



FEMA

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NRC Headquarters Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

To Whom It May Concern:

Enclosed is a copy of the Final Report for the Radiological Emergency Preparedness (REP) Partial Participation Plume Exposure Pathway Exercise conducted on May 20, 2008, for the Fermi 2 Nuclear Power Plant. The State of Michigan, and Monroe and Wayne Counties participated in this exercise. The utility owner, DTE Energy, and operator, Detroit Edison, also participated in this exercise.

There were no Deficiencies for any jurisdiction during this exercise.

There were no Areas Requiring Corrective Action (ARCAs) identified for the State of Michigan or Wayne County.

There were two ARCAs identified during this exercise for Monroe County. Both ARCAs were successfully re-demonstrated.

The first ARCA, Number 23-08-3.a.1-A-01, was identified at the Emergency Worker Equipment and Vehicle Monitoring and Decontamination demonstration at the Monroe County Fairgrounds under Criterion 3.a.1 - Implementation of Emergency Worker Exposure Control, whereby the Monroe County Health Department (MCHD) did not issue dosimetry kits to two of the MCHD staff participating in the demonstration. This ARCA was corrected at the out of sequence demonstration when the two MCHD staff members realized the oversight and promptly donned their dosimetry.

The second ARCA, Number 23-08-6.a.1-A-02, was identified at the Evacuee Monitoring and Decontamination demonstration at Bedford High School under Criterion 6.a.1 - Monitoring and Decontamination of Evacuees and Emergency Workers, and Registration of Evacuees, whereby a member of the monitoring staff was observed improperly using a hand held instrument to perform floor surveys. This ARCA was corrected at the out of sequence demonstration by re-demonstrating proper floor monitoring techniques.

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NBIR

There was one prior ARCA resolved for the State of Michigan, Number 15-07-2.b.2-A-01, regarding farmers being ordered to evacuate while simultaneously being advised to place their livestock on stored feed and protected water.

There was one prior ARCA resolved for Monroe County, Number 23-06-1.e.1-A-01, regarding the Monroe County Health Department's Arrow-Tech 0-2.0 Roentgen dosimeters not having evidence of current calibration.

There was one prior ARCA resolved for Wayne County, Number 23-06-5.b.1-A-03, regarding two EAS messages being sent to WJR for broadcast that were missing attachments containing evacuation routes, and including incorrect television station call letters.

A detailed discussion of these issues can be found in Part IV of this report.

Based on the results of the May 20, 2008 exercise, the offsite radiological emergency response plans and preparedness for the State of Michigan, and Monroe and Wayne Counties, site-specific to the Fermi 2 Nuclear Power Plant can be implemented, and are adequate to provide reasonable assurance that appropriate measures can be taken offsite to protect the health and safety of the public in the event of a radiological emergency at the site.

Therefore, the Title 44 CFR, Part 350, approval of the offsite radiological emergency response plans and preparedness for the State of Michigan, and Monroe and Wayne Counties, granted on March 9, 1987, remains in effect. Copies of this Report were transmitted to the DHS/FEMA National Office, Nuclear Regulatory Commission (NRC) Region III, and the State of Michigan.

If you have any questions, please contact William King at (312) 408-5575.

Sincerely,



Edward G. Buikema
Regional Administrator

Enclosure (1)

Enrico Fermi 2 Nuclear Power Plant

Exercise Report - 2008-05-20

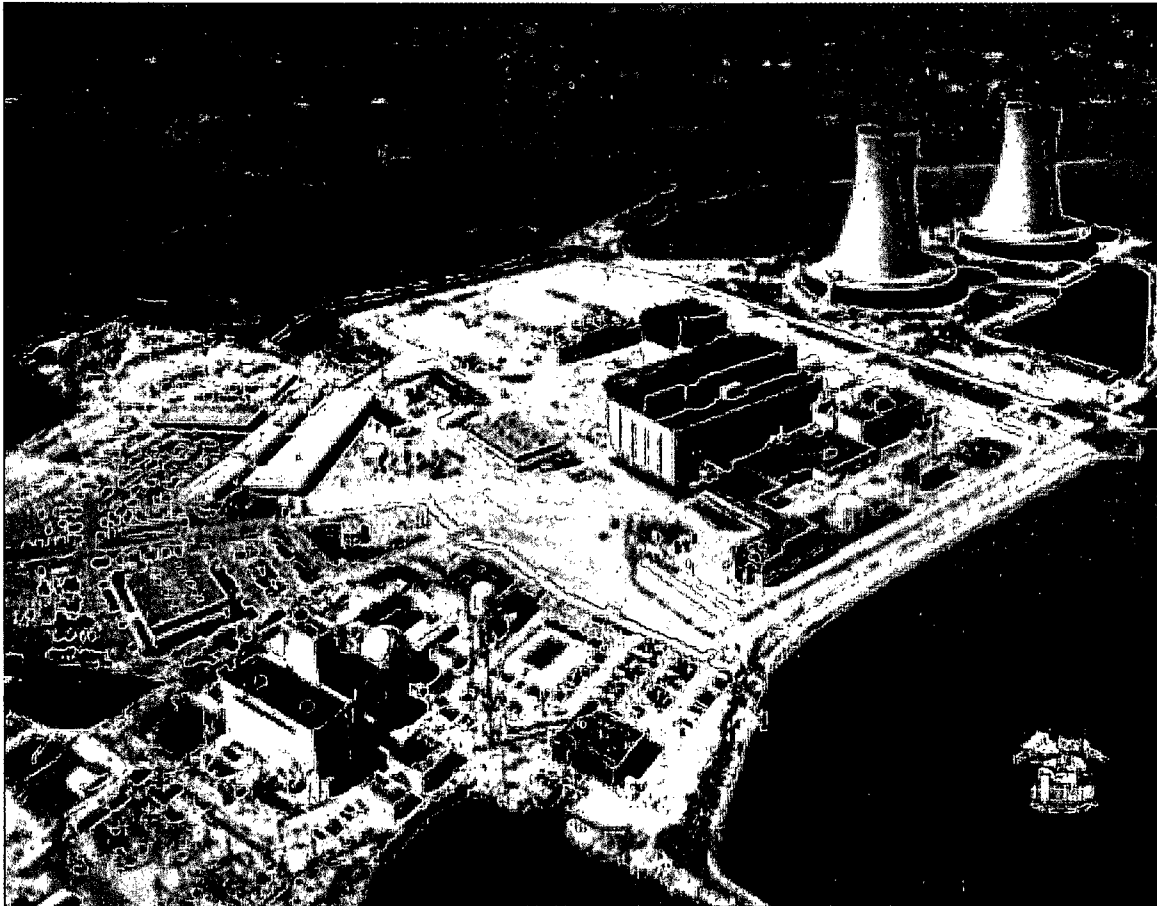
Final Report - Radiological Emergency

Preparedness (REP) Program

2008-07-03



FEMA





FEMA

Exercise Report

Enrico Fermi 2 Nuclear Power Plant

Exercise Date: 2008-05-20

Report Date: 2008-07-03

U.S. DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

REP Program

536 S. Clark St. 6th floor

Chicago, IL 60605

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1. Executive Summary

On May 20, 2008, a Radiological Emergency Preparedness (REP) Partial Participation Plume Exposure Pathway Exercise was conducted in the 10-mile Emergency Planning Zone (EPZ) around the Enrico Fermi 2 Nuclear Power Plant by the U.S. Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA) Region V. The purpose of this exercise was to assess the level of State and local preparedness in responding to a radiological emergency. This exercise was held in accordance with DHS/FEMA's policies and guidance concerning the exercise of State and local Radiological Emergency Response Plans (RERPs) and procedures.

The most recent exercise at this site was conducted on June 6 and 7, 2006. The qualifying emergency preparedness exercise was conducted on February 2, 1982.

The DHS/FEMA wishes to acknowledge the efforts of the many individuals who participated in this exercise. In the State of Michigan the risk counties of Monroe and Wayne participated along with the State government.

