONAL INFORMATION REGARDING NOTIFICATION OF SIGNIFICANT  
CHANGE TO SMALL-BREAK LOSS-OF-COOLANT ACCIDENT EMERGENCY  
CORE COOLING MODEL IN ACCORDANCE WITH 10 CFR 50.46(a)(3)  
(TAC NO. ME7415)

Dear Mr. Allen:

By letter dated May 27, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111510642), FirstEnergy Nuclear Operating Company (FENOC), submitted a notification of a significant change to the small-break loss-of-coolant accident emergency core cooling model in accordance with paragraph 50.46(a)(3) of Title 10 of the *Code of Federal Regulations* (10 CFR), for Davis-Besse Nuclear Power Station, Unit 1.

The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing your submittal and has determined that additional information is required to complete the review. The specific information requested is addressed in the enclosure to this letter. During a discussion with your staff on December 19, 2011, it was agreed that FENOC would provide a response within 30 days from the date of receipt of this letter.

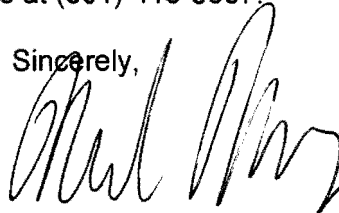
The NRC staff considers that timely responses to requests for additional information help ensure sufficient time is available for staff review and contribute toward the NRC's goal of

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efficient and effective use of staff resources. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-3867.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Mahoney", written over a diagonal line that extends from the top right towards the center of the page.

Michael Mahoney, Project Manager  
Plant Licensing Branch III-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosure:  
Request for Additional Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION

DAVIS-BESSE NUCLEAR POWER STATION, UNIT 1

FIRSTENERGY NUCLEAR OPERATING COMPANY

DOCKET NO. 50-346

By letter dated May 27, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111510642), FirstEnergy Nuclear Operating Company, the licensee for Davis-Besse Nuclear Power Plant, Unit 1, sent a notice reporting a change or error discovered in an evaluation model or in the application of such a model that affects the peak cladding temperature calculation. This report was submitted pursuant to the requirements of Section 50.46, "Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors," of Title 10 of the *Code of Federal Regulations* (10 CFR 50.46), which requires, in part, that licensees report a change in the evaluation model at least annually. The intent of this requirement is to enable the U.S. Nuclear Regulatory Commission (NRC) staff to establish the safety significance of this change (See *Federal Register*, Volume 53, No. 180, pp. 35996-36005).

The NRC staff has reviewed the licensee's submittal and determined that the following additional information is required to complete the review:

- In Table 1, "10 CFR 50.46 Summary for 2010," it is noted that peak cladding temperatures for Mk-B-HTP fuel in the mixed-core and full-core large-break loss-of-coolant accident (LBLOCA) evaluation models are "estimated" per Evaluation Model Revision 0.9. Please clarify why these specific peak cladding temperatures are "estimated" and not "analyzed" similar to the other values in the table.

ENCLOSURE

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efficient and effective use of staff resources. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-3867.

Sincerely,

*/RA/*

Michael Mahoney, Project Manager  
Plant Licensing Branch III-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosure:  
Request for Additional Information

cc w/encl: Distribution via Listserv

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**ADAMS Accession No. ML120170145**

NRR-106

OFFICE	LPL3-2/PM	LPL3-2/LA	LPL3-2/BC	LPL3-2/PM
NAME	MMahoney	SRohrer(JBurkhardt for)	JZimmerman	MMahoney
DATE	1/18/12	1/18/12	1/18/12	1/18/12

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