

Joseph H. Plona
Site Vice President

6400 N. Dixie Highway, Newport, MI 48166
Tel: 734.586.5910 Fax: 734.586.4172

DTE Energy



10 CFR 50.12

August 3, 2010
NRC-10-0061

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington D C 20555-0001

Reference: Fermi 2
NRC Docket No. 50-341
NRC License No. NPF-43

Subject: Fermi 2 Exemption Request from the Biennial
Emergency Preparedness Exercise Requirement
in 10 CFR 50, Appendix E, Section IV.F.2.b

Pursuant to 10 CFR 50.12, Detroit Edison, the licensee for Fermi 2, requests the Nuclear Regulatory Commission (NRC) approval of an exemption from the requirement of 10 CFR 50, Appendix E, Section IV.F.2.b for conducting a biennial emergency preparedness exercise. Specifically, Detroit Edison is requesting an exemption from conducting the 2010 emergency preparedness biennial evaluated exercise. The enclosure to this letter provides details regarding this request.

As discussed in the Enclosure and in accordance with 10 CFR 50.12(a)(1), the requested exemption is authorized by law, would not result in undue hazard to life or property, and is consistent with the common defense and security. This exemption request also meets the special circumstances criteria, as set forth in 10 CFR 50.12(a)(2).

Detroit Edison requests NRC approval of this exemption request by October 29, 2010.

A X45
NRC

Should you have any questions, please contact, Mr. Rodney W. Johnson,
Manager – Nuclear Licensing of my staff, at 734-586-5076.

Sincerely,

A handwritten signature in black ink that reads "Joseph H. Plone". The signature is written in a cursive style with a large, prominent initial "J".

Enclosure: Exemption Request
Attachment 1: Sequence of Events for Alert Declaration
Attachment 2: Drills and Training activities since the 2008 biennial Exercise
Attachment 3: Actual Event Objective Critique Summary
Attachment 4: Evaluated Exercise Actual Event Objective Review
Attachment 5: Drill / Exercise Component Checklist
Attachment 6: Drill and Exercise Opportunities for the Actual Event –
Classifications and Notifications
Attachment 7: Corrective Actions as a Result of the Actual Event

cc: NRC Project Manager
NRC Resident Office
Reactor Projects Chief, Branch 4, Region III
Regional Administrator, Region III
Supervisor, Electric Operators,
Michigan Public Service Commission

**Enclosure to
NRC-10-0061**

**Fermi 2 Exemption Request from the Biennial Emergency
Preparedness Exercise Requirement in 10 CFR 50,
Appendix E, Section IV.F.2.b**

Purpose

This Enclosure provides justification pursuant to 10 CFR 50.12 for an exemption from the requirement of 10 CFR 50, Appendix E, Section IV.F.2.b to conduct a biennial Emergency Preparedness Exercise. Specifically, this exemption request applies to special circumstances that were unavoidable, due to a tornado strike on the plant site two days prior to the scheduled biennial exercise date. Two events were declared, an Unusual Event and an Alert which resulted in the activation of the Emergency Preparedness Plan.

Detroit Edison is requesting NRC approval of an exemption from conducting a biennial exercise in 2010. Response to the actual event on June 6, 2010 provided an opportunity to fully demonstrate the objectives of the exercise. This request provides details for crediting the response to the actual event in lieu of the 2010 exercise.

Background

Detroit Edison's Fermi 2 biennial evaluated exercise was scheduled to be conducted on June 8, 2010. However, on June 6, 2010 at 0217 hours, a tornado warning was issued for Monroe County due to a storm front moving through southeast Michigan. At 0238 hours, a tornado swept across the Fermi 2 property. At 0253 hours, the Shift Manager declared an Unusual Event (UE) based on reports of storm damage within the protected area, including loss of both 345kV lines for Division 2 of offsite power supply, and the loss of two out of three 120kV lines for Division 1 of offsite power supply.

The Emergency Call Out System (ECOS) was activated at 0353 hours to supplement on shift personnel to assist in damage assessment. At 0417 hours, the Emergency Director declared an Alert due to confirmed structural damage to the Auxiliary Building. At 0430 hours, ECOS was activated for the Alert. The Emergency Response Organization (ERO) members arrived on-site and activated the Emergency Response Facilities. Assembly and accountability was performed and was completed at 0439 hours.

Three Emergency Response Facilities (the Technical Support Center, the Operational Support Center and the Emergency Operations Facility) were activated. The Joint Information Center (JIC) was not activated since this facility is not normally activated at the Alert level. The State of Michigan, Wayne County, and Monroe County emergency response personnel participated in the response to the event. Communication with the NRC was established and maintained throughout the actual event up to and including termination.

The Alert was terminated at 0220 hours on June 7, 2010 when it was determined that no release of radioactive material had occurred, no damage to safety related

equipment was sustained, safety systems in structures damaged by the tornado were not impacted, and offsite electrical power to the site was restored.

Overall performance of the ERO was determined to be satisfactory. The ERO demonstrated the ability to protect the health and safety of the public during the event which included storm damage within the protected area as well as the loss of offsite power.

Basis for the Exemption

The underlying purposes for conducting a biennial exercise are to test the adequacy of emergency plans, to ensure that emergency response organization personnel are familiar with their duties, and to identify and correct noted weaknesses.

The following seven attachments are provided with this exemption request to demonstrate how the objectives of the exercise have been met in the response to the actual event on June 6, 2010:

- Attachment 1: Sequence of Events for Alert Declaration
- Attachment 2: Drills and Training activities since the 2008 biennial Exercise
- Attachment 3: Actual Event Objective Critique Summary
- Attachment 4: Evaluated Exercise Actual Event Objective Review
- Attachment 5: Drill / Exercise Component Checklist
- Attachment 6: Drill and Exercise Opportunities for the Actual Event –
Classifications and Notifications
- Attachment 7: Corrective Actions as a Result of the Actual Event

Additional details regarding the information in the attachments are provided herein:

1. The sequence of the actual event that occurred on June 6, 2010 is captured in Attachment 1.
2. Fermi 2 has regularly exercised its emergency response strategies and personnel in coordination with offsite authorities. Eighteen (18) drills have been conducted since the last biennial evaluated exercise. Ten (10) series of re-qualification training sessions have been conducted in 2009 and 2010. The re-qualification training sessions included an integrated site table top drill involving all on-site and off-site Emergency Response Facilities. Additional table top drills were conducted for specific task elements. Forty-seven (47) evaluated simulator sessions for Licensed Operators and thirteen (13) table top exercises for Non-Licensed Operators were conducted since the last biennial evaluated exercise. Attachment 2 provides a list of drill and training dates that have been conducted since the 2008 evaluated exercise.
3. A review of the objectives for the planned 2010 Fermi 2 evaluated exercise was conducted based on actions that were demonstrated during the actual event. A

post-event drill/exercise component checklist was completed (Attachment 5) identifying the components that were and were not performed during the event. All objectives except those requiring radiological controls and Joint Information Center activation were exercised during the actual event. Attachment 3 provides a summary of the actual event objective critique. Attachment 4 provides details of the actual event objective review. Attachment 5 provides an exercise component checklist. These three attachments collectively delineate analysis of the exercise objectives versus the actual event.

4. Exercise performance was also analyzed for the actual event. All classifications and notifications were determined to be successful. This represents four successful opportunities of the four possible opportunities that occurred during the actual event. Attachment 6 summarizes the exercise opportunities for the actual event.
5. A post-event critique/debrief session was conducted with the ERO. Issues identified during the event were entered into the corrective action system. Attachment 7 provides a list of corrective actions that have been identified during the actual event and the post-event critique/debrief.
6. A limited scope biennial exercise utilizing partial onsite participation and full participation by offsite agencies was conducted on June 8, 2010; however, it only included offsite aspects of the originally planned exercise. FEMA evaluated the offsite aspects of the exercise on June 8, 2010 as originally planned. Therefore, Detroit Edison is not requesting an exemption from 10 CFR 50, Appendix E, Section IV.F.2.c for offsite authority participation.

Analysis of the actions that occurred during the June 6, 2010 actual event versus the activities that are required of an evaluated exercise provides objective evidence of the adequacy of the emergency plans at Fermi 2 and of the capability of the ERO personnel to respond to emergencies. The actual event provided the circumstances to demonstrate that Emergency Response Organization personnel are familiar with their duties and to demonstrate the site's ability to identify and correct weaknesses.