Protecting the public health and safety is the full-time job of some of the exercise participants and an additional assigned responsibility for others. Still others have willingly sought this responsibility by volunteering to provide vital emergency services to their communities. Cooperation and teamwork on the part of all the participants was evident during this exercise.

This Final Report contains the evaluation of the biennial exercise and the evaluation of the following out-of-sequence activities: Michigan Department of Environmental Quality activities at Monroe and Wayne County; Evacuee Vehicle Monitoring and Decontamination; Evacuee Monitoring, Decontamination and Registration; and Congregate Care Centers.

The State and local organizations, except where noted in this report, demonstrated knowledge of their emergency response plans and procedures, and adequately implemented them.

There were no Deficiencies for any jurisdiction during this exercise.

There were no Areas Requiring Corrective Action (ARCAs) identified for the State of

Michigan or Wayne County.

One prior ARCA for the State of Michigan, Number 15-07-2.b.2-A-01, regarding farmers being ordered to evacuate while simultaneously being advised to place their livestock on stored feed and protected water was resolved.

There were two ARCAs identified during this exercise for Monroe County. Both ARCAs were successfully re-demonstrated.

The first ARCA, Number 23-08-3.a.1-A-01, was identified at the Emergency Worker Equipment and Vehicle Monitoring and Decontamination demonstration at the Monroe County Fairgrounds under Criterion 3.a.1 - Implementation of Emergency Worker Exposure Control, whereby the Monroe County Health Department (MCHD) did not issue dosimetry kits to two of the MCHD staff participating in the demonstration. This ARCA was corrected at the out of sequence demonstration when the two MCHD staff members realized the oversight and promptly donned their dosimetry.

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A detailed discussion of these issues can be found in Part IV of this report.

2. Introduction

On December 7, 1979, the President directed FEMA to assume the lead responsibility for all off-site nuclear planning and response. The DHS/FEMA activities are conducted pursuant to 44 Code of Federal Regulations (CFR) Parts 350, 351, and 352. These regulations are a key element in the Radiological Emergency Preparedness (REP) Program that was established following the Three Mile Island Nuclear Station accident in March 1979.

The FEMA Rule 44 CFR 350 establishes the policies and procedures for DHS/FEMA's initial and continued approval of State and local governments' radiological emergency planning and preparedness for commercial nuclear power plants. This approval is contingent, in part, on State and local governments' participation in joint exercises with licensees.

The DHS/FEMA's responsibilities in radiological emergency planning for fixed nuclear facilities include the following:

- Taking the lead in off-site emergency planning and in the review and evaluation of RERPs and procedures developed by State and local governments;
- Determining whether such plans and procedures can be implemented on the basis of observation and evaluation of exercises of the plans and procedures conducted by State and local governments;
- Responding to requests by the U.S. Nuclear Regulatory Commission (NRC) pursuant to the Memorandum of Understanding between the NRC and FEMA dated June 17, 1993 (Federal Register, Vol. 58, No. 176, September 14, 1993); and
- Coordinating the activities of Federal agencies with responsibilities in the radiological emergency planning process:
 - U.S. Department of Agriculture;
 - U.S. Department of Energy;
 - U.S. Department of Health and Human Services;
 - U.S. Department of the Interior;
 - U.S. Department of Transportation;

- U.S. Environmental Protection Agency;
- U.S. Food and Drug Administration; and
- U.S. Nuclear Regulatory Commission.

Representatives of these agencies serve on the DHS/FEMA Region V Regional Assistance Committee (RAC), which is chaired by DHS/FEMA Region V.

Formal submission of the RERPs for the Enrico Fermi 2 Nuclear Power Plant to FEMA Region V by the State of Michigan and involved local jurisdictions occurred on March 22, 1982. Formal approval of these RERPs was granted by FEMA on March 9, 1987, under 44 CFR 350.

A REP exercise was conducted on May 20, 2008, by DHS/FEMA to assess the capabilities of State and local emergency preparedness organizations in implementing their RERPs and procedures to protect the public health and safety during a radiological emergency involving the Enrico Fermi 2 Nuclear Power Plant. The purpose of this exercise report is to present the exercise results and findings on the performance of the offsite response organizations (OROs) during a simulated radiological emergency.

The findings presented in this report are based on the evaluations of the Federal evaluation team, with final determinations made by the DHS/FEMA Region V RAC Chairperson, and approved by DHS/FEMA Headquarters.

The criteria utilized in the DHS/FEMA evaluation process are contained in:

- NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980;
- FEMA-REP-14, "Radiological Emergency Preparedness Exercise Manual," September 1991; and
- FEMA "Radiological Emergency Preparedness: Exercise Evaluation Methodology" as published in the Federal Register Notice/Vol. 67, No. 80, dated April 25, 2002.

Section III of this report, entitled "Exercise Overview," presents basic information and data relevant to the exercise. This section of the report contains a description of the plume pathway EPZ, a listing of all participating jurisdictions and functional entities,

which were evaluated, and a tabular presentation of the time of actual occurrence of key exercise events and activities.

Section IV of this report, entitled "Exercise Evaluation and Results," presents detailed information on the demonstration of applicable exercise criteria at each jurisdiction or functional entity evaluated in a jurisdiction-based, issues only format. This section also contains: (1) descriptions of all Deficiencies and ARCAs assessed during this exercise, recommended corrective actions, and the State and local governments' schedule of corrective actions, if applicable, for each identified exercise issue and (2) descriptions of unresolved ARCAs assessed during previous exercises and the status of the OROs' efforts to resolve them.

3. Exercise Overview

Contained in this section are data and basic information relevant to the May 20, 2008, exercise to test the offsite emergency response capabilities in the area surrounding the Enrico Fermi 2 Nuclear Power Plant. This section of the exercise report includes a description of the plume pathway EPZ, a listing of all participating jurisdictions and functional entities which were evaluated, and a tabular presentation of the time of the actual occurrence of key exercise events and activities.

3.1. EPZ Description

The Enrico Fermi 2 Nuclear Power Plant is comprised of approximately 1,120 acres of land owned by DTE Energy, and is operated by Detroit Edison. The site is bounded on the north by Swan Creek, on the east by Lake Erie, on the south by Pointe Aux Peaux Road, and on the west by Toll Road. Entrance to the site is from Enrico Fermi Drive (a private road owned by DTE Energy) to the west, and from Pointe Aux Peaux Road to another private road owned by DTE Energy to the south.

The plant is approximately six miles northeast of Monroe, Michigan; 30 miles southwest of downtown Detroit, Michigan; and 25 miles northeast of downtown Toledo, Ohio. The latitude of the site is 41° 57' 48" north and the longitude is 83° 15' 31" west. Site elevations range from the level of Lake Erie, on the eastern edge of the site, to approximately 25 feet above the lake level, on the western edge of the site.

The 10-mile EPZ includes parts of Monroe and Wayne Counties in Michigan; parts of Lake Erie; and the southern tip of Essex County, (Bay Point) Canada. Most of the 10-mile EPZ lies within Monroe County. Coordinated efforts occur between the two counties, which are divided into five Protective Action Areas numbered 1, 2, 3, 4 and 5. The following jurisdictions are located within the 10-mile EPZ: Ash Township, Carleton Village, Berlin Township, Estral Beach Village, Exeter Township, South Rockwood Village, Frenchtown Township, Monroe City, Monroe Township, Raisinville Township, Brownstown Township, Gibraltar City, Flat Rock City, and Rockwood City. The population in the 10-mile EPZ, based on the 2000 census, is 88,897.

Land use within the EPZ is diverse. About 55 percent of the land is farmland; the majority of agricultural land is located in Monroe County. The portion of Wayne County nearest to Detroit is a growing residential suburb. Twelve state parks and recreational

areas, and several light industries are located within the 10-mile EPZ.

There are three major roads within 10 miles of the plant, Interstates 75 and 275, and U.S. Route 24. Their closest approach to the plant is 4.1 miles, 4.2 miles and 5.8 miles, respectively. Five railroad lines operate within 10 miles of the plant. These include the Canadian National Railroad, the Norfolk Southern Railroad, the Chesapeake and Ohio Railroad, the Detroit Toledo and Ironton Railroad, and the Detroit and Toledo Shore Line Railroad. There are no major airports within 15 miles of the site.

