



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

March 13, 2015

Mr. Vito Kaminskas
Site Vice President - Nuclear Generation
DTE Electric Company
Fermi 2 - 280 OBA
6400 North Dixie Highway
Newport, MI 48166

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
FERMI 2 LICENSE RENEWAL APPLICATION – SET 26 (TAC NO. MF4222)

Dear Mr. Kaminskas:

By letter dated April 24, 2014, DTE Electric Company (DTE or the applicant) submitted an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54, to renew the operating license NPF-43 for Fermi 2, for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review.

This request for additional information was discussed with Ms. Lynne Goodman, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-3301 or e-mail Daneira.Melendez-Colon@nrc.gov.

Sincerely,

/RA/

Daneira Meléndez-Colón, Project Manager
Projects Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-341

Enclosure:
Request for Additional Information

cc w/encl: Listserv

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DISTRIBUTION: See next page

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SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
FERMI 2, LICENSE RENEWAL APPLICATION – SET 26 (TAC NO. MF4222)
DATED MARCH 13, 2015

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**FERMI 2
LICENSE RENEWAL APPLICATION
REQUEST FOR ADDITIONAL INFORMATION SET 26
(TAC NO. MF4222)**

RAI B.1.3-1a

Background:

In a letter dated January 26, 2015, the applicant provided the 2013 BADGER test report in Enclosure 2 of the submittal. The report provides information on the condition of the Boraflex material in the spent fuel pool and by extension the effectiveness of the Boraflex Monitoring Program. The monitoring program is implemented to ensure that no unexpected degradation of the Boraflex material compromises the criticality analysis.

Issue:

The staff reviewed the 2013 BADGER test report and has determined that more information is needed to complete its review. The staff has concerns on whether the program provides reasonable assurance that it can detect unexpected degradation of the Boraflex material in the spent fuel pool.

Request:

1. On page 8 of Enclosure 2 to NRC-15-0008, it states that once a critical dose level has been attained (approximately 2×10^9 rads), Boraflex becomes susceptible to dissolution by water in the spent fuel pool environment. Please discuss what percentage of Boraflex panels in the Fermi 2 spent fuel pool has attained the critical dose level of 2×10^9 rads.
2. On page 8 of Enclosure 2 to NRC-15-0008, it states that a RACKLIFE model of the Fermi 2 racks is used to estimate the service history of each Boraflex panel, specifically estimated gamma exposure. The license renewal application further states that the RACKLIFE model is used to calculate the amount of boron carbide loss from the Boraflex panels. Please discuss how the RACKLIFE model predictions compare with the results of the 2013 BADGER test report.
3. In the conclusion section of Enclosure 2 to NRC-15-0008, it states that the areal densities of 3 of 60 panels tested (i.e., 5 percent) fell below the minimum acceptance limit of $0.015656 \text{ g}^{-10}\text{B}/\text{cm}^2$. These panels were subsequently taken out of service. Please discuss whether a similar percentage of the untested panels in the spent fuel pool would be expected to have comparable degradation and thus may not meet the acceptance limit of $0.015656 \text{ g}^{-10}\text{B}/\text{cm}^2$. If so, discuss how this will impact the assumptions found in the criticality analysis. In addition, discuss how the Boraflex Monitoring Program provides reasonable assurance that unexpected degradation of Boraflex panels in the spent fuel pool will be identified.

ENCLOSURE