



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

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

July 2, 2008

Mr. Jack M. Davis  
Senior Vice President and  
Chief Nuclear Officer  
Detroit Edison Company  
Fermi 2 - 210 NOC  
6400 North Dixie Highway  
Newport, MI 48166

SUBJECT: FERMIL POWER PLANT, UNIT 2  
BIENNIAL EMERGENCY PREPAREDNESS EXERCISE BASELINE  
INSPECTION 05000341/2008502

Dear Mr. Davis:

On May 23, 2008, the U.S. Nuclear Regulatory Commission (NRC) completed a Biennial Emergency Preparedness Exercise Baseline inspection at your Fermi Power Plant, Unit 2. The enclosed report documents the inspection findings, which were discussed on May 23, 2008, with you and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and to compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no NRC-identified and no self-revealed findings of safety significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system

J. Davis

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(ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

*/RA/*

Hironori Peterson, Chief  
Operations Branch  
Division of Reactor Safety

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

Enclosure: Inspection Report 05000341/2008502  
w/Attachment: Supplemental Information

cc w/encl: J. Plona, Vice President,  
Nuclear Generation  
K. Hlavaty, Plant Manager  
R. Gaston, Manager, Nuclear Licensing  
D. Pettinari, Legal Department  
Michigan Department of Environmental Quality  
M. Yudasz, Jr., Director, Monroe County  
Emergency Management Division  
Supervisor - Electric Operators  
T. Strong, State Liaison Officer  
Wayne County Emergency Management Division

J. Davis

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Letter to Jack M. Davis from Hironori Peterson dated July 2, 2008.

SUBJECT: FERMIL POWER PLANT, UNIT 2  
BIENNIAL EMERGENCY PREPAREDNESS EXERCISE BASELINE  
INSPECTION 05000341/2008502

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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-341

License No: NPF-43

Report No: 05000341/2008502

Licensee: Detroit Edison Company

Facility: Fermi Power Plant, Unit 2

Location: Newport, MI

Dates: May 19 through 23, 2008

Inspectors: Robert Jickling, Senior Emergency Preparedness  
Inspector  
Regina Russell, Emergency Preparedness Inspector  
Michael Morris, Senior Resident Inspection

Approved by: Hironori Peterson, Chief  
Operations Branch  
Division of Reactor Safety

Enclosure

## SUMMARY OF FINDINGS

IR 05000341/2008502; 05/19/2008 - 05/23/2008; Fermi Power Plant, Unit 2; Biennial Emergency Preparedness Exercise Baseline Inspection.

This report covers a 1 week period of baseline inspection by two regional inspectors and a resident inspector. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

**A. NRC-Identified and Self-Revealed Findings**

**Cornerstone: Emergency Preparedness**

No findings of significance were identified.

**B. Licensee-Identified Violations**

No violations of significance were identified.

## REPORT DETAILS

### 1. REACTOR SAFETY

#### Cornerstone: Emergency Preparedness

#### 1EP1 Exercise Evaluation (71114.01)

##### .1 Exercise Evaluation

##### a. Inspection Scope

The inspectors reviewed the May 20, 2008, biennial emergency preparedness exercise's 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 2006, 2007, and 2008, to verify that those drills' scenarios were sufficiently different from the scenario used in the May 20, 2008, exercise.

The inspectors 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); 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, 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 inspection constituted a single sample as defined in Inspection Procedure 71114.01-05.

##### b. Findings

No findings of significance were identified.

#### 4. OTHER ACTIVITIES

##### 4OA1 Performance Indicator Verification (71151)

###### .1 Drill/Exercise Performance

###### a. Inspection Scope

The inspectors sampled licensee submittals for the Drill/Exercise Performance performance indicator (PI) for the period from the 3<sup>rd</sup> quarter 2007 through the 1<sup>st</sup> quarter 2008. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 5, 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; assessments of PI opportunities during predesignated control room simulator training sessions, performance during the 2007 off-year exercise, and performance during other drills. Specific documents reviewed are described in the Attachment to this report.

This inspection constitutes one drill/exercise performance sample as defined in Inspection Procedure 71151-05.

###### b. Findings

No findings of significance 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 3<sup>rd</sup> quarter 2007 through the 1<sup>st</sup> quarter 2008. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 5, 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 2007 off-year exercise and other drills; and revisions of the roster of personnel assigned to key emergency response organization positions. Specific documents reviewed are described in the Attachment to this report.

This inspection constitutes one ERO drill participation sample as defined in Inspection Procedure 71151-05.



b. Findings

No findings of significance 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 3<sup>rd</sup> quarter 2007 through the 1<sup>st</sup> quarter 2008. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 5, 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 regularly scheduled ANS operability tests. Specific documents reviewed are described in the Attachment to this report.

This inspection constitutes one alert and notification system sample as defined in Inspection Procedure 71151-05.

b. Findings

No findings of significance were identified.

40A5 Other Activities

.1 Closure of Unresolved Items

(Closed) URI 05000341/2007010-05: Potential Decrease in Effectiveness of EAL Revision without Prior NRC Approval

Emergency Action Levels (EALs) approved in a December 24, 1995 Safety Evaluation had been revised prior to implementation in Revision 17 of the Emergency Plan. Two of the changes to the EALs: 1) "Loss of Water Level in the Reactor Vessel That Uncovered or Will Uncover Fuel in the Reactor Vessel"; and 2) "Containment Isolation Valve Status After Containment Isolation Signal," were identified by NRC as potential decreases in the effectiveness of the emergency plan. Additional information regarding the revisions was not available by the end of the inspection.