3.2. Exercise Participants

Agencies and organizations of the following jurisdictions participated in the Enrico Fermi 2 Nuclear Power Plant exercise:

State Jurisdictions

- Office of the Governor
- Michigan State Police
- Michigan State Police Emergency Management and Homeland Security Division
- Department of Environmental Quality
- Department of Agriculture
- Department of Human Services
- Department of Information Technology
- Department of Military and Veterans Affairs
- Department of Natural Resources
- Department of Community Health
- Michigan Army/Air National Guard
- Michigan Supreme Court
- Department of Transportation
- Office of Services to the Aging
- State Fire Marshal
- Department of Labor and Economic Growth
- Attorney General

Risk Jurisdictions

- Monroe County Board of Commissioners
- Monroe County Administrator
- Monroe County Emergency Management Agency
- Monroe County Sheriff's Office
- Monroe County Drain Commission

Monroe County Department of Human Services
Monroe County Road Commission
Monroe County Extension Office
Monroe County Finance and Purchasing Department
Area Agency on Aging
Monroe County Ambulance Authority
Monroe County Planning Department
Monroe County Intermediate School District
Monroe County Department of Health
Monroe County Environmental Health
Monroe County Central Dispatch
Monroe County Department of Information Technology
Monroe County Cooperative Extension Service
Wayne County Chief Executive
Wayne County Department of Homeland Security and Emergency Management
Monroe County Animal Control
Wayne County Sheriff's Department
Wayne County Health Department
Wayne County Department of Transportation
Wayne County Department of Human Services
Wayne County Regional Educational Services Agency
Wayne County Chaplain Corps
City of Monroe
Monroe City Police
Monroe Fire Department
Downriver Police Mutual Aid
Downriver Fire Mutual Aid
Western Wayne County Fire Mutual Aid
Western Wayne County Police Mutual Aid
City of Rockwood
City of Flatrock
City of Flatrock Fire Department
Garden City
Private Jurisdictions
American Red Cross
DTE Energy
Amateur Radio Emergency Service

Radio Amateur Civil Emergency Services
Monroe County Amateur Radio
Radio Public Service Corps
Mercy Memorial Hospital
Health Emergency Medical Service
Huron Township Community Emergency Response Team
Bedford Public Schools
Bedford Volunteer Fire Department
Radio Station WJR
Inkster Fire Department
Brownstown Township
Frenchtown Township
Harry S. Truman High School
Brownstown Fire Station #4
Whiteford High School
Bedford High School
Monroe County Community College
Ottawa Lake Volunteer Fire Department
Whiteford Volunteer Fire Department
Deerfield Fire Department

3.3. Exercise Timeline

TABLE 1. EXERCISE TIMELINE

DATE AND SITE: May 20, 2008; Enrico Fermi 2 Nuclear Power Plant

Emergency Classification Level or Event	Time Utility Declared	Time That Notification Was Received or Action Was Taken				
		MICHIGAN STATE EOC	TECHNICAL SUPPORT GROUP	MONROE COUNTY EOC	WAYNE COUNTY EOC	FNPP JIC
Notification of Unusual Event	0759	0812	0824	0807	0807	N/A
Alert	0834	0845	0834	0840	0848	1027
Site Area Emergency	0955	1005	0955	1007	1008	1040
General Emergency	1050	1056	1050	1104	1111	1103
Simulated Radiation Release Started	1130	1137	1130	1137	1140	1150
Simulated Radiation Release Terminated	N/A	N/A	N/A	N/A	N/A	N/A
Facility Declared Operational		0925	0925	0912	0921	1048
State Declaration of State of Disaster		1012	N/A	N/A	N/A	N/A
Local Declaration of State of Emergency Wayne Co: Monroe Co:		0959 1015	N/A	1013	0955	N/A 1105
Exercise Terminated		1335	1335	1335	1335	1335
1 st Early Precautionary Action Decision: Evacuate Schools;		N/A	N/A	1007	1030	1055
2 nd : Ag Advisories including placing livestock on stored feed and protected water		1011	N/A	N/A	N/A	N/A
3 rd Early Precautionary Action Decision: Food embargo order issued by MDA		1113	N/A	N/A	N/A	N/A
4 th Early Precautionary Action Decision: Air, Rail and Water restrictions		1113	N/A	N/A	N/A	N/A
1 st Protective Action Order: Evacuate sub-areas 1 and 2, and out to 5-mile radius from plant on Lake Erie		1102	N/A	N/A	N/A	N/A
1 st Siren Activation:		N/A	N/A	1111	N/A	N/A
1 st EAS Activation:		N/A	N/A	N/A	1116	N/A
2 nd Protective Action Order: Evacuate sub-areas 1,2,3 and 4 and out to 10-mile radius from plant on Lake Erie		1307	N/A	N/A	N/A	N/A
2 nd Siren Activation		N/A	N/A	1313	N/A	N/A
2 nd EAS Activation		N/A	N/A	N/A	1319	N/A
Recommendation to take KI: EWs in 10-mile EPZ		1110	1110	1129	1121	N/A
Recommendation to take KI: IPs <40 years of age, areas 1 and 2		1158	1158	1208	1210	N/A
Recommendation to take KI: IPs <40 years of age, areas 3 and 4		1311	1311	1324	N/A	N/A

4. Exercise Evaluation and Results

Contained in this section are the results and findings of the evaluation of all jurisdictions and functional entities that participated in the May 20, 2008, REP Partial Participation Plume Pathway Exercise to test the off-site emergency response capabilities of State and local governments in the 10-mile EPZ surrounding the Enrico Fermi 2 Nuclear Power Plant.

Each jurisdiction and functional entity was evaluated based on its demonstration of exercise criteria delineated in Federal Register Notice/Vol. 67, No. 80, dated April 25, 2002. Detailed information on the exercise criteria and the extent-of-play agreement used in this exercise are found in Appendix 3 of this report.

4.1. Summary Results of Exercise Evaluation

The matrix presented in Table 2, on the following page(s), presents the status of all exercise criteria from Federal Register Notice/Vol. 67, No. 80, dated April 25, 2002, that were scheduled for demonstration during this exercise by all participating jurisdictions and functional entities. Exercise criteria are listed by number and the demonstration status of those criteria are indicated by the use of the following letters:

M – Met (No Deficiency or ARCA assessed and no unresolved ARCAs from prior exercises)

D – Deficiency assessed

A – ARCA(s) assessed or unresolved ARCA(s) from prior exercise(s)

N – Not Demonstrated (Reason explained in Section IV.B.)

Blank – Not scheduled for demonstration

Table 2 - Summary of Exercise Evaluation (4 pages)

DATE: 2008-05-20 SITE: Enrico Fermi 2 Nuclear Power Plant, MI A: ARCA, D: Deficiency, M: Met													
		State INP	State EOC	Tech Support Grp	Field Tm Ctr Cell	FNPP JIC	State Liaison - MCEOC	State Liaison - WCEOC	MDEQ REP - EVAC/VEH MON/DECON - HSTHS	MDEQ REP - EVAC/VEH MON/DECON - BHS - MC	MDEQ REP - EW EQUIP/VEH MON/DECON - MCF	MDEQ REP - EW MON/DECON - MCF	MDEQ REP - EW EQUIP/VEH MON/DECON - BFS4
Emergency Operations Management													
Mobilization	1a1	M	M	M	M	M							
Facilities	1b1												
Direction and Control	1c1		M			M							
Communications Equipment	1d1	M	M	M	M	M		M	M	M	M	M	M
Equip & Supplies to support operations	1e1		M	M	M	M		M	M	M	M	M	M
Protective Action Decision Making													
Emergency Worker Exposure Control	2a1		M	M	M		M	M					
Radiological Assessment and PARs	2b1			M	M		M	M					
Decisions for the Plume Phase -PADs	2b2		M	M	M								
PADs for protection of special populations	2c1		M	M									
Rad Assessment and Decision making for the Ingestion Exposure Pathway	2d1												
Rad Assessment and Decision making concerning Relocation, Reentry, and Return	2e1												
Protective Action Implementation													
Implementation of emergency worker exposure control	3a1								M	M	M	M	M
Implementation of KI decision	3b1		M										
Implementation of protective actions for special populations - EOCs	3c1												
Implementation of protective actions for Schools	3c2												
Implementation of traffic and access control	3d1		M										
Impediments to evacuation are identified and resolved	3d2												
Implementation of ingestion pathway decisions - availability/use of info	3e1												
Materials for Ingestion Pathway PADs are available	3e2												
Implementation of relocation, re-entry, and return decisions	3f1												
Field Measurement and Analysis													
Adequate Equipment for Plume Phase Field Measurements	4a1												
Field Teams obtain sufficient information	4a2												
Field Teams Manage Sample Collection Appropriately	4a3												
Post plume phase field measurements and sampling	4b1												
Laboratory operations	4c1												
Emergency Notification and Public Info													
Activation of the prompt alert and notification system	5a1		M				M	M					
Activation of the prompt alert and notification system - Fast Breaker	5a2												
Activation of the prompt alert and notification system - Exception areas	5a3												
Emergency information and instructions for the public and the media	5b1		M			M	M	M					
Support Operations/Facilities													