Justification of the Exemption

In accordance with 10 CFR 50.12(a)(1), the NRC may grant exemptions from certain requirements of the Part 50 regulations that are authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security.

1. This exemption request is authorized by law:

In accordance with 10 CFR 50.12, the NRC may grant an exemption from the requirements of 10 CFR 50, if the exemption is authorized by law. The proposed exemption is authorized by law in that no other prohibition of law exists to preclude the activities which would be authorized by the exemption.

The proposed exemption will continue to serve the underlying purpose of the regulation. The underlying purposes for conducting a biennial Exercise are to test the adequacy of emergency plans, to ensure that emergency response organization personnel are familiar with their duties, and to identify and correct weaknesses. The activities performed during the actual event at Fermi 2 demonstrate that these underlying purposes of conducting an exercise have been met.

2. This exemption request will not present an undue risk to the public health and safety:

During response to the actual event on June 6, 2010, the Fermi 2 Emergency Response Organization demonstrated the ability to protect the health and safety of the public. The event included tornado damage to plant structures within the protected area as well as the loss of offsite power. The Fermi 2 emergency plans used to respond to the event demonstrated the effectiveness of the plans in protecting the health and safety of the public.

3. This exemption request is consistent with the common defense and security:

This exemption requests NRC approval using the response to the actual tornado strike event two days before the 2010 scheduled exercise in place of the biennial exercise to meet the requirement of 10 CFR 50, Appendix E, Section IV.F.2.b. Granting this exemption will maintain focus on nuclear safety and security; therefore, it is ultimately in the interest of common defense and security.

Pursuant to 10 CFR 50.12(a)(2), the NRC will consider granting an exemption from the regulation if special circumstances are present. This exemption request meets this requirement since special circumstances that were present when the plant site was subject to a tornado strike. Specifically, the underlying purpose of the rule has been adequately served in responding to the actual event on June 6, 2010.

Environmental impact

The scheduled 2010 biennial emergency exercise would not be conducted for Fermi 2, if the requested exemption is approved by the NRC. Whether or not the exercise is conducted would have no effect on the environment since any outdoor activity during an exercise is limited to minimal use of roads and highways. The proposed action would not significantly increase the probability or consequences of an accident, change the types or quantities of radiological effluents that may be released offsite, or result in a significant increase in public or occupational radiation exposure since there would be no change to facility operations that could create a new accident or affect a previously analyzed accident or release path.

Since the proposed action will not have any adverse environmental effects, there are no alternatives available for reducing or avoiding adverse environmental effects.

With regard to non-radiological impacts, no changes would be made to non-radiological plant effluents or activities that would adversely affect the environment. Therefore, no significant non-radiological impacts are associated with the proposed action.

There are no federal permits, licenses, approvals and other entitlements which must be obtained in connection with the proposed action. The proposed action is not subject to any environmental quality standards or requirements imposed by Federal, State, regional, or local agencies having responsibility for environmental protection.

Alternatives to the Proposed Action

1. Schedule and conduct a biennial exercise in 2010:

The underlying purposes for conducting a biennial exercise are to test the adequacy of emergency plans, to ensure that emergency response organization personnel are familiar with their duties, and to identify and correct weaknesses. These objectives have been adequately demonstrated during the response of the tornado strike on site.

Since the actual event on June 6, 2010 adequately demonstrated the objectives for conducting the biennial exercise and due to the fact that Fermi 2 has a refuel outage scheduled for the fourth quarter of 2010, this alternative is ruled out.

2. Schedule and conduct a biennial exercise in 2011:

The June 6, 2010 tornado required the declaration of an Alert and the activation of the Fermi 2 emergency plan. Additionally, on June 8, 2010 the offsite authorities participated in an exercise that was evaluated by FEMA, as required. These two activities fulfill the requirements of holding the biennial evaluated exercise as required by 10 CFR 50, Appendix E, Section IV.F.2. Therefore, this alternative is also ruled out.

Neither alternative provides the benefit of relieving Fermi 2 from an unneeded demonstration of the emergency capability that had been adequately demonstrated during the actual event of June 6, 2010.

Conclusion

The underlying purposes for conducting a biennial exercise are to test the adequacy of emergency plans, to ensure that emergency response organization personnel are familiar with their duties, and to identify and correct weaknesses. Review of the actions that occurred during the June 6, 2010 actual event supplemented by the drills, exercises, and other training activities conducted since the previous biennial exercise provides evidence that Fermi 2 has regularly exercised its emergency response strategies and personnel in coordination with offsite authorities as required by regulations. Granting an exemption from the requirement of conducting the biennial exercise will not pose an undue risk to public health and safety and will ensure that focus is maintained on plant safety and security.

As required by 10 CFR 50.12, the requested exemption is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security.

**Attachment 1 to
NRC-10-0061**

**Fermi 2 Exemption Request from the Biennial Emergency
Preparedness Exercise Requirement in 10 CFR 50,
Appendix E, Section IV.F.2.b**

Sequence of Events for Alert Declaration
Sunday, June 6, 2010 - Monday, June 7, 2010

Sunday, June 6, 2010

Time	Event
0217	The National Weather Service issued a Tornado Warning for Monroe County. Control Room Supervisor entered AOP 20.000.01, "Acts of Nature."
0238 thru 0245	Loss of both 345kV offsite power lines, EDG #13 & 14 start to supply Division 2 power. Loss of two out of three 120kV offsite power lines. Main turbine tripped. Reactor scrambled. The main condenser was used as heat sink via turbine bypass lines. Shift Manager receives reports of trailers turned over and damage to turbine building and several outbuildings.
0253	Shift Manager became the Emergency Director (SM/ED) and declared an Unusual Event (HU1), " <i>Natural AND Destructive Phenomena Affecting the Protected Area</i> ", EAL #9, " <i>Assessment by the Control Room that a destructive event affecting the protected area has occurred</i> " based on storm damage within the Protected Area.
0253	Message 1 – Initial Notification of the declaration of an Unusual Event (HU1)
0259	Initial Notification to off-site authorities complete.
0346	Message 2 – Follow-up Notification signed by SM/ED.
0348	Notification to off-site agencies complete.
0353	SM/ED activates ECOS to supplement on-shift personnel to assist in damage assessment.
0401	Shift Manager received a phone call reporting possible damage to the Auxiliary Building. The Superintendent, Operations left the control room to investigate.
0408	Superintendent, Operations reported to the SM/ED that there was a large hole in the Auxiliary Building East wall.
0415	TSC ED arrives at the TSC.
0417	The SM/ED declared an Alert (HA1), " <i>Natural AND Destructive Phenomena Affecting the Plant Vital Area</i> ", EAL #3, " <i>Any occurrence that results in VISIBLE DAMAGE to the Reactor Building, Auxiliary Building, or RHR Complex</i> " based on confirmed damage to the Auxiliary Building.
0417	Message 3 – Initial Notification of an Alert (HA1).
0418	Assembly and Accountability ordered.
0422	Initial Notification to off-site authorities complete.
0430	SM/ED activates ECOS for the Alert.

**Sequence of Events for Alert Declaration
 Sunday, June 6, 2010 - Monday, June 7, 2010**

0439	Assembly and Accountability completed. One ITC employee not accounted for. Hi Com announcements and search initiated.
0447	NRC Briefing with TSC ED.
0453	Message 4 – Follow-up Notification signed by SM/ED.
0457	Notification to off-site agencies complete.
0502	TSC functional.
0505	OSC has no power. OSC Coordinator moving staff to Alternate OSC.
0520	All personnel accounted for. Missing ITC employee found working on 345kV mat.
0536	OSC functional.
0550	Message 5 – Follow-up Notification signed by TSC ED.
0548	NRC Briefing with TSC NRC Communicator
0552	TSC ED attempted to contact the State Emergency Director.
0554	Notification to off-site agencies complete.
0554	EOF functional.
0557	State EOC operational
0604	4-hour report to NRC complete as required by 10CFR50.72.b.2.iv.B (RPS Actuation) and in accordance with MLS05004, “ <i>Fermi 2 Event Notification Worksheet</i> ”
0621	Message 6 – Follow-up Notification signed by EOF EO.
0623	Notification to State EOC complete
0636	State Emergency Director contacted TSC ED.
0640	Notification to ANI (American Nuclear Insurers)
0652	Message 7 – Follow-up Notification signed by EOF EO.
0652	Notification to State EOC complete
0703	NRC Briefing with TSC ED.

