



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

May 11, 2017

EA-17-012

Mr. Paul Fessler, Senior VP
and Chief Nuclear Officer
DTE Energy Company
Fermi 2 - 210 NOC
6400 North Dixie Highway
Newport, MI 48166

**SUBJECT: FERMI POWER PLANT, UNIT 2 - FINAL SIGNIFICANCE DETERMINATION OF A
WHITE FINDING AND NOTICE OF VIOLATION; NRC INSPECTION REPORT
05000341/2017011 AND ASSESSMENT FOLLOWUP LETTER**

Dear Mr. Fessler:

This letter provides you the final significance determination of the preliminary White finding discussed in Inspection Report 05000341/2017009, dated February 24, 2017. The report is available in the U.S. Nuclear Regulatory Commission's (NRC) Agencywide Documents Access and Management System (ADAMS) at Accession Number ML17055C090. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. The finding involved the licensee's failure to maintain the effectiveness of the Fermi Unit 2 Emergency Plan and to use adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency.

In letter dated April 4, 2017, you provided a response to the NRC staff preliminary determination regarding the finding. A copy of the letter can be found in ADAMS, under accession number ML17094A745. In your response you indicated that you agreed with the preliminary significance determination of White for the finding and associated violation. Your response indicated that you believed that the NRC should consider enforcement discretion and a deviation from the NRC's Action Matrix. The response stated that the error occurred in the 1980s, limited opportunities existed to identify the error, and effective corrective actions were rapidly put into place following identification. You also indicated that the root cause of the event is not indicative of current licensee performance.

We have reviewed your response and have carefully considered your requests for a deviation from the Action Matrix and enforcement discretion. Regarding a deviation from the Action Matrix, as part of our evaluation, we determined that you had opportunities to identify and correct the performance deficiency. However, your staff failed to understand the radiological environment that would be present during postulated accident conditions and the impact these conditions would have upon the monitor and upon your staff's ability to correctly determine Emergency Action Levels (EALs) and protective action recommendations (PARs). Specifically, when Fermi performed the design reconstitution project in 1996, your staff identified a discrepancy between the configuration of the monitor and its description in the Final Safety

Analysis Report (FSAR), which included the description of a background subtraction feature that was not installed. The staff chose to revise the FSAR instead of correcting the issue with the monitor. More recently, our inspectors identified the issue to your staff, and the staff initially evaluated the monitor, based on the radiological conditions expected during normal operating conditions, which demonstrated an ongoing deficiency with your staff's understanding of the emergency preparedness implications. While we acknowledge that you have taken action to correct the issue, we also understand that NRC action was necessary to facilitate your understanding of the implications of the issue. Your staff continued to demonstrate a lack of understanding of the emergency planning considerations.

Regarding enforcement discretion, in your April 4, 2017, letter you referenced considerations outlined in the NRC Enforcement Policy pertaining to the application of enforcement discretion. However, those references are related to Section 2.3.4 of the Enforcement Policy, which is associated with civil penalties, which is not applicable in this case. Nonetheless, we also evaluated this issue with respect to possible discretion under Section 3.2 of the Enforcement Policy. However, for discretion to be given for an old design issue all of the following criteria must be met: (1) it was identified by the licensee as a result of a voluntary initiative; (2) it was or will be corrected; and (3) it was unlikely to be identified by efforts such as normal surveillances or routinely scheduled Quality Assurance activities. This issue was NRC-identified. Therefore, we concluded that this issue does not meet the criteria for discretion for either civil penalties or old design issues.

As a result of our review, we concluded that neither deviation from the Action Matrix nor enforcement discretion is warranted. Therefore, after considering the information developed during the inspection and the additional information you provided in your letter, dated April 4, 2017, the NRC has concluded that the finding is appropriately characterized as White, a finding of low-to-moderate risk significance.