Mon / decon of evacuees and emergency workers, and registration of evacuees	6a1									M	M		M	M
Mon / decon of emergency worker equipment	6b1											M		M
Temporary care of evacuees	6c1													
Transportation and treatment of contaminated injured individuals	6d1													

Table 2 - Summary of Exercise Evaluation (Continued. page 2/4)

DATE: 2008-05-20 SITE: Enrico Fermi 2 Nuclear Power Plant, MI A: ARCA, D: Deficiency, M: Met		MDEQ REP - EW MON/DECON - BFS4	MDEQ REP - WHS - MC	Monroe County INP	Monroe County EOC	Monroe County EMPIH	MC - TACDB	Monroe County TACP	MC Personnel in JIC	MCHD Dosimetry	EVAC VEH MON/DECON - BHS - MC	EVAC MON/DECON - BHS - MC	EVAC REG - BHS - MC
Emergency Operations Management													
Mobilization	1a1			M	M								
Facilities	1b1				M								
Direction and Control	1c1				M								
Communications Equipment	1d1	M	M	M	M			M			M	M	M
Equip & Supplies to support operations	1e1	M	M		M			M		M	M	M	M
Protective Action Decision Making													
Emergency Worker Exposure Control	2a1												
Radiological Assessment and PARs	2b1												
Decisions for the Plume Phase -PADs	2b2												
PADs for protection of special populations	2c1				M								
Rad Assessment and Decision making for the Ingestion Exposure Pathway	2d1												
Rad Assessment and Decision making concerning Relocation, Reentry, and Return	2e1												
Protective Action Implementation													
Implementation of emergency worker exposure control	3a1	M	M					M	M		M	M	M
Implementation of KI decision	3b1							M					
Implementation of protective actions for special populations - EOCs	3c1				M								
Implementation of protective actions for Schools	3c2				M								
Implementation of traffic and access control	3d1				M			M					
Impediments to evacuation are identified and resolved	3d2				M								
Implementation of ingestion pathway decisions - availability/use of info	3e1												
Materials for Ingestion Pathway PADs are available	3e2												
Implementation of relocation, re-entry, and return decisions	3f1												
Field Measurement and Analysis													
Adequate Equipment for Plume Phase Field Measurements	4a1												
Field Teams obtain sufficient information	4a2												
Field Teams Manage Sample Collection Appropriately	4a3												
Post plume phase field measurements and sampling	4b1												
Laboratory operations	4c1												
Emergency Notification and Public Info													
Activation of the prompt alert and notification system	5a1				M								
Activation of the prompt alert and notification system - Fast Breaker	5a2												
Activation of the prompt alert and notification system - Exception areas	5a3												
Emergency information and instructions for the public and the media	5b1				M	M		M					
Support Operations/Facilities													
Mon / decon of evacuees and emergency workers, and registration of evacuees	6a1	M	M								M	M	M
Mon / decon of emergency worker equipment	6b1												
Temporary care of evacuees	6c1												

Table 2 - Summary of Exercise Evaluation (Continued, page 3/4)

DATE: 2008-05-20 SITE: Enrico Fermi 2 Nuclear Power Plant, MI A: ARCA, D: Deficiency, M: Met		CONG CARE CTR - BHS - MC	EW EQUIP/VEH MON/DECON - MCF	EW MON - MCF	EW DECON - MCF	EVAC VEH MON/DECON - WHS -MC	EVAC MON/DECON - WHS - MC	EVAC REG - WHS - MC	CONG CARE CTR - WHS - MC	Wayne County INP	Wayne County EOC	WC Personnel in JIC
Emergency Operations Management												
Mobilization	1a1									M	M	
Facilities	1b1											
Direction and Control	1c1										M	
Communications Equipment	1d1	M	M	M	M	M	M	M	M	M	M	
Equip & Supplies to support operations	1e1		M	M	M	M	M	M			M	
Protective Action Decision Making												
Emergency Worker Exposure Control	2a1											
Radiological Assessment and PARs	2b1											
Decisions for the Plume Phase -PADs	2b2											
PADs for protection of special populations	2c1										M	
Rad Assessment and Decision making for the Ingestion Exposure Pathway	2d1											
Rad Assessment and Decision making concerning Relocation, Reentry, and Return	2e1											
Protective Action Implementation												
Implementation of emergency worker exposure control	3a1		M	M	M	M	M	M				
Implementation of KI decision	3b1										M	
Implementation of protective actions for special populations - EOCs	3c1										M	
Implementation of protective actions for Schools	3c2										M	
Implementation of traffic and access control	3d1										M	
Impediments to evacuation are identified and resolved	3d2										M	
Implementation of ingestion pathway decisions - availability/use of info	3e1											
Materials for Ingestion Pathway PADs are available	3e2											
Implementation of relocation, re-entry, and return decisions	3f1											
Field Measurement and Analysis												
Adequate Equipment for Plume Phase Field Measurements	4a1											
Field Teams obtain sufficient information	4a2											
Field Teams Manage Sample Collection Appropriately	4a3											
Post plume phase field measurements and sampling	4b1											
Laboratory operations	4c1											
Emergency Notification and Public Info												
Activation of the prompt alert and notification system	5a1										M	
Activation of the prompt alert and notification system - Fast Breaker	5a2											
Activation of the prompt alert and notification system - Exception areas	5a3											
Emergency information and instructions for the public and the media	5b1										M	M
Support Operations/Facilities												
Mon / decon of evacuees and emergency workers, and registration of evacuees	6a1			M	M	M	M	M				
Mon / decon of emergency worker equipment	6b1		M									
Temporary care of evacuees	6c1	M							M			
Transportation and treatment of contaminated injured individuals	6d1											

Table 2 - Summary of Exercise Evaluation (Continued, page 4/4)