**Sequence of Events for Alert Declaration
 Sunday, June 6, 2010 - Monday, June 7, 2010**

0715	Message 8 – Follow-up Notification signed by EOF EO.
0718	Notification to State EOC complete
0733	Notification to INPO (Institute of Nuclear Power Operations)
0742	Message 9 – Follow-up Notification signed by EOF EO.
0743	Notification to State EOC complete
0810	Message 10 – Follow-up Notification signed by EOF EO.
0812	Notification to State EOC complete
0830	Monroe County declared a State of Emergency.
0830	NRC Briefing with TSC ED.
0831	Message 11 – Follow-up Notification signed by EOF EO.
0833	Notification to State EOC complete
0841	NRC Briefing with EOF EO.
0853	EOF EO authorizes distribution of Press Release.
0855	Message 12 – Follow-up Notification signed by EOF EO.
0902	Notification to State EOC complete
0917	Message 13 – Follow-up Notification signed by EOF EO.
0918	Notification to State EOC complete
0940	Message 14 – Follow-up Notification signed by EOF EO.
0941	Notification to Regional Manager, DTE Corporate & Governmental Affairs, who immediately contacted local county, city, and township officials.
0942	Mid America employees on site with chain saws to clear a path of fallen trees to the cooling towers.
0943	Notification to State EOC complete
0951	Follow up Notification reporting frequency decreased to every hour (vice every half hour).

**Sequence of Events for Alert Declaration
 Sunday, June 6, 2010 - Monday, June 7, 2010**

1016	ITC employee received burns to his arms from a static discharge while working on 345kV mat.
1018	Shift Manager requests ambulance to be dispatched to site.
1037	Message 15 – Follow-up Notification signed by EOF EO.
1038	Notification to State EOC complete
1040	Injured ITC employee transported to Mercy Memorial Hospital via ambulance.
1042	NRC Briefing with TSC NRC Communicator concerning injured ITC employee
1049	Lansing Flight Services notified that N. and S. Cooling Tower lights inoperable due to loss of power and/or damage.
1050	NRC Briefing with EOF EO and TSC ED.
1107	Notification to ANI and INPO.
1111	TSC ED directs Outage Control Center (OCC) to start staffing per EP-402, Recovery Organization.
1134	Message 16 – Follow-up Notification signed by EOF EO.
1135	Notification to State EOC complete.
1203	Notification to ANI and INPO.
1228	Message 17 – Follow-up Notification signed by EOF EO.
1229	Notification to State EOC complete
1230	NRC Briefing with EOF EO.
1313	Message 18 – Follow-up Notification signed by EOF EO.
1318	Notification to State EOC complete.
1353	Notified NEIL, per GRRR I-17, of wind damage to insured buildings (AB, TB, CWPH, Cooling Towers).
1406	Message 19 – Follow-up Notification signed by EOF EO.
1407	Notification to State EOC complete
1430	NRC Briefing with EOF EO.

**Sequence of Events for Alert Declaration
 Sunday, June 6, 2010 - Monday, June 7, 2010**

1440	Two representatives from the National Weather Service arrived on site to conduct an inspection.
1500	Message 20 – Follow-up Notification signed by EOF EO. Nuclear Information requested to only be notified if significant changes occur.
1501	Notification to State EOC complete
1505	Management conferred with NRC and decided to cancel FERMEX '10 due to resources needed for recovery.
1520	Notification to INPO
1553	Message 21 – Follow-up Notification signed by EOF EO.
1557	Notification to State EOC complete
1610	EOF EO gave permission for Monroe County EMD to view pictures of Fermi storm damage. They are to get any hardcopies from Nuclear Information.
1634	Brownstown #3 line is energized.
1642	Message 22 – Follow-up Notification signed by EOF EO.
1645	Notification to State EOC complete
1729	345kV Switchyard Buses 301 & 302 are energized.
1742	Message 23 – Follow-up Notification signed by EOF EO.
1742	Notification to State EOC complete
1748	NRC requests a formal briefing every two hours
1828	Message 24 – Follow-up Notification signed by EOF EO.
1830	NRC Briefing with EOF EO.
1831	Notification to State EOC complete
1923	Message 25 – Follow-up Notification signed by EOF EO.
1924	Notification to State EOC complete
1951	OCC being manned in preparation of taking over recovery once termination is declared.

Sequence of Events for Alert Declaration
Sunday, June 6, 2010 - Monday, June 7, 2010

2020	Message 26 – Follow-up Notification signed by EOF EO.
2022	Notification to State EOC complete
2030	NRC Briefing with EOF EO.
2110	Informed that injured ITC employee had burns to his hands, hip, and stomach. He has been released from Mercy Memorial Hospital.
2215	The National Weather Service Survey Team confirmed an EF-1 tornado had impacted Fermi site. It touched down at the Southwest portion of Detroit Beach and tracked 6.5 miles to the Northeast portion of Estral Beach. The path was 500 yards wide with estimated wind speeds of 90 mph.
2116	Off site power restored to 4160v ESF bus 65E. EDG 13 is shutdown.
2121	Message 27 – Follow-up Notification signed by EOF EO.
2122	Notification to State EOC complete
2222	Message 28 – Follow-up Notification signed by EOF EO.
2224	Notification to State EOC complete
2315	Message 29 – Follow-up Notification signed by EOF EO.
2318	Notification to State EOC complete

Sequence of Events for Alert Declaration
Sunday, June 6, 2010 - Monday, June 7, 2010

Monday, June 7, 2010

Time	Event
0012	Message 30 – Follow-up Notification signed by EOF EO.
0013	Notification to State EOC complete
0030	NRC Briefing with EOF EO.
0031	Wayne County EMD terminated from the event. Only the Wayne County Liaison (DTE ERO member) is present at that facility.
0040	Off site power restored to 4160v ESF bus 65F. EDG 14 is shutdown.
0110	Message 31 – Follow-up Notification signed by EOF EO.
0112	Notification to State EOC complete
0150	NRC Briefing with TSC ED.
0208	Message 32 – Follow-up Notification signed by EOF EO.
0209	Notification to State EOC complete
0220	The EOF EO and TSC ED conferred and terminated the Alert per EP-103, Step 7.8.
0233	State EOC terminated from the event.
0234	NRC Brief with EOF EO and TSC ED concerning termination.
0235	Message 33 – Initial Notification of event termination. Notification to State EOC complete
0236	ERDS de-activated. IPCS reset to display “NO EMERG.”

**Attachment 2 to
NRC-10-0061**

**Fermi 2 Exemption Request from the Biennial Emergency
Preparedness Exercise Requirement in 10 CFR 50,
Appendix E, Section IV.F.2.b**

Drills and Training activities since the 2008 biennial Exercise

Fermi 2 has regularly exercised its emergency response strategies and personnel in coordination with offsite authorities and will not pose undue risk to public health and safety. The following is a list of drills, exercises, and other training activities that have occurred since the last evaluated exercise that was performed on May 20, 2008:

Drills:

13 drills were conducted since the last biennial evaluated exercise and were performed on the following dates:

8/6/2008; 9/24/2008; 10/20/2008; 10/22/2008;
3/4/2009; 5/11/2009; 5/19/2009; 7/14/2009; 8/18/2009; 8/25/2009; 9/17/2009; 9/23/2009;
10/13/2009; 12/18/2009;
3/3/2010; 5/12/2010, 5/26/2010 and 06/09/2010.

Training:

Requalification training, which included a table top drill, was conducted during the following weeks during 2009 and 2010:

2/16/2009; 5/4/2009; 7/20/2009; 10/5/2009; 12/14/2009;
1/12/2010; 1/19/2010; 1/26/2010; 2/2/2010; and 2/9/2010.

47 evaluated simulator sessions for Licensed Operators were conducted since the last biennial evaluated exercise and were performed on the following dates:

6/24/2008; 7/1/2008; 7/15/2008; 7/22/2008; 7/28/2008; 9/25/2008; 10/2/2008;
10/13/2008;
3/10/2009; 5/7/2009; 6/2/2009; 6/3/2009; 6/9/2009; 6/11/2009; 6/16/2009; 6/17/2009;
6/23/2009; 6/24/2009; 6/30/2009; 7/1/2009; 7/6/2009; 7/7/2009; 8/11/2009; 9/1/2009;
9/2/2009; 9/8/2009; 9/9/2009; 9/14/2009; 9/16/2009; 10/3/2009; 11/10/2009; 11/17/2009;
11/23/2009; 12/1/2009; 12/8/2009; 1/19/2010; 1/26/2010; 2/2/2010; 2/9/2010;
2/16/2010; 2/23/2010; 3/30/2010; 4/6/2010; 4/13/2010; 4/20/2010; 4/27/2010, and
5/4/2010.

