



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

September 8, 2016

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

SUBJECT: FERMI POWER PLANT, UNIT 2 – BASELINE EMERGENCY PREPAREDNESS
BIENNIAL EXERCISE INSPECTION REPORT 05000341/2016502

Dear Mr. Fessler:

On August 11, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Fermi Power Plant, Unit 2. The enclosed report documents the results of this inspection which were discussed on August 11, 2016, with Mr. M. Caragher and other members of your staff.

No findings were identified during this inspection.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA Joe Maynen Acting for/

Steven K. Orth, Chief
Plant Support Branch
Division of Reactor Safety

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

Enclosure:
IR 05000341/2016502

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 05000341/2016502

Licensee: DTE Electric Company

Facility: Fermi Power Plant, Unit 2

Location: Newport, MI

Dates: August 8 through 11, 2016

Inspectors: G. Hansen, Senior Emergency Preparedness Inspector
M. Garza, Emergency Preparedness Inspector
J. Kutlesa, Physical Security Inspector
F. Tran, Health Physicist Inspector

Approved by: S. Orth, Chief
Plant Support Branch
Division of Reactor Safety

Enclosure

SUMMARY

IR 05000341/2016502; 08/08/2016 – 08/11/2016; Fermi Power Plant, Unit 2; Baseline Emergency Preparedness Exercise Evaluation; Exercise Evaluation Scenario Review; and Performance Indicator Verification.

This report covers a 1-week period of announced baseline inspection by four Region III inspectors. The U.S. Nuclear Regulatory Commission's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 5, dated July 2016.

NRC-Identified and Self-Revealed Findings

Cornerstone: Emergency Preparedness

No findings were identified.

Licensee-Identified Violations

None

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP1 Exercise Evaluation (71114.01)

.1 Exercise Evaluation

a. Inspection Scope

The inspectors reviewed the August 9, 2016, biennial emergency preparedness exercise objectives and scenario to ensure that the exercise would acceptably test major elements of the licensee's emergency plan and to verify that the exercise's simulated problems provided an acceptable framework to support demonstration of the licensee's capability to implement its plan. The inspectors also reviewed records of other drills and exercises conducted in 2014, 2015, and 2016, to verify that those drills' scenarios were sufficiently different from the scenario used in the August 9, 2016, exercise.

The inspectors observed and evaluated the licensee's exercise performance, focusing on the risk-significant activities of emergency classification, notification, and protective action decision making, implementation of accident mitigation strategies, and correction of past exercise weaknesses, in the following emergency response facilities:

- Control Room Simulator (CRS);
- Technical Support Center (TSC);
- Operational Support Center (OSC); and
- Emergency Operations Facility (EOF).

The inspectors also assessed the licensee's recognition of abnormal plant conditions, transfer of responsibilities between facilities, internal communications, interfaces with offsite officials, readiness of emergency facilities and related equipment, and overall implementation of the licensee's emergency plan.

The inspectors attended post-exercise critiques in the CRS, TSC, OSC, and EOF to evaluate the licensee's initial self-assessment of its exercise performance. The inspectors later met with the licensee's lead exercise evaluators and managers to obtain the licensee's findings and assessments of its exercise participants' performances. These self-assessments were then compared with the inspectors' independent observations and assessments to assess the licensee's ability to adequately critique its exercise performance.

Documents reviewed are listed in the Attachment to this report.

This exercise evaluation inspection constituted one sample as defined in Inspection Procedure (IP) 71114.01.

b. Findings

No findings were identified.

1EP8 Exercise Evaluation – Scenario Review (71114.08)

a. Inspection Scope

Prior to the inspection activity, the inspectors conducted an in-office review of the exercise objectives and scenarios submitted to the NRC using IP 71114.08, “Exercise Evaluation – Scenario Review,” to determine if the exercise would test major elements of the Emergency Plan as required by Title 10 of the *Code of Federal Regulations* 50.47(b)(14).

Documents reviewed are listed in the Attachment to this report.

This review of the exercise objectives and scenario constituted one sample as defined in IP 71114.08.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

Cornerstone: Emergency Preparedness

4OA1 Performance Indicator Verification (71151)

.1 Drill/Exercise Performance

a. Inspection Scope

The inspectors sampled licensee submittals for the Drill/Exercise Performance (DEP) Performance Indicator (PI) for the period from the third quarter of 2015 through the second quarter of 2016. To determine the accuracy of the PI data reported during this period, PI definitions and guidance contained in NEI 99-02, “Regulatory Assessment Performance Indicator Guideline,” Revision 7, were used. The inspectors reviewed the licensee’s records associated with the performance indicator to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the Nuclear Energy Institute (NEI) guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI, assessments of PI opportunities during pre-designated control room simulator training sessions, and performance during other drills.

Documents reviewed are listed in the Attachment to this report.

This inspection constituted one DEP sample as defined in IP 71151.

b. Findings

No findings were identified.

.2 Emergency Response Organization Drill Participation

a. Inspection Scope

The inspectors sampled licensee submittals for the Emergency Response Organization (ERO) Drill Participation PI for the period from the third quarter of 2015 through the second quarter of 2016. To determine the accuracy of the PI data reported during this period, PI definitions and guidance contained in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, were used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI, performance during the 2015 and 2016 drill, and revisions of the roster of personnel assigned to key emergency response organization positions.