DATE: 2008-05-20 SITE: Enrico Fermi 2 Nuclear Power Plant, MI A: ARCA, D: Deficiency, M: Met		EAS Station WJR	EVAC VEH MON/DECON - HSTHS -	EVAC MON/DECON HSTHS - WC	EVAC REG - HSTHS - WC	CONG CARE CTR - HSTHS - WC	Wayne County Dosimetry - BFS4	WC - TACDB	Wayne County TACP	EW EQUIP/VEH MON/DECON - BFS4	EW MON - BFS4	EW DECON - BFS4
Emergency Operations Management												
Mobilization	1a1											
Facilities	1b1											
Direction and Control	1c1											
Communications Equipment	1d1		M	M	M	M			M	M	M	M
Equip & Supplies to support operations	1e1		M	M	M	M			M	M	M	M
Protective Action Decision Making												
Emergency Worker Exposure Control	2a1											
Radiological Assessment and PARs	2b1											
Decisions for the Plume Phase -PADs	2b2											
PADs for protection of special populations	2c1											
Rad Assessment and Decision making for the Ingestion Exposure Pathway	2d1											
Rad Assessment and Decision making concerning Relocation, Reentry, and Return	2e1											
Protective Action Implementation												
Implementation of emergency worker exposure control	3a1		M	M	M				M	M	M	M
Implementation of KI decision	3b1								M			
Implementation of protective actions for special populations - EOCs	3c1											
Implementation of protective actions for Schools	3c2											
Implementation of traffic and access control	3d1								M			
Impediments to evacuation are identified and resolved	3d2											
Implementation of ingestion pathway decisions - availability/use of info	3e1											
Materials for Ingestion Pathway PADs are available	3e2											
Implementation of relocation, re-entry, and return decisions	3f1											
Field Measurement and Analysis												
Adequate Equipment for Plume Phase Field Measurements	4a1											
Field Teams obtain sufficient information	4a2											
Field Teams Manage Sample Collection Appropriately	4a3											
Post plume phase field measurements and sampling	4b1											
Laboratory operations	4c1											
Emergency Notification and Public Info												
Activation of the prompt alert and notification system	5a1	M										
Activation of the prompt alert and notification system - Fast Breaker	5a2											
Activation of the prompt alert and notification system - Exception areas	5a3											
Emergency information and instructions for the public and the media	5b1											
Support Operations/Facilities												
Mon / decon of evacuees and emergency workers, and registration of evacuees	6a1		M	M	M						M	M
Mon / decon of emergency worker equipment	6b1									M		
Temporary care of evacuees	6c1					M						

4.2. Status of Jurisdictions Evaluated

This subsection provides information on the evaluation of each participating jurisdiction and functional entity in a jurisdiction-based, issues-only format. Presented below are definitions of the terms used in this subsection relative to criteria demonstration status.

- Met – Listing of the demonstrated exercise criteria under which no Deficiencies or ARCAs were assessed during this exercise and under which no ARCAs assessed during prior exercises remain unresolved.
- Deficiency – Listing of the demonstrated exercise criteria under which one or more Deficiencies were assessed during this exercise. Included is a description of each Deficiency and recommended corrective actions.
- Area Requiring Corrective Action – Listing of the demonstrated exercise criteria under which one or more ARCAs were assessed during the current exercise or ARCAs assessed during prior exercises remain unresolved. Included is a description of the ARCAs assessed during this exercise and the recommended corrective action to be demonstrated before or during the next biennial exercise.
- Not Demonstrated – Listing of the exercise criteria that were not demonstrated as scheduled during this exercise and the reason(s) they were not demonstrated.
- Prior ARCAs – Resolved – Descriptions of ARCAs assessed during previous exercises that were resolved in this exercise and the corrective actions demonstrated.
- Prior ARCAs – Unresolved – Descriptions of ARCAs assessed during prior exercises that were not resolved in this exercise. Included is the reason the ARCA remains unresolved and recommended corrective actions to be demonstrated before or during the next biennial exercise.

The following are definitions of the two types of exercise issues that maybe discussed in this report.

- A Deficiency is defined in FEMA-REP-14 as "...an observed or identified inadequacy of organizational performance in an exercise that could cause a finding that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency

to protect the health and safety of the public living in the vicinity of a nuclear power plant."

- An ARCA is defined in FEMA-REP-14 as "...an observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health and safety."

DHS/FEMA has developed a standardized system for numbering exercise issues (Deficiencies and ARCAs). This system is used to achieve consistency in numbering exercise issues among DHS/FEMA regions and site-specific exercise reports within each region. It also is used to expedite tracking of exercise issues on a nationwide basis.

The identifying number of Deficiencies and ARCAs includes the following elements, with each element separated by a hyphen (-).

- Plant Site Identifier – A two-digit number, corresponding to the Utility Billable Plant Site Code.
- Exercise Year – The last two digits of the year the exercise was conducted.
- Criterion Number – An alpha and two-digit number corresponding to the criteria numbers in the six Exercise Evaluation Areas described in Federal Register Notice/Vol. 67, No. 80 dated April 25, 2002, which amends FEMA-REP 14, Radiological Emergency Preparedness Exercise Manual.
- Issue Classification Identifier – (D = Deficiency, A = ARCA). Only Deficiencies and ARCAs are included in exercise reports. Plan issues are reported to the State(s) via a letter from the RAC Chairman. Therefore, standardized issue numbers are not assigned to Plan Issues.
- Exercise Identification Number – A separate two- (or three-) digit indexing number assigned to each issue identified in the exercise.

4.2.1. State Jurisdictions

4.2.1.1. Initial Notification Point

- a. MET: 1.a.1, 1.d.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.1.2. State Emergency Operations Center

- a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 2.c.1, 3.b.1, 3.d.1, 5.a.1, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: 2.b.2.

ISSUE NO.: 15-07-2b2-A-01

ISSUE: Farmers are being ordered to evacuate and at the same time are being advised to place their animals on stored feed and protected water.

CORRECTIVE ACTION DEMONSTRATED: CORRECTIVE ACTION DEMONSTRATED: Subsequent to release of the Governor's PAOs the State did not issue conflicting instructions for livestock owners. The PAOs, which cover all categories of the public, including livestock owners, superseded previous protective actions, including sheltering livestock, and ordered their evacuation.

- f. PRIOR ISSUES - UNRESOLVED: None

4.2.1.3. Technical Support Group

- a. MET: 1.a.1, 1.d.1, 1.e.1, 2.a.1, 2.b.1, 2.b.2, 2.c.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None

- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.1.4. Field Team Center Cell

- a. MET: 1.a.1, 1.d.1, 1.e.1, 2.a.1, 2.b.1, 2.b.2.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.1.5. Enrico Fermi 2 Nuclear Power Plant Joint Information Center

- a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.1.6. State Liaison - Monroe County Emergency Operations Center

- a. MET: 2.a.1, 2.b.1, 5.a.1, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.1.7. State Liaison - Wayne County Emergency Operations Center

- a. MET: 2.a.1, 2.b.1, 5.a.1, 5.b.1.

- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.1.8. Michigan Department of Environmental Quality - Evacuee/Vehicle Monitoring/Decontamination - Harry S. Truman High School

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.1.9. Michigan Department of Environmental Quality - Evacuee/Vehicle Monitoring/Decontamination - Bedford High School - Monroe County

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.1.10. Michigan Department of Environmental Quality - Emergency Worker Equipment/Vehicle Monitoring/Decontamination - Monroe County

Fairgrounds

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.1.11. Michigan Department of Environmental Quality - Emergency Worker Monitoring/Decontamination - Monroe County

Fairgrounds

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.1.12. Michigan Department of Environmental Quality - Emergency Worker Equipment/Vehicle Monitoring/Decontamination - Brownstown Fire Station #4

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1, 6.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.1.13. Michigan Department of Environmental Quality - Emergency Worker

Monitoring/Decontamination - Brownstown Fire

Station #4

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.1.14. Michigan Department of Environmental Quality - Evacuee/Vehicle

Monitoring/Decontamination - Whiteford High School

- Monroe County

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2. Risk Jurisdictions

4.2.2.1. Monroe County Central Dispatch - Initial Notification Point

- a. MET: 1.a.1, 1.d.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None

- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.2. Monroe County Emergency Operations Center

- a. MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 2.c.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.a.1, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.3. Monroe County Emergency Management Public Inquiry Hotline

- a. MET: 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.4. Monroe County Traffic and Access Control Dosimetry Briefing

- a. MET: 3.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.5. Monroe County Traffic and Access Control Demonstration

- a. MET: 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.d.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.6. Monroe County Personnel in Joint Information Center

- a. MET: 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.7. Monroe County Health Department - Dosimetry

- a. MET: 1.e.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: 1.e.1.

ISSUE NO.: 23-06-1e1-A-01

ISSUE: Monroe County Health Department Arrow-Tech 0-2.0 Roentgen dosimeter (200 units) did not have evidence of current calibration.

CORRECTIVE ACTION DEMONSTRATED: The evaluator cross-referenced five randomly selected DRDs with documentation provided by the Michigan

Department of Environmental Quality. Each had a current calibration date of November 29, 2007.

- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.8. Monroe County - Evacuee Vehicle

Monitoring/Decontamination - Bedford High School

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.9. Monroe County - Evacuee

Monitoring/Decontamination - Bedford High School

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: 6.a.1.

ISSUE NO.: 23-08-6a1-A-02

ISSUE: Reception center/emergency worker facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees and/or emergency workers. (NUREG-0654, J.10.h., K.5.b)

CONDITION: A member of the evacuation and monitoring staff was observed improperly using a handheld instrument to perform floor surveys at the Bedford High School reception center. In addition the individual and other personnel present, were unfamiliar with proper instrument setup and operation.

POSSIBLE CAUSE: Neither the Monitoring and Decontamination Supervisor nor a MDEQ staff member was present at the time this activity was performed, and therefore could not provide technical oversight and advice.

Also, the individual did not refer to procedural guidance and, was unfamiliar with correct meter response while performing the instrument operational check.

REFERENCE: NUREG-0654 J.10.h; J.12; K.5.a

EFFECT: Improper use and operational checks of radiation instruments and inadequate supervisory/technical oversight of monitoring and decontamination staff could result in inaccurate survey results and cross contamination of evacuees and facility.

CORRECTIVE ACTION DEMONSTRATED: This portion of the exercise was re-demonstrated successfully before the exercise was concluded following remediation by the Monitoring and Decontamination Supervisor and MDEQ staff. During the re-demonstration, the volunteer, the State Controller, the Monitoring and Decontamination Supervisor and a Michigan DEQ representative were present. The volunteer explained that a proper instrument response to the check source would be 300 on the lowest scale, and the contamination action level was 300 counts per minute. The MDEQ representative explained that the background count rate is included in the 300 count per minute action level. The volunteer performed a survey of a floor area, and was coached by the DEQ representative to monitor more slowly to allow the instrument to respond. The following day, a Monroe County representative forwarded a copy of the latest revision (March 2008) of the procedure "Monroe County Radiological Emergency Procedures for Public Reception Decontamination Congregate Care Centers". An attachment in the procedure entitled "OPERABILITY CHECKS FOR RADIOLOGICAL INSTRUMENTS" included a statement that a mid-scale reading should be obtained using the check source when the meter is on the X1 scale. This is contrary to the practice observed during the exercise.

- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.10. Monroe County - Evacuee Registration - Bedford High School

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.11. Monroe County - Congregate Care Center - Bedford High School

- a. MET: 1.d.1, 6.c.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.12. Emergency Worker Equipment/Vehicle Monitoring /Decontamination - Monroe County Fairgrounds

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: 3.a.1.

ISSUE NO.: 23-08-3a1-A-01

ISSUE: OROs issue appropriate dosimetry and procedures, and manage radiological exposure to emergency workers IAW plans and procedures. Emergency workers periodically and at the end of each mission read and record dosimeter reading. (NUREG-0654, K.3)

CONDITION: At the Monroe County Fair Grounds Emergency Worker Monitoring and Decontamination Center, the Monroe County Health

Department (MCHD) did not issue dosimetry kits to two members of the MCHD staff.

POSSIBLE CAUSE: The MCHD staff reported that they forgot to issue kits to themselves, noting there was no cross verification between the Fire IC and MCHD.

REFERENCE: NUREG-0654, K3a, 3b.

EFFECT: The MCHD staffs radiation exposure would have gone unrecorded in the event of an actual radiological emergency.

CORRECTIVE ACTION DEMONSTRATED: The MCHD staff immediately donned their dosimetry kits upon recognition of the oversight. The staff demonstrated, through observation and interview full knowledge of proper dosimetry use and commenced dose reporting protocols.

- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.13. Emergency Worker Monitoring - Monroe County Fairgrounds

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.14. Emergency Worker Decontamination - Monroe County Fairgrounds

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.

- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.15. Monroe County - Evacuee Vehicle

Monitoring/Decontamination - Whiteford High School

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.16. Monroe County - Evacuee

Monitoring/Decontamination - Whiteford High School

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.17. Monroe County - Evacuee Registration -

Whiteford High School

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.18. Monroe County - Congregate Care Center - Whiteford High School

- a. MET: 1.d.1, 6.c.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.19. Wayne County Central Communications Center - Initial Notification Point

- a. MET: 1.a.1, 1.d.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.20. Wayne County Emergency Operations Center

- a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.c.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.a.1, 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: 5.b.1.

ISSUE NO.: 23-06-5b1-A-3

ISSUE: The two EAS messages sent to WJR for broadcast were missing attachments containing evacuation routes, and included incorrect television station call letters.

CORRECTIVE ACTION DEMONSTRATED: The Wayne County EOC

demonstrated its ability to provide timely and accurate instructions to the public and news media, thereby correcting the previously identified issue. The PIO reviewed EAS messages and ensured the proper receipt of the EAS messages by the radio station.

- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.21. Wayne County Personnel in Joint Information Center

- a. MET: 5.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.22. Emergency Alert System Radio Station WJR AM-760

- a. MET: 5.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.23. Wayne County - Evacuee Vehicle Monitoring/Decontamination - Harry S. Truman High School

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None

- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.24. Wayne County - Evacuee

Monitoring/Decontamination - Harry S. Truman High School

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.25. Wayne County - Evacuee Registration -

Harry S. Truman High School

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.26. Wayne County - Congregate Care Center -

Harry S. Truman High School

- a. MET: 1.d.1, 6.c.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.27. Wayne County - Dosimetry - Brownstown Fire Station #4

- a. MET: 1.e.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.28. Wayne County Traffic and Access Control Dosimetry Briefing

- a. MET: 3.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.29. Wayne County Traffic and Access Control Demonstration

- a. MET: 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.d.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.30. Emergency Worker Equipment/Vehicle Monitoring/Decontamination - Brownstown Fire Station #4

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.31. Emergency Worker Monitoring - Brownstown Fire Station #4

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.32. Emergency Worker Decontamination - Brownstown Fire Station #4

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.a.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

APPENDIX 1

ACRONYMS AND ABBREVIATIONS

AA	Agricultural Advisories
ACP	Access Control Point
ADRCS	Adventist Disaster Response Community Services
ANS	Alert and Notification System
ARC	American Red Cross
ARES	Amateur Radio Emergency Service
CAP	Civil Air Patrol
CB	Citizen Band
CCC	Congregate Care Center
CD V	Civil Defense, Category V
CE	Chief Executive
CES	Cooperative Extension Service
CME	Chief Medical Examiner
DCO	Dosimetry Control Officer
DDE	Deep Dose Equivalent
DO	Duty Officer
DRD	Direct-Reading Dosimeter
DTE	Detroit Edison
DW	Decontamination Worker
EAD	Electronic Alarming Dosimeter
EAS	Emergency Alert System
ECC	Emergency Coordination Center
ECL	Emergency Classification Level
EMAC	Emergency Management Assistance Compact
EMC	Emergency Management Coordinator
EMD	Emergency Management Director
EMHSD/MSP	Emergency Management and Homeland Security Division/Michigan State Police
EMS	Emergency Medical Service
EMSO	Emergency Medical Services Official
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EOP	Emergency Operations Plan
EPZ	Emergency Planning Zone
ESF	Emergency Support Function
EW	Emergency Worker
FD	Fire Department
FIN	Finance/Administration Section Chief
FMT	Field Monitoring Team
FNAMS	Federal National Message System
FNARS	FEMA National Radio System
FNPP	Fermi 2 Nuclear Power Plant
FOG	Field Operations Guide
FRMAC	Federal Radiological Monitoring and Assessment Center