13 table top exercises for Non-Licensed Operators were conducted since the last biennial evaluated exercise and were performed on the following dates:

7/3/2008; 7/9/2008; 10/28/2008; 11/4/2008; 11/11/2008; 11/18/2008; 11/26/2008;
5/21/2009; 6/3/2009; 6/10/2009; 6/17/2009; 6/24/2009, and 7/1/2009.

**Attachment 3 to
NRC-10-0061**

**Fermi 2 Exemption Request from the Biennial Emergency
Preparedness Exercise Requirement in 10 CFR 50,
Appendix E, Section IV.F.2.b**

ACTUAL EVENT OBJECTIVE CRITIQUE SUMMARY

A. Drill/Exercise Implementation

6/6/2010 ERO Green Team on call
 Date

B. Overall Actual Event Performance SAT UNSAT
Overall Fermex 2010 Objectives Met Yes No

Obj. #	Objective description	Assessment
A	Assignment and Responsibility – Planning Standard	
A1	Demonstrate the ability to establish and maintain priorities for the emergency response effort.	Satisfactory
A2	Provide effective periodic briefings throughout the emergency.	Satisfactory
A3	Develop an effective mitigation and response strategy.	Satisfactory
B	Onsite Emergency Organization – Planning Standard	
B1	Demonstrate the activation of the Emergency Response Organization.	Satisfactory
B2	Demonstrate the ability to staff the (<i>Emergency Response Facility</i>) in a timely manner.	Unsatisfactory (Documented in CARD 10-24665)
C	Emergency Response Support and Resources	
C3	Demonstrate the ability to activate the State and County Liaisons.	Satisfactory
D	Emergency Classification System – Planning Standard	
D1	Demonstrate the ability to accurately classify simulated plant conditions in a timely manner.	Satisfactory
E	Notification Methods and Procedures – Planning Standard	
E1	Demonstrate timely and accurate initial notifications of plant events.	Satisfactory
E2	Demonstrate the ability to provide informative and timely follow-up notifications to offsite authorities.	Satisfactory
E3	Demonstrate the ability to perform prompt, information notifications to the NRC.	Satisfactory
F	Emergency Communication System – Planning Standard	
F1	Demonstrate effective inter- and intra-facility communications.	Satisfactory
F2	Demonstrate effective log keeping.	Satisfactory

ACTUAL EVENT OBJECTIVE CRITIQUE SUMMARY

Obj. #	Objective description	Assessment
G	Public Education and information – Planning Standard	
G1	Demonstrate effective rumor control.	Not observed
G2	Demonstrate the ability to conduct effective news media briefings.	Not observed
G3	Demonstrate proper response to technical questions from the media.	Not observed
G4	Demonstrate adequate security controls for the facility.	Not observed
H	Emergency Facilities and Equipment – Planning Standard	
H1	Demonstrate effective turnover(s) of responsibilities between emergency response facilities.	Satisfactory
H2	Demonstrate timely and effective status board updates.	Satisfactory
H3	Demonstrate the ability to inspect, inventory, and use of E-kits.	Satisfactory
H4	Demonstrate adequate preparation and use of damage control teams.	Satisfactory
H5	Demonstrate the ability to obtain current and forecast meteorological data.	Satisfactory
I	Accident Assessment – Planning Standard	
I1	Demonstrate accurate and timely dose assessment operations.	Satisfactory
I2	Demonstrate effective operations of the IPCS/SPDS system.	Satisfactory
I3	Demonstrate timely activation and dispatch on-site and off-site RETs.	Not observed
I5	Demonstrate effective plume tracking operations.	Not observed
I6	Demonstrate the performance and evaluation of portable air samples.	Not observed
J	Protective Response – Planning Standard	
J1	Recognize when to activate the on-site alarm system	Satisfactory
J2	Formulate on-site protective actions.	Satisfactory
J4	Formulate timely and accurate offsite protective action recommendations.	Not observed
J6	Demonstrate the ability to establish and implement appropriate radiological controls.	Satisfactory
K	Radiological Exposure Controls – Planning Standard	
K2	Demonstrate the ability to apply the emergency exposure guidelines of EP-201-03.	Not observed
K3	Demonstrate the ability to program emergency dose extensions into electronic dosimetry devices.	Not observed

ACTUAL EVENT OBJECTIVE CRITIQUE SUMMARY

Obj. #	Objective description	Assessment
N	Human Performance – Planning Standard	
N1	Job Briefs	Satisfactory
N2	Self Checking	Satisfactory
N3	Verification Techniques	Satisfactory
N4	Effective Communication	Satisfactory
N5	Questioning Attitude	Satisfactory
N6	Procedure Use and Adherence	Satisfactory

**Attachment 4 to
NRC-10-0061**

**Fermi 2 Exemption Request from the Biennial Emergency
Preparedness Exercise Requirement in 10 CFR 50,
Appendix E, Section IV.F.2.b**

Evaluated Exercise - Actual Event Objective Review

A review of the objectives that had been generated for the 2010 Fermi Evaluated Exercise was conducted based on actions that were demonstrated during the actual event.

Objective Number	Evaluated Exercise Objective	Actual Event Evaluation
A. ASSIGNMENT AND RESPONSIBILITY		
Standard: Primary responsibilities for emergency response by the nuclear facility licensee and by the State and local organizations within the Emergency Planning Zones have been assigned; the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.		
A1	Demonstrate the ability to establish and maintain priorities for the emergency response effort. Standard: The Facility Manager (FM) shall review procedural guidance to assist in the development of response strategies and priorities. The FM shall collaborate with ERO members throughout the event to help determine appropriate response strategies and priorities. Players shall determine, through the course of the event, an appropriate repair, monitoring, and operational plan. Communications between the engineering staff, Operations personnel, RP personnel, and the appropriate decision-makers will be critical to this task's successful completion. Prioritizing tasks, identifying and obtaining needed resources (equipment and personnel), and evaluating probable scenarios will lead to the development of appropriate strategies. The goal is to achieve a safe and stable operating condition. Constant assessment of response activities is critical to ensure appropriate efforts are maintained. The FM shall review field team data as it becomes available to refine strategies and priorities throughout the emergency. The FM shall solicit input from response personnel in order to gauge response efforts and adjust existing strategies and priorities.	Complete
A2	Provide effective periodic briefings throughout the emergency. Standard: The FM shall provide for facility briefings. The FMs should refer to the applicable facility's briefing guide. Facility briefings shall be clear and understandable, avoiding acronyms and technical jargon. Each briefing should address the resource needs, current response efforts and priorities. The FM should also solicit input from personnel in the facility.	Complete
A3	Develop an effective mitigation and response strategy. Standard: The ERO should identify necessary resources for support to the response efforts for the event. Field teams should be established and dispatched to acquire information for the FM to determine further response measures and response. Plant information and procedures should be made available and reviewed to assist in these efforts.	Complete

Evaluated Exercise - Actual Event Objective Review

B. ONSITE EMERGENCY ORGANIZATION Standard: On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation for response capabilities is available and the interfaces among various onsite response activities are specified.		
B1	<p>Demonstrate activation of the Emergency Response Organization.</p> <p>Standard: Once the initial declaration of emergency is made the SM must activate the Emergency Call Out System in accordance with EP-290. The SM may select from one of the existing messages or record one of their own. Activation of the back-up method is accomplished in accordance with EP-292. The SM must also make the appropriate announcements using the site paging system. Implementation of the Building Coordinator "network" in accordance with FBP-36 and the Owner Controlled Area Notification System may also be necessary depending on the emergency.</p>	Complete
B2	<p>Demonstrate the ability to staff the (Emergency Response Facility) in a timely manner.</p> <p>Standard: The Technical Support Center shall achieve minimum staffing in accordance with EP-301-01. The Operational Support Center shall achieve minimum staffing in accordance with EP-302-01. The Emergency Operation Facility shall achieve minimum staffing in accordance with EP-303-01.</p> <p>COMMENT: The Technical Support Center was activated within 45 minutes of the ECOS call-out, the Operational Support Center (OSC) was activated within 79 minutes and the Emergency Operations Facility was activated within 97 minutes of the ECOS call-out. The arriving Emergency Response Organization members reported to, and activated, their emergency response facilities. Assembly and accountability was performed and completed at 0439. The RERP Plan, B.1.2, states, <i>"It is the goal of Detroit Edison to augment Control Room staff by the Emergency Response Organization (Table B-1) in two groups of key personnel. The first group of key personnel should be in their Emergency Response Facility within 30 minutes of an Alert being declared. However, there may be some conditions where up to 60 minutes may be required. The second group of key personnel should be in place within 60 minutes of being declared."</i> As evidenced by the road conditions as a result of the tornado (i.e. trees uprooted wires down, some impassable roads, etc.) and testimony of personnel reporting to site during the event, conditions warranted their caution to drive slowly, take alternate routes, etc. The weather conditions, and the aftermath of the storm, resulted in a delayed response and augmentation.</p>	Complete