Documents reviewed are listed in the Attachment to this report.

This inspection constituted one ERO Drill Participation sample as defined in IP 71151.

b. Findings

No findings were identified.

.3 Alert and Notification System

a. Inspection Scope

The inspectors sampled licensee submittals for the Alert and Notification System (ANS) PI for the period from the third quarter of 2015 through the second quarter of 2016. To determine the accuracy of the PI data reported during this period, PI definitions and guidance contained in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, were used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI and results of periodic scheduled ANS operability tests.

Documents reviewed are listed in the Attachment to this report.

This inspection constituted one ANS sample as defined in IP 71151.

b. Findings

No findings were identified.

4OA6 Management Meetings

.1 Exit Meeting Summary

On August 11, 2016, the inspectors presented the biennial exercise inspection results to Mr. M. Caragher, and other members of the licensee staff. The licensee acknowledged the issues presented.

The inspectors confirmed that none of the potential report input discussed was considered proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

M. Caragher, Plant Manager
W. Colonnello, Work Management Director
J. Ford, Recovery Director
L. Peterson, Engineering Director
S. Maglio, Licensing Manager
J. Louwers, Quality Assurance Manager
G. Piccard, Operations Manager
N. Avrakatos, Radiological Emergency Response Preparedness (RERP) Manager
L. Kantola, Outage and Work Management Manager
J. Pendergast, Licensing
A. Mann, RERP Specialist
G. Garber, RERP Specialist
J. Baum, RERP Specialist
M. O'Connor, Security Manager

U.S. Nuclear Regulatory Commission

B. Kemker, Senior Resident Inspector
P. Smagacz, Resident Inspector

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened, Closed, and Discussed

None

LIST OF DOCUMENTS REVIEWED

The following is a partial list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety, but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

1EP1 Exercise Evaluation (71114.01)

Fermi 2 2016 Emergency Preparedness Exercise Scenario; Dated August 9, 2016
Fermi 2 Radiological Emergency Response Plan; Revision 46
EP-101; Classification of Emergencies; Revision 41
EP-102; Unusual Event; Revision 21
EP-103; Alert; Revision 22
EP-104; Site Area Emergency; Revision 21
EP-105; General Emergency; Revision 22
EP-290; Emergency Notifications; Revision 61
EP-301-01; Technical Support Center; Revision 22
EP-302-01; Operational Support Center; Revision 14
EP-303-01; Emergency Operations Facility; Revision 16
EP-542; Computer-Based Offsite Dose Assessment – Airborne Release; Revision 13
EP-545; Protective Action Recommendations; Revision 26
Two-Years of Drill and Exercise Corrective Action Program Items; Dated August 2014 – August 2016
Two-Years of Scenario Timelines; Dated August 2014 – August 2016
NQA Audit Report 16-0101; Quality Assurance Audit Report of the Radiological Emergency Response Preparedness Program; Dated February 9, 2016
CARD 15-29766; RERP Blue Team EOF administrator position not backfilled for out-processed employee; Dated December 8, 2015
CARD 16-20506; NQA – Security EITER Equipment (OCANS) deficiencies not documented in CAP; Dated February 16, 2016
CARD 16-21437; NQA Audit Deficiency: ERO Positions not in alignment with the RERP Plan; Dated January 20, 2016
CARD 16-26019; RERP Drill 07/26/16 – Follow-up notifications assessed as UNSAT; Dated July 29, 2016
CARD 16-25598; RERP Drill 07/26/16 – Inadequate Number of Drill Controllers; Dated July 29, 2016
CARD 16-26233; JIC Access Control; Dated August 8, 2016

CARD 16-26234; Effective Communications; Dated August 8, 2016

CARD 16-26235; Media Briefings; Dated August 8, 2016

1EP8 Exercise Evaluation – Scenario Review (71114.08)

Fermi 2 2016 Emergency Preparedness Exercise 60 Day Submittal; Dated June 3, 2016

4OA1 Performance Indicator Verification (71151)

NRC Performance Indicator Data; Drill/Exercise Performance; 3rd Quarter of 2015 – 2nd Quarter of 2016

NRC Performance Indicator Data; Emergency Response Organization Drill Participation; 3rd Quarter of 2015 – 2nd Quarter of 2016

NRC Performance Indicator Data; Alert and Notification System Reliability; 3rd Quarter of 2015 – 2nd Quarter of 2016

NEI 99-02; Regulatory Assessment Performance Indicator Guideline; Revision 7

LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
ANS	Alert and Notification System
CFR	Code of Federal Regulations
CRS	Control Room Simulator
DEP	Drill and Exercise Performance
EOF	Emergency Operations Facility
ERO	Emergency Response Organization
IP	Inspection Procedure
NEI	Nuclear Energy Institute
NRC	U.S. Nuclear Regulatory Commission
OSC	Operational Support Center
PARS	Publicly Available Records System
PI	Performance Indicator
TSC	Technical Support Center

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/RA Joe Maynen Acting for/

Steven K. Orth, Chief
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Letter to Mr. Paul Fessler from Mr. Steven K. Orth dated September 8, 2016

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