FSO	Fire Services Officer
FTC	Field Team Center
FTCC	Field Team Center Cell
FTS	Federal Communications System
GE	General Emergency
GM	Gieger-Mueller
HEMS	Health Emergency Medical System
HERN	Hospital Emergency Radio Network
HP	Health Physicist
HPL	Health Physics Liaison
HPRT	Health Physics Response Team
HPT	Health Physics Technician
HSO	Human Services Official or Health Services Official
IC	Incident Commander or Information Coordinator
INP	Initial Notification Point
ISD	Intermediate School District
JIC	Joint Information Center
JPIT	Joint Public Information Team
KI	potassium iodide
LD	Luminescence Dosimeter
LEIN	Law Enforcement Information Network
LEO	Law Enforcement Official
LMR	London-Maybee-Raisinville
LNO	Liaison Officer
LOG	Logistics Section Chief
MC	Monroe County
MCAC	Monroe County Animal Control
MCBC	Monroe County Board of Commissioners
MCCD	Monroe County Central Dispatch
MCDHS	Monroe County Department of Human Services
MCEMD	Monroe County Emergency Management Division
MCEMP	Monroe County Emergency Management Plan
MCEOC	Monroe County Emergency Operations Center
MCFA	Monroe County Fire Association
MCHD	Monroe County Health Department
MCHRD	Monroe County Human Resources Director
MCMCA	Monroe County Medical Control Authority
MCME	Monroe County Medical Examiner
MCPD	Monroe County Planning Department or Monroe City Police Department
MCSO	Monroe County Sheriff's Office
MDA	Michigan Department of Agriculture
MDAG	Michigan Department of Attorney General
MDCH	Michigan Department of Community Health
MDCR	Michigan Department of Civil Rights
MDCS	Michigan Department of Civil Service
MDEQ	Michigan Department of Environmental Quality
MDHAL	Michigan Department of History, Arts and Libraries
MDHS	Michigan Department of Human Services
MDIT	Michigan Department of Information Technology

MDLEG	Michigan Department of Labor and Economic Growth
MDMB	Michigan Department of Management and Budget
MDMVA	Michigan Department of Military and Veterans Affairs
MDNR	Michigan Department of Natural Resources
MDOC	Michigan Department of Corrections
MDOE	Michigan Department of Education
MDOS	Michigan Department of State
MDOT	Michigan Department of Transportation
MDT	Michigan Department of Treasury
MEMP	Michigan Emergency Management Plan
MHMP	Michigan Hazard Mitigation Plan
MMRS	Metropolitan Medical Response System
MOSA	Michigan Office of Services to the Aging (Department of Community Health)
MPSC	Michigan Public Service Commission
MPSCS	Michigan Public Safety Communication System
mR	milliRoentgen
MSP	Michigan State Police
ND	News Director
NFERP	Nuclear Facilities Emergency Response Procedures
NGO	Nongovernmental Organization
NOUE	Notification of an Unusual Event
NPEN	Nuclear Plant Event Notification
NTS	National Traffic Service
OSL	Optically Stimulated Luminescence
PAG(s)	Protective Action Guide(s)
PAO	Protective Action Order or Public Affairs Officer
PAR(s)	Protective Action Recommendation(s)
PIP	Public Inquiry Personnel
PIS	Public Inquiry Supervisor
PPE	Personal Protective Equipment
PWO	Public Works Official
R	Roentgen
RAC	Regional Assistance Committee
RACES	Radio Amateur Civil Emergency Services
rad	Radiation Absorbed Dose
RADEF	Radiological Defense
RAP	Radiological Assistance Program
RCCF	Reception/Congregate Care Facility
RDO	Radiological Defense Officer
REA	Radiation Emergency Area
rem	Roentgen Equivalent Man
RESA	Regional Education Service Agency
RESTAT	Resources Status
RRCC	Regional Response Coordination Center
SA	Salvation Army
SAE	Site Area Emergency
SED	State Emergency Director
SEOC	State Emergency Operations Center
SITREP	Situation Report

SO	Safety Officer
SSO	School Services Official
TACP	Traffic and Access Control Point
TLD	Thermoluminescence Dosimeter
WCCC	Wayne County Central Communications
WCEOC	Wayne County Emergency Operations Center
WCO	Warning/Communications Official
WDC	Worker Decontamination Center
WHMD	Waste and Hazardous Materials Division, Michigan Department of Environmental Quality

APPENDIX 2

EXERCISE EVALUATORS AND TEAM LEADERS

The following is a list of the personnel who evaluated the Enrico Fermi 2 Nuclear Power Plant Partial Participation Plume Exposure Pathway Exercise on May 20, 2008. Evaluator Team Leaders are indicated by the letters "(TL)" after their names. The organization which each evaluator represents is indicated by the following abbreviations:

DHS/FEMA - Department of Homeland Security/Federal Emergency Management Agency
 ICF - ICF International

<u>TITLE</u>	<u>NAME</u>	<u>ORGANIZATION</u>
RAC Chair	William E. King	DHS/FEMA
Exercise Director	Dwaine K. Warren	DHS/FEMA
REP Team Leader	Gary L. Naskrent	DHS/FEMA
Regional Site Specialist	Clinton E. Crackel	DHS/FEMA

<u>EVALUATION SITE</u>	<u>EVALUATOR</u>	<u>ORGANIZATION</u>
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STATE OF MICHIGAN

Initial Notification Point	William Ryan	DHS/FEMA
Emergency Operations Center	Carl Bebrich (TL) Michael Henry William Ryan	DHS/FEMA ICF DHS/FEMA
Technical support Group	Dennis Wilförd	ICF
Field Team Center Cell	Terry Blackmon	ICF
Joint Information Center	George MacDonald	ICF
State Liaison - MCEOC	Paul Nied	ICF
State Liaison - WCEOC	Harold Spedding	ICF
MDEQ REP - Truman H.S.	Dennis Wilford	ICF
MDEQ REP - Bedford H.S.	Mike Meshenberg	ICF
MDEQ REP - MC Fairgrounds	Richard Grundstrom Sonia Eischen	ICF ICF

MDEQ REP - BFS4	Terry Blackmon	ICF
	Richard Grundstrom	ICF

MDEQ REP - Whiteford H.S.	David Stuhan	ICF
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MONROE COUNTY

Initial Notification Point	Clint Crackel	DHS/FEMA
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Monroe County EOC	Harral Logaras (TL)	DHS/FEMA
	Clint Crackel	DHS/FEMA
	Sonia Eischen	ICF
	Paul Nied	ICF
	Daniel Prevo	ICF

EMPIH - MCEOC	Sonia Eischen	ICF
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TACDB	Paul Nied	ICF
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Traffic and Access Control	Daniel Prevo	ICF
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MC Personnel in JIC	George MacDonald	ICF
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MCHD - Dosimetry	Sonia Eischen	ICF
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EVAC VEH M&D - Bedford H.S.	Mike Meshenberg	ICF
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EVAC M&D - Bedford H.S.	Richard Watts	ICF
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EVAC REG - Bedford H.S.	Alan Bevan	ICF
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Congregate Care - Bedford H.S.	Mike Meshenberg	ICF
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EW EQUIP/VEH M&D - MCF	Lenora Borchardt	ICF
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EW Monitoring - MCF	Richard Grundstrom	ICF
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EW DECON - MCF	Mike Meshenberg	ICF
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EVAC VEH M&D - Whiteford H.S.	Alan Bevan	ICF
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EVAC M&D - Whiteford H.S.	Raymond Wood	ICF
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EVAC REG - Whiteford H.S.	David Stuhan	ICF
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Congregate Care - Whiteford H.S.	Richard Grundstrom	ICF
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WAYNE COUNTY

Initial Notification Point	Robert Vork	ICF
Wayne County EOC	Jay Kinsley (TL) Harold Spedding Robert Vork	DHS/FEMA ICF ICF
WC Personnel in JIC	George MacDonald	ICF
EAS Radio Station WJR	David Stuhan	ICF
EVAC VEH M&D - Truman H.S.	David Stuhan	ICF
EVAC M&D - Truman H.S.	Lenora Borchardt	ICF
EVAC REG - Truman H.S.	Dennis Wilford	ICF
Congregate Care - Truman H.S.	Terry Blackmon	ICF
WC Dosimetry - BSF4	Terry Blackmon	ICF
TACDB - BFS4	Terry Blackmon	ICF
Traffic and Access Control - BFS4	Richard Grundstrom	ICF
EW EQUIP/VEH M&D - BFS4	Richard Watts	ICF
EW Monitoring - BFS4	Raymond Wood	ICF
EW DECON - BFS4	Dennis Wilford	ICF

APPENDIX 3

EXERCISE CRITERIA AND EXTENT-OF-PLAY AGREEMENT

This appendix lists the exercise criteria that were scheduled for demonstration in the Enrico Fermi 2 Nuclear Power Plant REP Partial Participation Plume Exposure Pathway Exercise on May 20, 2008, and the off-site extent-of-play agreement approved by DHS/FEMA Region V on May 16, 2008.