Evaluated Exercise - Actual Event Objective Review

C. EMERGENCY RESPONSE SUPPORT AND RESOURCES Standard: Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate State and local staff at the licensee's near-site Emergency Operations Facility have been made, and other organizations capable of augmenting the planned response have been identified.		
C3	Demonstrate the ability to activate the State and County Liaisons. Standard: The Liaisons are notified of an event at the Alert declaration of emergency and are to be stationed in the respective EOCs upon their activation.	Complete
D. EMERGENCY CLASSIFICATION SYSTEM Standard: A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensee for determinations of minimum initial offsite response measures.		
D1	Demonstrate the ability to accurately classify simulated plant conditions in a timely manner. Standard: Players shall monitor plant conditions using all available resources. They should follow the progression of events which approach conditions requiring classification(s). Players shall utilize EP-101 to evaluate potential classifications. Minimal time (< 15 minutes) shall be taken once indications are available to recognize, evaluate, and classify an emergency. Once a classification is declared further monitoring and evaluation must be performed so that all possible changes in classification are identified. Players shall also take appropriate actions identified in the individual event procedures, EP-102 through EP-105. This is a risk significant activity.	Complete
E. NOTIFICATION METHODS AND PROCEDURES Standard: Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and follow-up messages to response organizations and the public have been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway EPZ have been established.		
E1	Demonstrate timely and accurate initial notifications of plant events. Standard: All initial notifications shall be completed, approved, and communicated to off-site authorities within 15 minutes of any declared emergency. Players shall complete EP-290001 with the required information in a timely and legible manner. The initial PAR is communicated on the same form as the initial notification of a General Emergency. Any changes to an existing PAR shall be communicated as an initial notification using EP-290001 as quickly as possible but not to exceed 15 minutes . A change in PAR based on dose calculations requires completion of both EP-290001 and EP-290002. All lines on the form(s) must be completed correctly, with the exception of minor variations of met data. This is a risk significant activity.	Complete

Evaluated Exercise - Actual Event Objective Review

<p>E2</p>	<p>Demonstrate the ability to provide informative and timely follow-up notifications to offsite authorities. Standard: Follow-up messages are normally completed following an initial message. During fast breaking scenarios this may not be possible. Follow-up messages are provided as conditions change or every 30 minutes, whichever is sooner. The players shall use EP-290002 for each follow-up message. Follow-up messages shall be completed to the maximum extent possible. Dose calculations must be written onto EP-290002. Canada is not provided follow-up messages by the ERO.</p>	<p>Complete</p>
<p>E3</p>	<p>Demonstrate the ability to perform prompt, informative notifications to the NRC. Standard: The NRC shall be notified immediately following off-site authority notifications will be on the applicable form communicated AND the communicator's log. The ERO should maintain an open line to the NRC at all times.</p>	<p>Complete</p>
<p>F. EMERGENCY COMMUNICATION SYSTEM Standard: Provisions exist for the prompt communications among principal response organizations to emergency personnel and to the public.</p>		
<p>F1</p>	<p>Demonstrate effective inter- and intra-facility communications. Standard: Players shall effectively utilize available telecommunications equipment should include the use of "this is a drill" at the beginning and end of each transmission. Written communications shall be legible. Communications between facilities is crucial in assuring facility specific tasks can be accomplished quickly and accurately. Radios are operated in accordance with FCC rules and regulations. All communications involving the transfer of data must use proper three-way communications.</p>	<p>Complete</p>
<p>F2</p>	<p>Demonstrate effective log keeping. Standard: ERO personnel should keep a chronological log for their position. It must identify pertinent events and communications made with other personnel. It shall be completed in a timely and effective manner. The log should be written in such a way as to recreate the events and actions taken.</p>	<p>Complete</p>

Evaluated Exercise - Actual Event Objective Review

G. PUBLIC EDUCATION AND INFORMATION Standard: Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency, the principal points of contact with the news media for dissemination of information during an emergency are established in advance, and procedures for coordinated dissemination of information to the public are established.		
G1	Demonstrate effective rumor control. Standard: Upon activation of the JIC, a rumor control group shall be in place to answer questions from the general public. The phone numbers for rumor control shall be given during the first media briefing and may be given during subsequent media briefings. When questions are asked the rumor control group shall give answers that are accurate and timely. The rumor control personnel shall be aware of the events taking place, weather conditions, road conditions, evacuation routes, shelter areas, etc.	Not observed
G2	Demonstrate the ability to conduct effective news media briefings. Standard: Upon activation of the JIC, the Joint Information Team (JIT) shall g approximately every 60 minutes, but can be held earlier if conditions change dramatically at the plant, or if there is a change in classification or protective action recommendations, or any other actions occur that are deemed important enough to call for a media briefing.	Not observed
G3	Demonstrate proper response to technical questions from the media. Standard: When "technical" questions are asked by the media, the JIC staff shall arrange to have one or more of the three Technical Advisors (depending on the types of questions being asked) meet with the media to answer their questions. The Technical Advisor(s) shall answer the questions in a brief and accurate manner, yet in "non-technical" terms, so as to be understood by the media and general public. The Media Relations Administrator, or designee, shall be in the vicinity to assist the Technical Advisors.	Not observed
G4	Demonstrate adequate security controls for the facility. Standard: Fermi 2 Nuclear Security shall provide three (3) security personnel to the JIC, who will station themselves at strategic, predetermined locations. They are to maintain order, distribute access badges to all personnel (whether a member of the JIC or a member of the PRESS), control access and movement of personnel throughout the JIC, and, if required, control and coordinate the movement of media personnel from the JIC to the Onsite News Center, located in the NTC Auditorium.	Not observed

Evaluated Exercise - Actual Event Objective Review

H. EMERGENCY FACILITIES AND EQUIPMENT		
Standard: Adequate emergency facilities and equipment to support the emergency response are provided and maintained.		
H1	<p>Demonstrate effective turnover(s) of responsibilities between emergency response facilities.</p> <p>Standard: Upon activation facility personnel begin to make their facility functional using the associated facility procedures. Once functional the "oncoming" facility manager will accept responsibility for various tasks. It will depend on availability of personnel as to the tasks the facility can accept. These tasks may include dose assessment calculations, emergency notifications, NRC notifications, Emergency Director duties (i.e., classifications, command and control), and the development of mitigation and repair strategy. Detailed, focused, timely, and accurate communications between the facility managers are critical to a successful transfer. A controlled and informed approach by each facility manager in addition to active participation by ERO personnel is needed to facilitate an effective turnover.</p>	Complete
H2	<p>Demonstrate timely and effective status board updates.</p> <p>Standard: ERO Personnel should update status boards at a minimum of every 10 minutes. They should also be updated as conditions change. Data that is not pertinent to the particular event should be marked "n/a" or equivalent. Generally "blanks" on the board are not acceptable. All "broken" equipment should be identified. All facility personnel are expected to monitor the status boards for accuracy.</p>	Complete
H3	<p>Demonstrate the ability to inspect, inventory, and use of E-kits.</p> <p>Standard: Equipment is inspected prior to use. Physical condition is checked, equipment or damage. Inventories are performed in accordance with 67.000.405.</p>	Complete
H4	<p>Demonstrate adequate preparation and use of damage control teams.</p> <p>Standard: OSC personnel should respond to requests from the Control Room and/or the TSC as necessary to form repair teams. Teams are dispatched upon Emergency Director approval. Teams are formed and briefed in accordance with EP-204-01. The goal for dispatch of a team is within approximately 15 minutes of request. Upon return the team will be debriefed discussing what actions were taken, damage control equipment status (inventory, etc.), and other pertinent information regarding the event.</p>	Complete
H5	<p>Demonstrate the ability to obtain current and forecast meteorological data.</p> <p>Standard: IPCS is used to acquire current met data. Forecast data is acquired from the Fermi Internet sources or via the National Weather Service using the phone number in the RERP Emergency Telephone Directory.</p>	Complete