The NRC determined that the failure to maintain the effectiveness of the emergency plan and use adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency was a performance deficiency within your ability to foresee and correct. Specifically, the failure to maintain the ability to accurately declare an EAL for a General Emergency classification and to develop and issue accurate PARs for the public during the implementation of the site's Emergency Plan in response to a rapidly progressing accident is a violation of Title 10 of the *Code of Federal Regulations* (CFR) 50.54(q)(2). The failure to accurately analyze the effect of increasing background radiation on the site's Standby Gas Treatment System (SGTS) accident range radiation monitor (AXM) indications based on the installed configuration of the AXM is a violation of 10 CFR 50.47(b)(9). As configured, the AXM would provide inaccurate indications of radioactive releases that are used as the licensee's basis for determining EAL classification and development of PARs. The circumstances surrounding the violation were described in detail in the subject inspection report. In accordance with the NRC Enforcement Policy, the Notice is considered an escalated enforcement action because it is associated with a White finding. No cross-cutting aspect was assigned since the cause of the performance deficiency (i.e. initial design) associated with this finding does not reflect current licensee performance.

The NRC has concluded that the information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved is already adequately addressed on the docket in

Inspection Report 05000341/2017009, and your April 4, 2017, letter. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position.

As a result of our review of Fermi Power Plant, Unit 2 performance, including this White finding, we have assessed the Fermi Power Plant to be in the Regulatory Response column of the NRC's Action Matrix, effective the first quarter of 2017. Therefore, we plan to conduct a supplemental inspection using Inspection Procedure 95001, "Supplemental Inspection Response to Action Matrix Column 2 Inputs," when your staff has notified us of your readiness for this inspection. This inspection procedure is conducted to provide assurance that the root cause and contributing causes of risk significant performance issues are understood, the extent of condition and the extent of cause are identified, and the corrective actions are sufficient to prevent recurrence.

In accordance with Title 10 of the *Code of Federal Regulations* (CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from ADAMS. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Sincerely,

/RA by Darrell J. Roberts acting for/

Cynthia D. Pederson
Regional Administrator

Docket No. 50-341
License No. NPF-43

Enclosure:
Notice of Violation

cc: Distribution via LISTSERV[®]

Letter to Paul Fessler from Cynthia D. Pederson dated May 11, 2017

SUBJECT: FERMI POWER PLANT, UNIT 2 - FINAL SIGNIFICANCE DETERMINATION OF A WHITE FINDING AND NOTICE OF VIOLATION; NRC INSPECTION REPORT 05000341/2017011 AND ASSESSMENT FOLLOWUP LETTER

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¹ OE Concurrence received by email from Mark Marshfield on May 4, 2017

NOTICE OF VIOLATION

DTE Energy Company
Fermi Power Plant, Unit 2

Docket No.50-341
License No.NPF-43
EA-17-012

During a U.S. Nuclear Regulatory Commission (NRC) inspection completed on January 25, 2017, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Title 10 of the *Code of Federal Regulations* (CFR) 50.54(q)(2) requires, in part, a licensee authorized to possess and operate a nuclear power reactor shall follow and maintain the effectiveness of an emergency plan which meets the requirements in Appendix E to this part and the planning standards of §50.47(b).

Title 10 CFR 50.47(b)(9) requires, in part, that adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

Contrary to the above, as of September 30, 2016, the licensee failed to maintain the effectiveness of its emergency plan and to use adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency. Specifically, the licensee failed to maintain the ability to accurately declare an Emergency Action Level (EAL) Classification RG-1.1, and develop and issue accurate protective action recommendations (PARs) during the implementation of the site's Emergency Plan in response to a rapidly progressing accident. The licensee failed to analyze the effect of increasing background radiation on the site's Standby Gas Treatment System (SGTS) accident range radiation monitor (AXM) radiation monitor indications based on the installed configuration of the AXM monitor. As configured, the AXM monitor would provide inaccurate indications of radioactive releases that are used as the licensee's basis for determining EAL classification and development of PARs.

This violation is associated with a White SDP finding.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved is already adequately addressed on the docket in Inspection Report No. 05000341/2017009, and the licensee's letter, dated April 4, 2017. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation, EA-17-012", and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001 with a copy to the Regional Administrator, Region III, 2443 Warrenville Road, Lisle, IL 60532-4352, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Enclosure

If you choose to respond, your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. Therefore, to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days of receipt.

Dated this 11th day of March 2017