The licensee completed further analysis of these EAL changes in corrective actions 07-26350 and 07-26235. Corrective actions 07-26350 and 07-26352, were completed December 10, 2007, and included additional information not described in the effectiveness reviews provided to NRC. The NRC Headquarters staff and regional inspectors determined that the change justifications were adequate and did not represent a decrease in effectiveness of the emergency plan. The URI is closed.

#### 4OA6 Management Meetings

##### .1 Exit Meeting Summary

- On May 23, 2008, the inspectors presented the inspection results to you 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.

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##### .2 Public and Media Briefing

- On May 23, 2008, the inspector summarized the NRC's preliminary exercise inspection conclusions at a public and media briefing hosted by Department of Homeland Security/Federal Emergency Management Agency Region V Field Office staff in Monroe, Michigan.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee

J. Davis, Senior Vice President and Chief Nuclear Office  
R. Gaston, Manager Licensing  
K. Hlavaty, Plant Manager  
D. Keskitalo, Supervisor Radiological Engineering  
E. Kokosky, Manager Performance Improvement  
J. Plona, Site Vice President  
S. Stasek, Director Nuclear Projects  
R. Zipfel, Supervisor Radiological Emergency Response Preparedness

#### Nuclear Regulatory Commission

M. Morris, Senior Resident Inspector

### **LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED**

#### Opened

None.

#### Closed

05000341/2007010-05	URI	Potential Decrease in Effectiveness of EAL Revision without Prior NRC Approval (Section 40A5)
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#### Discussed

None.

## LIST OF DOCUMENTS REVIEWED

The following is a 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.

<b>PLANT PROCEDURES</b>		
<b><u>Number</u></b>	<b><u>Description or Title</u></b>	<b><u>Date or Revision</u></b>
Fermi 2 RERP Plan	Sections D, E, H, and K	33
Fermi 2 RERP Plan	Table B-1, Staffing for Fermi 2 ERO	33
Fermi 2 RERP Plan	Table B-2, ERO Functional Responsibilities	33
EP-101	Classification of Emergencies	32
EP-220	Personnel Monitoring and Radiological Emergency Teams	15

<b>CORRECTIVE ACTION PROGRAM DOCUMENTS REVIEWED</b>		
<b><u>Number</u></b>	<b><u>Description or Title</u></b>	<b><u>Date or Revision</u></b>
08-23104	Initial Notification and Follow-Up	May 7, 2008
08-22766	Classification and Notification	April 23, 2008
07-26310	Add The Basis Information for Emergency Classification to EP-101	October 17, 2007
07-26246	HU4 Declaration Timeliness	October 16, 2007
07-24852	Misclassification of Unusual Event	August 9, 2007
07-21752	Missed PI Opportunity	March 21, 2007
06-25164	Notification Deficiency	August 9, 2006
06-18020	Simulator Yields Unexpected Indications	June 2006

<b>PERFORMANCE INDICATOR RECORDS</b>		
	<b><u>Description or Title</u></b>	<b><u>Date</u></b>
	NRC Performance Indicator (RERP) Form, Drill and Exercise Performance Indicator Data	January 2007 – March 2008
	Siren Test Results, NRC Siren Performance Indicator Data	January 2007 – March 2008
	Key ERO Drill and Exercise Participation	March 2007 – March 2008

<b>EXERCISE RECORDS</b>		
<b><u>Number</u></b>	<b><u>Description or Title</u></b>	<b><u>Date or Revision</u></b>
	List of Drill and Exercise CRs	June 6, 2006 – May 7, 2008
	Drill and Exercise Scenario Timelines	June 6, 2006 – May 20, 2008
	May 20, 2008, Classification, Notification, and Assessment Evaluated Exercise Records	May 20, 2008

<b>EMERGENCY ACTION LEVEL CHANGES</b>		
<b><u>Number</u></b>	<b><u>Description or Title</u></b>	<b><u>Date or Revision</u></b>
08-23370	Documentation of Notification Timeline of Security Event Declaration	May 18, 2008
07-26040	Evaluate the EALs Contained in EP-101, Emergency Classifications	October 11, 2007
07-26354	NRC Identified: Recommendation for Improvement to EALs	October 18, 2007
07-26352	Evaluate the Change Mode to SS5 in RERP Plan; Revision 17	October 18, 2007
07-26350	Evaluate the Change Mode to Loss of Primary Containment EAL in Revision 17	October 18, 2007
07-26235	Title 10 CFR 50.54(q) Document Was Complete but not Transferred into the Effectiveness Review Form	October 16, 2007
07-26315	NRC Special Inspection: Inadequate Implementation of Emergency Plan Revision 17	October 17, 2007

## LIST OF ACRONYMS USED

ADAMS	NRC's Document System
CAP	Corrective Action Program
CFR	Code of Federal Regulations
CRS	Control Room Simulator
DRS	Division of Reactor Safety
EALs	Emergency Action Levels
EOF	Emergency Operations Facility
ERO	Emergency Response Organization
NEI	Nuclear Energy Institute
NRC	U.S. Nuclear Regulatory Commission
PARS	Publicly Available Records
PI	Performance Indicator
RERP	Radiological Emergency Response Preparedness
TSC	Technical Support Center
URI	Unresolved Item