



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, ILLINOIS 60532-4352

January 2, 2019

Mr. Keith Polson, Senior VP  
and Chief Nuclear Officer  
DTE Energy Company  
Fermi 2 – 260 TAC  
6400 North Dixie Highway  
Newport, MI 48166

SUBJECT: FERMI POWER PLANT, UNIT 2—NRC TRIENNIAL INSPECTION OF  
EVALUATION OF CHANGES, TESTS AND EXPERIMENTS INSPECTION  
REPORT 05000341/2018010

Dear Mr. Polson:

On December 13, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed an Evaluation of Changes, Tests and Experiments Inspection at your Fermi Power Plant, Unit 2. On December 13, 2018, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

The NRC inspectors did not identify any findings or violations of more-than-minor significance.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the Code of Federal Regulations, Part 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

*/RA/*

Robert C. Daley, Chief  
Engineering Branch 3  
Division of Reactor Safety

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

Enclosure:  
Inspection Report 05000341/2018010

cc: Distribution via LISTSERV®

Letter to Keith Polson from Robert C. Daley dated January 2, 2019.

SUBJECT: FERMI POWER PLANT, UNIT 2—NRC TRIENIAL INSPECTION OF  
EVALUATION OF CHANGES, TESTS AND EXPERIMENTS INSPECTION  
REPORT 05000341/2018010

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Numbers: 50-341; 72-71

License Numbers: NPF-43

Report Numbers: 05000341/20180010

Enterprise Identifier: I-2018-010-0071

Licensee: DTE Energy Company

Facility: Fermi Power Plant, Unit 2

Location: Newport, MI

Dates: December 10, 2018, through December 13, 2018

Inspectors: A. Dahbur, Senior Reactor Inspector (Team Lead)  
J. Neurauter, Senior Reactor Inspector  
J. Robbins, Reactor Inspector

Approved by: R. Daley, Chief  
Engineering Branch 3  
Division of Reactor Safety

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring licensee's performance by conducting an Evaluations of Changes, Tests and Experiments Inspection at Fermi Power Plant, Unit 2, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information. A NRC and self-revealed findings, violations, and additional items are summarized in the table below.

### **List of Findings and Violations**

No findings or violations were identified.

### **Additional Tracking Items**

None

## INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

## REACTOR SAFETY

### 71111.17T—Evaluations of Changes, Tests and Experiments (24 Samples)

The inspectors evaluated the following:

#### 10 CFR 50.59 Evaluations—71111.17T

- (1) 15-0209; Unretrievable screw dropped into the reactor pressure vessel during refueling outage RF17 dispositioned as de facto design change by TSR 37586; Revision 0
- (2) 16-0251; Rev. A of DC-4804 VOL I, "Secondary Containment Drawdown During DBA-LOCA", and related LCR-16-082-UFS Rev. 0, affecting UFSAR section 6.2.3.3.2 and figure 6.2-21; Revision 0
- (3) 18-0206; TSR-38055 / LCR 18-054-UFS - Revision of Main Steam Isolation Valve Closing Force Description; Revision 0
- (4) 14-0175; Use of US Army Corps of Engineers Manual EM 1110-2-2502 in Design Calculations SS-0026, Vol. I, Revision G, to Calculate Static Lateral Soil Pressure on Subsurface Exterior Reactor Building Walls; Revision 0
- (5) 16-0226; Resolution of ECCS Suction Strainer Modification Calculation Deficiencies; Revision 0
- (6) 17-0166; UFSAR Revision to Incorporate AutoPIPE and GTSTRUDL; Revision 0
- (7) 17-0108; Installation of Pomona Terminal Jacks on HFA relays to Facilitate MSIV Channel Functional Testing Using MSIV Test Box; Revision 0

#### 10 CFR 50.59 Screening/Applicability Determinations—71111.17T

- (1) 15-0009; Replace Cooling Coils in T4700B001 and T4700B002 Drywell Coolers; Revision D
- (2) 15-0150; Installation and Usage of Rigging Brackets on RB-5 Roof Girders for RB Main Crane Repairs; Revision 0
- (3) 16-0011; Hardened Vent System Modifications; Revision N