Evaluated Exercise - Actual Event Objective Review

I. ACCIDENT ASSESSMENT		
Standard: Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.		
I1	<p>Demonstrate accurate and timely dose assessment operations.</p> <p>Standard: The ERO shall monitor radiation and meteorological data using available instrumentation. Careful scrutiny of all available information sources must occur. It is critical to correctly identify when a radioactive release actually begins. Players must recognize and validate any effluent monitor alarms as needed. Review of SPING data (including magnitude of activity), ventilation system operation(s), core damage estimates (CHRRMs) are critical in the calculation of dose to the public. Comparison of Actual and Potential dose calculations must be performed and reported to facility decision-makers in a timely manner. As conditions change or new information becomes available, timely analysis of potential impacts on the current response efforts must occur. Timely communication of all related information pertaining to a radioactive release must occur to ensure proper actions and assessments are made. This is a risk significant activity.</p>	Complete
I2	<p>Demonstrate effective operations of the IPCS/SPDS system.</p> <p>Standard: The ERO shall utilize the IPCS system to acquire information during the event. The ERO should be able to access available instrumentation using the IPCS system for accident, dose and met data assessments. The ERO should be able use IPCS to identify most safety-related equipment that are out of service.</p>	Complete
I3	<p>Demonstrate timely activation and dispatch on-site and off-site RETs.</p> <p>Standard: On and Off-Site RETs are formed at the Alert declaration or earlier if needed. Each team prepares in accordance with EP-220. A brief is performed for each team. Radiological conditions, safety hazards, expected tasks, travel routes, met conditions are discussed. Teams are dispatched as needed to determine or verify radiological conditions outside of the plant.</p>	Not observed
I5	<p>Demonstrate effective plume tracking operations.</p> <p>Standard: Plume tracking is performed in accordance with EP-220, Tab 2. Plume tracking is required to be performed when a radiological release is likely, suspected or in progress. Good ALARA techniques must be demonstrated in order to keep personnel exposure low. All survey results must be reported quickly and accurately.</p>	Not observed
I6	<p>Demonstrate the performance and evaluation of portable air samples.</p> <p>Standard: Portable air samples are performed in accordance with EP-220, Tab 4. Care must be exercised to prevent cross-contamination of samples. Personnel must perform good ALARA techniques to keep their exposure low. Survey data must be communicated quickly and accurately. Samples should be transported as soon as possible for counting by plant personnel for use in dose assessment operations as needed (nuclide data analysis).</p>	Not observed

Evaluated Exercise - Actual Event Objective Review

J. PROTECTIVE RESPONSE Standard: A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale has been developed.		
J1	Recognize when to activate the on-site alarm system. Standard: During a declared emergency the on-site alarm system will be activated by the Shift Manager to inform personnel of any on-site protective actions.	Complete
J2	Formulate on-site protective actions. Standard: Players shall review plant and weather conditions, radiological conditions, and/or dose assessment results, as needed using all available methods. Careful review of this information is critical in determining the correct on-site protective action(s). Players shall determine the appropriate on-site protective actions for the scenario indications. Players shall review EP-530 to determine appropriate on-site protective actions.	Complete
J3	Demonstrate the ability to perform Assembly and Accountability in a timely manner. Standard: Assembly and Accountability is required at an Alert (or higher) declaration. It is ordered by the Emergency Director and the Protected Area must be completed within 30 minutes of the order. It is complete when the Emergency Director is informed by Security that all personnel in the Protected Area are accounted for or when given a list of those personnel who are presumed missing.	Complete
J4	Formulate timely and accurate offsite protective action recommendations. Standard: Players shall monitor plant conditions, radiological and meteorological conditions, including weather forecasts, dose assessment results, and RET survey data as the event progresses in order to identify possible PARs. Players shall review EP-545 to determine the appropriate PAR. Once the initial PAR is formulated it shall be communicated along with the initial notification to off-site authorities of the General Emergency. Minimal time (<15 minutes) shall be taken once indications are available to recognize, evaluate, and communicate the PAR. Players should consider the impact of the increase traffic patterns as a potential hindrance and should report this condition to off-site authorities. Constant review of this information in addition to the information described in Enclosure A of EP-545 is essential in the evaluation of PAR adequacy. If a change in PAR is anticipated, minimal time (<15 minutes) shall be taken to recognize, evaluate, and communicate the new PAR. This is a risk significant activity.	Not observed

Evaluated Exercise - Actual Event Objective Review

<p>J6</p>	<p>Demonstrate the ability to establish and implement appropriate radiological controls. Standard: The ERO shall determine radiological conditions inside and outside of the plant as soon as practical. This is normally done by reviewing installed instrumentation to determine these conditions. Access controls are then developed and communicated to the ERO through regular briefings. Normal radiological practices should be used whenever possible. As response teams are dispatched, further data is gathered and becomes available. These controls may become too stringent as to provide an effective and timely response by ERO personnel. Radiological controls can be modified based on this new data. In these cases the requirements of EP-201-03 may be implemented.</p>	<p>Complete</p>
<p>K. RADIOLOGICAL EXPOSURE CONTROLS Standard: Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with the EPA Emergency Worker and Lifesaving Activity Protective Action Guides.</p>		
<p>K2</p>	<p>Demonstrate the ability to apply the emergency exposure guidelines of EP-201-03. Standard: Two separate guidelines can be used. One for saving property and one for life-saving situations. The Emergency Director or RPA may approve extensions up to the Federal Exposure limit whereas the Emergency Director is the only person who may authorize extensions beyond the Federal Exposure Guidelines. EP-201-03 details the requirements for these extensions and the limits involved.</p>	<p>Not observed</p>
<p>K3</p>	<p>Demonstrate the ability to program emergency dose extensions into electronic dosimetry devices. Standard: Whenever possible electronic dosimetry is the preferred method for tracking individual dose during response. Dose extensions can be programmed into electronic dosimetry by using the RERP Work Instruction "Administration of Electronic Dosimetry for Emergency Response Teams"</p>	<p>Not observed</p>

Evaluated Exercise - Actual Event Objective Review

N HUMAN PERFORMANCE		
N1	<p>Job Briefs</p> <p>Standard: Job Briefs and its supporting tools help the supervisor and worker to recognize and address the risk of human error to safety and reliability. The supporting tools include the following elements, Task Preview, Pre-Job Briefs, Turnover, Job Status Update, and Post Job Reviews.</p>	Complete
N2	<p>Self Checking</p> <p>Standard: Self Checking is a human performance tool that helps the performer focus attention on the appropriate component or task at hand. The tools used to Self Check are Flagging and STAR (Stop Think Act Review).</p>	Complete
N3	<p>Verification Techniques</p> <p>Standard: Verification techniques include Peer Check, Concurrent Verification, and Independent Verification. Verification techniques help to prevent errors by a person, confirms equipment conditions and configuration, and to confirm the condition of a component before, during, and after an action.</p>	Complete
N4	<p>Effective Communication</p> <p>Standard: When communicating operational information important to safety and emergency response, effective communications are critical to ensure a positive outcome. Effective communications consists of three-way communication and use of the phonetic alphabet.</p>	Complete
N5	<p>Questioning Attitude</p> <p>Standard: A questioning attitude fosters situation awareness, encouraging thought about safety before action is taken. Ask "Does this make sense? Use in-field decision making by employing READE.</p> <ul style="list-style-type: none"> • Recognize the degraded condition or uncertain situation that threatens safety. • Express the situation in terms of consequence, if left alone, related to plant safety and reliability or personal safety. • Appraise the situation, with a questioning attitude, to identify conditions that could threaten safety. • Decide what to do to resolve the situation safely. Compare appraisal to critical parameters, safety limits, or abort criteria. Consider what absolutely has to go right. • Evaluate the effectiveness of the action(s) in achieving the desired results. <p>Another valuable method is Take Two which will improve a person's situation awareness particularly when first arriving at a job site.</p>	Complete

Evaluated Exercise - Actual Event Objective Review

N HUMAN PERFORMANCE		
N6	<p>Procedure Use and Adherence</p> <p>Standard: Procedure adherence means understanding the procedure's intent and purpose and following its direction. Procedure quality is paramount to safety and reliability. The completeness, accuracy, and internal consistency of the instructions, and its usability (easy to understand and follow) all impact the user. Experience has shown that procedures do not always contain sufficient information. With this in mind, users follow procedures while mindful of the impact their actions could have on plant equipment before taking the actions.</p>	<p>Complete</p>

Evaluated Exercise - Actual Event Objective Review

Objectives Not Observed

The following objectives were not observed:

a. Objective G: Public Education and information – Planning Standard

G1: Demonstrate effective rumor control.