- (4) 17-0256; Changes to Appendix B of the UFSAR Aging Management Program Descriptions; Revision 0
- (5) 14-0256; Maximum Expected Differential Pressure (MEDP) for Valves T4803F601, 602, T4804F601 A/B, F602A/B, F603A/B, F604A/B, F605A/B, F606A/B, FO1A/B, F002A/B, F003A/B; Revision 0
- (6) 15-0022; Minimum Required Target Thrust (MRTT) for Generic Letter 89-10 Gate, Globe and Quarter-turn Valves (torque); Revision 0
- (7) 15-0183; Revise DC-5719 Vol I, DC-6083 Vol I, and CECO due to Limitorque Tech Update 13-02 and as-built changes per MES21; Revision 0
- (8) 16-0213; Reactor Core Isolation Cooling (RCIC) Hydraulic Analysis; Revision 0
- (9) 17-0116; Update the Fermi 2 Commitment to Fuel Channel Deflection Monitoring; Revision 0
- (10) 17-0256; Changes to Appendix B of the UFSAR Aging Management Program Descriptions; Revision 0
- (11) 15-0245; Control Rod Drift; Revision 0
- (12) 16-0180; Fuel Bundle Upper Tie Plate Removal/Replacement and Individual Rod Handling; Revision 0
- (13) 17-0211; Failed Safety Relief Valve; Revision 0
- (14) 17-0261; Loss of Feedwater or Feedwater Control; Revision 0
- (15) 18-0247; EDP 80065; Revision A
- (16) 17-0031; TSR 37800; Revision A
- (17) 16-0008; EDP 37281; Revision 0

## **INSPECTION RESULTS**

No findings or violations were identified

## **EXIT MEETINGS AND DEBRIEFS**

The inspectors confirmed that proprietary information was controlled to protect from public disclosure. The inspectors verified no proprietary information was documented in this report.

- On December 13, 2018, the inspectors presented the Evaluation of Charges, Tests and Experiments Inspection results to Mr. Keith Polson, and other members of the licensee staff.

## **DOCUMENTS REVIEWED**

### 71111.17T—Evaluations of Changes, Tests and Experiments

#### **Condition Reports—Issued During Inspection**

- 18-29955; STAAD Pro Error Reports; 12/11/2018
- 18-30012; Screen 16-0226 Potentially Inadequate; 12/12/2018
- 18-30013; UFSAR Not Updated in 1998 to Reflect Changes to ECCS Strainers; 12/12/2018

#### **Condition Reports—Reviewed During Inspection**

- 10-24322; Revision to DC-0502 Predicts SOP 23.206 Specified RCIC Flow of 650 gallon-per-minute may Exceed RCIC Turbine Rated Horsepower; 05/25/2010
- 10-28455; CARD 07-23892 Did Not Update All Documents; 09/24/2010
- 16-26697; MSIV Calculation DC-0469 Discrepancy with UFSAR 5.5.5.1.e; 08/24/2016
- 16-27189; MSIV TS SR 3.6.1.3.7 not correlated to Plant Safety Analysis; 09/09/2016
- 17-25117; Revise 20.000.25, Abnormal Operating Procedure, Failed Safety Relief Valve; 06/07/2017
- 15-22957; Scaffolding Remaining in Place Greater Than 90 Days, Request for 50.59; 04/24/2015
- 16-23935; Inadequate 50.59 Screen for Temporary Modification 15-0044 – Remove “High Offgas % Oxygen” HWC Trip Signal; 05/12/2016
- 17-26060; 50.59 Evaluation Required per MMA21; 07/18/2017
- 18-20479; Request 50.59 Evaluation for Scaffolding to Vent Valves; 01/19/2018
- 18-25119; Screen 18-0008 for Changes to E11R608A Unsatisfactory; 07/02/2018
- 18-25120; TSR 37522 Incorrectly Changed Safety Classification of Torus Spray; 07/02/2018
- 18-25124; Rigging Plan and 50.59 Screen for 125% Load Test Unsatisfactory; 07/02/2018
- 18-26241; Screen 17-0037 for 003N9976 Is Not Satisfactory; 07/09/2018
- 18-27294; TSR 37785 Revision 0 Issued without 50.59 Screen; 09/25/2018

#### **Procedures**

- 20.000.25; Failed Safety Relief Valve; Revision 26 and 27
- 20.129.01; Loss of Station and/or Control Air; Revision 35
- 35.137.002; MSIV - Assembly, Disassembly, Repair and Adjustment; Revision 55A

#### **Drawings**

- 6SD721-2500-08; One Line Diagram – 4160V Diesel Generator Buses; Revision U

#### **Others**

- GE Nuclear Services SIL No. 477; Main Steam Isolation Valve Closure; 12/13/1988
- FER 175797; Calculation: Hydrodynamic Load Factors; Revision 1
- LCR 17-054-UFS; Alternate Methodology to Calculate Static Lateral Pressure on Reactor/Auxiliary Building Subsurface Exterior Walls; Revision 0