G2: Demonstrate the ability to conduct effective news media briefings.

G3: Demonstrate proper response to technical questions from the media.

G4: Demonstrate adequate security controls for the facility.

The objectives were not utilized because the intent is to exercise the Joint Information Center (JIC). The JIC was exercised during drills conducted in 2008, 2009, and 2010. However, since a JIC is not activated at an Alert declaration, the intent of this objective to keep the public informed during the event was met by the following actions that occurred during the actual event:

The Unusual Event declaration and the first follow-up notification were both communicated to Nuclear Information by the MCR at 0359. There was no answer. The Shift Communicator left a voicemail explaining the current emergency status. Within minutes, the Shift Communicator tried again, reached Nuclear Information and relayed the information concerning the Unusual Event. At 0421, Nuclear Information was contacted for the Alert declaration.

Immediately upon notification of the Unusual Event, Nuclear Information relayed the information to Media Relations in the DTE Energy Headquarters in Detroit, MI. They conferred and put together a communication plan. Nuclear Information would handle questions concerning Fermi 2 and Media Relations would handle questions concerning Monroe County issues. They recognized that the Emergency Officer would have to approve any Press Releases prior to distribution.

At 0530, contacted the NRC Region III Public Affairs Office relaying information, what our communication plan consisted of, and coordinated with the NRC Communication Plan.

At 0725, the first Press Release was approved by the EOF EO for distribution.

At approximately 0830 and throughout the event, the following media outlets were in communication with Nuclear Information:

TV – Channels 2, 4, 7 (all Detroit), CBS News (New York), Weather Channel Atlanta)

Radio – WWJ, WJR (all Detroit)

Print – Monroe Evening News

Misc – Dow Jones, Bloomberg News, AP (Associated Press)

Evaluated Exercise - Actual Event Objective Review

b. Under Objective I: Accident Assessment – Planning Standard, the following support objectives were not observed

I3: Demonstrate timely activation and dispatch on-site and off-site RETs.

I5: Demonstrate effective plume tracking operations.

I6: Demonstrate the performance and evaluation of portable air samples.

During the actual event there was no radiological release. As a result, the above objectives were not exercised. However, the EOF dose assessors did initiate the dose assessment program using potential scenarios that could occur during the actual event conditions. Additionally, this objective was evaluated during drills conducted during 2008, 2009, and 2010.

c. Under Objective J: Protective Response – Planning Standard, the following support objectives were not observed

J4: Formulate timely and accurate offsite protective action recommendations.

During the actual event there was no radiological release. As a result, the above objectives were not exercised during the actual event. However, these enabling objectives were evaluated during drills conducted during 2008, 2009, and 2010.

d. Objective K: Radiological Exposure Controls – Planning Standard

K2: Demonstrate the ability to apply the emergency exposure guidelines of EP-201-03.

K3: Demonstrate the ability to program emergency dose extensions into electronic dosimetry devices.

During the actual event there was no radiological release. As a result, the above objectives were not exercised during the actual event. However, these enabling objectives were evaluated during drills conducted during 2008, 2009, and 2010.

Evaluated Exercise - Actual Event Objective Review

Challenged Objective

B2 Demonstrate the ability to staff the (*Emergency Response Facility*) in a timely manner.

Standard: The Technical Support Center shall achieve minimum staffing in accordance with EP-301-01. The Operational Support Center shall achieve minimum staffing in accordance with EP-302-01. The Emergency Operation Facility shall achieve minimum staffing in accordance with EP-303-01.

The EOF was activated within 97 minutes. The TSC was activated within 45 minutes. The OSC was activated within 79 minutes. This does not meet the standards set forth in the procedures.

ECOS was activated for the Unusual Event on June 6, 2010 at 0353. During an Unusual Event, ECOS contacted Operational Support Center (OSC) staff, Technical Support Center (TSC) minimum staff, RERP Advisors, NRC Resident Inspectors, Senior Management, and Nuclear Information personnel. While these people were in route to the site, the SM/ED declared an Alert at 0417.

ECOS was activated for the Alert on June 6, 2010 at 0430. The 13 minute delay between Alert declaration and ECOS activation in addition to road and weather conditions contributed in part to not meeting the Emergency Response Facility activation time requirements, per EP-302-01 and EP-301-01, for functionality. It was also noted that the loss of power led to difficulty in contacting ERO members via telephone. The delayed response of augmented personnel did not impact the control room's ability to operate the plant and ensure plant safety.

There were instances of ERO Green Team (the duty team) members not responding to ECOS, or to their emergency response facility, and/or arriving late. CARDS 10-24626 and 10-24665 were written to address these issues.

RERP Plan, B.1.2, states, "*It is the goal of Detroit Edison to augment Control Room staff by the Emergency Response Organization (Table B-1) in two groups of key personnel. The first group of key personnel should be in their Emergency Response Facility within 30 minutes of an Alert being declared. However, there may be some conditions where up to 60 minutes may be required. The second group of key personnel should be in place within 60 minutes of being declared.*" As evidenced by the road conditions left by the tornado (i.e. trees uprooted, wires down, some roads impassable, etc.) and testimony of personnel reporting to site during the event, conditions warranted their caution to drive slowly, take alternate routes, etc. The weather conditions, and the aftermath of the storm, resulted in a delayed response and augmentation.

**Attachment 5 to
NRC-10-0061**

**Fermi 2 Exemption Request from the Biennial Emergency
Preparedness Exercise Requirement in 10 CFR 50,
Appendix E, Section IV.F.2.b**

DRILL/EXERCISE COMPONENT CHECKLIST

Drill Date: _____ Start Time: _____

Exercise Date: _____ Start Time: _____

Drill Setting: Actual Event - Alert - 06/06/10

A. Communications

- | | |
|---|---|
| 1. State of Michigan | <input checked="" type="checkbox"/> Yes |
| | <input type="checkbox"/> No |
| 2. Wayne County | <input checked="" type="checkbox"/> Yes |
| | <input type="checkbox"/> No |
| 3. Monroe County | <input checked="" type="checkbox"/> Yes |
| | <input type="checkbox"/> No |
| 4. Offsite Field Teams | <input type="checkbox"/> Yes |
| | <input checked="" type="checkbox"/> No |
| 5. TSC | <input checked="" type="checkbox"/> Yes |
| | <input type="checkbox"/> No |
| 6. OSC | <input type="checkbox"/> Yes |
| | <input checked="" type="checkbox"/> No |
| 7. EOF | <input checked="" type="checkbox"/> Yes |
| | <input type="checkbox"/> No |
| 8. Alternate Facility | <input checked="" type="checkbox"/> Yes |
| | <input type="checkbox"/> No |
| <input checked="" type="checkbox"/> Alternate OSC | |
| <input type="checkbox"/> Alternate TSC | |
| <input type="checkbox"/> Alternate EOF | |
| 9. JIC | <input type="checkbox"/> Yes |
| | <input checked="" type="checkbox"/> No |
| 10. Back-up Communications used | <input type="checkbox"/> Yes |
| | <input checked="" type="checkbox"/> No |

DRILL/EXERCISE COMPONENT CHECKLIST

B. Fire

- 1. Offsite assistance used Yes
 No
- 2. Onsite Fire Brigade response Yes
 No

C. Medical

- 1. Onsite medical emergency Yes
 No
- 2. Offsite medical emergency Yes
 No
- 3. Involves a simulated contaminated individual(s) Yes
 No
- 4. First aid/rescue teams Yes
 No
- 5. Ambulance support Yes
 No
- 6. Hospital support Yes
 No

- Mercy Memorial Hospital
- Oakwood Southshore Medical Center

DRILL/EXERCISE COMPONENT CHECKLIST

D. Radiological/Health Physics Monitoring

- 1. Involves an offsite radioactive release Yes
 No
- 2. Plume tracking Yes
 No
- 3. Dose rate measurements Yes
 No
- 4. Contamination surveys Yes
 No
- 5. Emergency TLD collection (simulated) Yes
 No
- 6. Collection and analysis of air sample Yes
 No
- 7. Collection and analysis of environmental samples Yes
 No
 - Vegetation Surface Water
 - Snow Soil
 - Drinking Water
- 8. Radiological Exposure Controls Yes
 No

E. Miscellaneous Components

- 1. Shift staffing and augmentation Yes
 No
 - a. Activated ECOS Yes
 No
- 2. Notification of onsite and offsite responders Yes
 No
- 3. Accident detection and assessment Yes
 No

DRILL/EXERCISE COMPONENT CHECKLIST

- a. Classifications Yes
 No
- b. IPCS/SPDS Use Yes
 No
- 4. Radioactive release detection and assessment (dose assessment) Yes
 No
 - a. Automatic method Yes
 No
 - b. Manual method Yes
 No
 - c. Forecast meteorology used Yes
 No
 - d. Grab sample/nuclide data analysis Yes
 No
- 5. Protective Response Yes
 No
 - a. Assembly and Accountability Yes
 No
 - b. PARS, including PAR changes Yes
 No
 - c. Facility Access Control/Security Yes
 No
- 6. Weather conditions (describe): EF1 Tornado on site
- 7. Security Force Response Yes
 No

Describe threat: _____
- 8. Severe Accident Management Yes
 No
- 9. JIC Operations

DRILL/EXERCISE COMPONENT CHECKLIST

- a. Rumor Control Yes
 No
- b. Media Interface Yes
 No
- c. Corporate Headquarters Support Yes
 No
- 10. Hazwoper Response Yes
 No
- 11. OPA Response Yes
 No
- 12. Ingestion Exposure Pathway Drill Yes
 No

- F. Six Year Components**
- 1. Use of back-up power Yes
 No
 - TSC EOF
- 2. Recovery Organization Yes
 No
- 3. Off-hours, between 1800 to 0400 Yes
 No
- 4. Unannounced drill Yes
 No
- 5. Limited site evacuation to offsite assembly areas Yes
 No
- 6. Personnel Monitoring Team(s) Yes
 No
- 7. KI distribution (on site only) Yes
 No

**Attachment 6 to
NRC-10-0061**

**Fermi 2 Exemption Request from the Biennial Emergency
Preparedness Exercise Requirement in 10 CFR 50,
Appendix E, Section IV.F.2.b**

**Drill and Exercise Opportunities for the Actual Event
 Classifications and Notifications**

Classification	EAL	Timely	Accurate	Notification	Timely	Accurate	NRC PI Opportunity/Success
Unusual Event	HU1	Yes (0238/0253)	Yes		Yes (0258/0259)	Yes	2/2
Alert	HA1	Yes (0408/0417)	Yes		Yes (0421/0422)	Yes	2/2
Total Successful Opportunities / Total Opportunities				4/4			

Message #	Time Class.	Time signed	Time Comm.	Time between Notifications	Accurate?	Timely?
1	0253 (UE)	0258	0259	N/A	y	y
2		0346	0348	49	y	y
3	0417 (Alert)	0421	0422	34	y	y
4		0453	0457	35	y	y
5		0550	0554	57	y	y
6		0621	0623	29	y	y
7		0652	0652	29	y	y
8		0715	0718	26	y	y
9		0742	0743	25	y	y
10		0810	0812	29	y	y
11		0831	0833	21	y	y
12		0855	0902	29	y	y
13		0917	0918	16	y	y
14		0940	0943	25	y	y
15		1037	1038	55	y	y
16		1134	1135	57	y	y
17		1228	1229	54	y	y
18		1313	1318	49	y	y
19		1406	1407	49	y	y

**Drill and Exercise Opportunities for the Actual Event
 Classifications and Notifications**

Message #	Time Class.	Time signed	Time Comm.	Time between Notifications	Accurate?	Timely?
20		1500	1501	54	y	y
21		1553	1557	56	y	y
22		1642	1645	48	y	y
23		1742	1742	57	y	y
24		1828	1831	49	y	y
25		1923	1924	53	y	y
26		2020	2022	58	y	y
27		2121	2122	60	y	y
28		2222	2224	62	y	y
29		2315	2318	54	y	y
30		0012	0013	55	y	y
31		0110	0112	59	y	y
32		0208	0209	57	y	y
33	0220 (Term)	0235	0235	26	y	y
Total Time of the Event: 23 hr / 27 min						

**Attachment 7 to
NRC-10-0061**

**Fermi 2 Exemption Request from the Biennial Emergency
Preparedness Exercise Requirement in 10 CFR 50,
Appendix E, Section IV.F.2.b**

Corrective Actions as a Result of the Actual Event

A review of the Condition Assessment Resolution Document (CARD) database was performed to identify the CARDS written related to the event and associated damage. Additional CARDS may be written as further damage assessment and plant restoration continues.

CARD	Title
10-24610	Building and equipment damage to NEIL insured structures
10-24611	Recorder T47R803A has no power and thus is INOP
10-24612	Aux bldg 5 th Floor stairwell wall exterior siding damaged due to damaging winds
10-24613	Turbine Bldg roof is damaged and the roof vents are open following high wind condition
10-24614	Fire Protection Riser pressure gauge damaged
10-24616	FO 10-02 Storm damage: Cooling tower materials & support building
10-24617	ARP 4D121 "345kV Bkr Pos CF Open" incorrectly states that CF breaker will trip on the generator under frequency signal
10-24618	FO 10-02 Storm Damage: N Cooling Tower
10-24619	FO 10-02 Storm Damage: S Cooling Tower
10-24620	ITC Personnel receives an electrical shock
10-24621	T46R9800B would not reset following loss of power
10-24622	Integrated Plant Computer System (IPCS) Server to external users (InfoServer) not responding
10-24624	HWC Tank Facility Walk-down
10-24625	Nitrogen Tank, 12-packs loose
10-24626	Request Evaluation of ECOS Timeliness of Callout 6/6/10
10-24627	Missed TRM Surveillance Requirements TRSR 3.4.5.1
10-24628	Guard House Gate 02 (GHG02) out of Alignment
10-24630	BOP Battery Charger 2C-1 Trouble Alarm
10-24631	BOP Battery Charger 2C1-2 Trouble Alarm
10-24632	Minor EDG14 lube oil leaks
10-24633	On-Site Storage Facility Roof Penthouse Damage
10-24634	Blown output fuse for BOP Battery Charger 2C-1
10-24635	Debris on top of Low Pressure Turbine Hoods
10-24636	Request for Temporary Power on Auxiliary Bldg Roof
10-24637	Request for temporary power on Turbine Bldg Roof
10-24640	Covering of Main Generator Brushgear and RITA/Romon Skid
10-24644	Protected Area (PA) fence outrigger is bent causing barbed wire to sag
10-24646	Material Left in a Potentially Unsafe Condition
10-24648	3DMonicores Does Not Receive Scram Data from Rod Worth Minimizer
10-24656	Turbine valve fast closure scram due to loss of 345kV during tornado with subsequent Alert
10-24658	N6200F622, East OG Recombiner Outlet Isolation Valve Minor Oil Leak

Corrective Actions as a Result of the Actual Event

CARD	Title
10-24660	Damage Assessment of REMP Sampling Equipment
10-24665	RERP Event: Untimely facility activation for Alert event of 06/06/10
10-24666	Loose insulation and debris on Auxiliary Building roof
10-24668	South TBHVAC Fan
10-24679	Potential Damage to RB5 East Wall
10-24680	Degrading trend in time taken to initiate Level 1 CARDS to Document Reactor Scrams
10-24685	Pressure gauge indicator needle is broken; fire hose station #RB-1, elev. 736'
10-24691	Safety concern not taken seriously.
10-24698	FO 10-02 Lessons Learned - Aux Building Blowout Panels
10-24703	FO 10-02 Storm Damage- Cooling Tower aircraft warning light guide cables
10-24710	RB SPING possible overheating from temporary weather covering
10-24717	Reactor Building Roof leaking rain water on to RB5
10-24718	Degraded Seals on OSB Windows
10-24719	Forced Outage 10-02, Emergent Issue, Below the Hook Lifting Device Inspection and Certification
10-24742	Green team members did not all show at TSC for the Alert on 6/6/2010
10-24744	TSC staffing for 24 hour coverage issues
10-24745	Suggestions for improvement for TSC based on Alert on 6/6/2010
10-24751	RERP Event: Failure to enter time of receipt of Alert indication in Control Rm. log
10-24752	ERO Phone Notification Enhancement
10-24756	Tornado damage to screen rack
10-24758	Evaluate potential airborne radiation dose to TB roof workers
10-24762	June 2010 ALERT Lesson Learned - Rechargeable Wireless Headsets
10-24765	Oxygen Pressure Gauge PI-57A
10-24831	RERP: State Liaisons during Long-Term Events