The exercise criteria, contained in FEMA "Radiological Emergency Preparedness Exercise Evaluation Methodology" as published in the Federal Register Notice/Vol. 67, No 80, dated April 25, 2002, represent a functional translation of the planning standards and evaluation criteria of NUREG-0654/FEMA-REP-1, Rev. 1, Criteria for the Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, November 1980.

Because the exercise criteria are intended for use at all nuclear power plant sites, and because of variations among off-site plans and procedures, an extent-of-play agreement is prepared by the State and approved by DHS/FEMA Region V to provide evaluators with guidance on expected actual demonstration of the criteria.

A. Exercise Criteria and Extent-of-Play

Listed below are the specific REP criteria scheduled for demonstration during this exercise.

EVALUATION AREA 1: EMERGENCY OPERATIONS MANAGEMENT

CRITERION 1.a.1: OROs use effective procedures to alert, notify and mobilize emergency personnel and facilities in a timely manner.

CRITERION 1.b.1: Facilities are sufficient to support emergency operations.

CRITERION 1.c.1: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible.

CRITERION 1.d.1: At least two communications systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations.

CRITERION 1.e.1: Equipment, maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations.

EVALUATION AREA 2: PROTECTIVE ACTION DECISION-MAKING

CRITERION 2.a.1: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for emergency workers including provisions to authorize radiation exposure in excess of administrative limits or protective action guides.

CRITERION 2.b.1: Appropriate protective action recommendations are based on available information on plant conditions, field monitoring data, and licensee and ORO dose projections, as well as knowledge of on-site and off-site environmental conditions.

CRITERION 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make protective action decisions (PADs) for the general public (including the recommendation for the use of KI, if ORO policy).

CRITERION 2.c.1: Protective action decisions are made, as appropriate, for special population groups.

EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION

CRITERION 3.a.1: The OROs issue appropriate dosimetry and procedures, and manage radiological exposure to emergency workers in accordance with the plans and procedures. Emergency workers periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart.

CRITERION 3.b.1: KI and appropriate instructions are available should a decision to recommend use of KI be made. Appropriate record keeping of the administration of KI for emergency workers and institutionalized individuals (not the general public) is maintained.

CRITERION 3.c.1: Protective action decisions are implemented for special populations other than schools within areas subject to protective actions.

CRITERION 3.c.2: OROs/School officials decide upon and implement protective actions for schools.

CRITERION 3.d.1: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel.

CRITERION 3.d.2: Impediments to evacuation are identified and resolved.

EVALUATION AREA 5: EMERGENCY NOTIFICATION & PUBLIC INFORMATION

CRITERION 5.a.1: Activities associated with primary alerting and notification of the public are completed in as timely manner following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include as a minimum the elements required by current FEMA REP guidance.

CRITERION 5.b.1: OROs provide accurate emergency information and instructions to the public and the news media in a timely manner.

EVALUATION AREA 6: SUPPORT OPERATION/FACILITIES

CRITERION 6.a.1: The reception center/emergency worker facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees and/or emergency workers.

CRITERION 6.b.1: The facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of emergency worker equipment including vehicles.

CRITERION 6.c.1: Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with American Red Cross planning guidelines (found in MASS CARE-Preparedness Operations, ARC 3031). Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate prior to entering congregate care facilities.

B. Extent-of-Play Agreement

The extent-of-play agreement on the following pages was submitted by the State of Michigan, and Monroe and Wayne Counties in preparation for the Enrico Fermi 2 Nuclear Power Plant REP Partial Participation Plume Exposure Pathway Exercise on May 20, 2008. The extent-of-play agreement includes any significant modification or change in the level of demonstration of each exercise criterion listed in Subsection A of this appendix.

**STATE OF MICHIGAN AND MONROE AND WAYNE COUNTIES'
EXTENT-OF-PLAY AGREEMENT
FOR THE
ENRICO FERMI 2 NUCLEAR POWER PLANT REP EXERCISE**

May 20, 2008

EVALUATION AREA 1 - EMERGENCY OPERATIONS MANAGEMENT

Criterion 1.a.1: OROs use effective procedures to alert, notify and mobilize emergency personnel and activate facilities in a timely manner.

State of Michigan

1. The State Emergency Operations Center (SEOC) will be fully activated. State personnel reporting to the SEOC will be mobilized in accordance with procedures.
2. State personnel reporting to the county EOC will be pre-positioned and will report when mobilized by the SEOC. (approximately 30 minutes)
3. State personnel reporting to the Joint Information Center (JIC) will be pre-positioned and will begin participation after the arrival of county JIC personnel.
4. State personnel involved in out of sequence demonstrations will be pre-staged.
5. A roster will be provided to demonstrate 24-hour staffing.

Monroe County

1. The Monroe County EOC will be activated and mobilized in accordance with procedures.
2. Monroe County JIC personnel will be mobilized in accordance with procedures.
3. A roster will be provided to demonstrate 24-hour staffing of the EOC.

Wayne County

1. The Wayne County EOC will be activated and mobilized in accordance with procedures.
2. Wayne County JIC personnel will be mobilized in accordance with procedures.
3. A roster will be provided to demonstrate 24-hour staffing of the EOC.

Note: The use and interaction with E-team will not be evaluated.

Criterion 1.b.1: Facilities are sufficient to support the emergency response.

State of Michigan

1. This criterion was demonstrated during the Palisades exercise on June 4, 2002.
2. The State Emergency Operations Center (SEOC) is maintained in operational readiness and set up will not be demonstrated.

Monroe County

1. This criterion will be demonstrated during this exercise on May 20, 2008
2. The Monroe County Emergency Operations Center (MCEOC) is maintained in operational readiness and set up will not be demonstrated

Wayne County

1. This criterion was demonstrated during the Fermi 2 exercise on September 24, 2002.
2. The Wayne County Emergency Operations Center (WCEOC) is maintained in operational readiness and set up will not be demonstrated

Criterion 1.c.1: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible.

State of Michigan, Monroe and Wayne County

This criterion will be demonstrated at the SEOC, county EOCs, and the JIC.

Criterion 1.d.1: At least two communication systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations.

State of Michigan, Monroe and Wayne County

This criterion will be demonstrated by the SEOC, county EOCs, the JIC, and Access Control. If both the primary and back-up systems fail, this objective may be demonstrated by successful use of an alternate method of communication.

Criterion 1.e.1: Equipment, maps, displays, dosimetry, potassium iodide (KI) and other supplies are sufficient to support emergency operations.

State of Michigan, Monroe and Wayne County

1. Equipment, maps, displays, and other supplies will be demonstrated to support emergency operations at the SEOC, JIC, and county EOCs. In addition, out of sequence events.
2. Personnel involved in traffic and access control points will demonstrate knowledge of where to secure traffic control equipment.
3. Potassium iodide and dosimeters are stored at each county and at the MSP/EMHSD office in Lansing.
4. The Michigan Department of Environmental Quality maintains supplies of potassium iodide and dosimeters for use by its personnel.
5. Documentation related to KI shelf life extension is maintained by MSP/EMHSD and will be provided in the Evaluators Handbook.

Monroe County

Potassium iodide and dosimeters are stored at the Monroe County Community Health office

EVALUATION AREA 2 - PROTECTIVE ACTION DECISION MAKING

Criterion 2.a.1: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for emergency workers including provisions to authorize radiation exposure in excess of administrative limits or protective action guides.

State of Michigan

1. The ability to make the decision to recommend the use of KI to emergency workers will be demonstrated by the SEOC.
2. Authorization to exceed state exposure limits will be demonstrated. If the scenario does not provide an opportunity to demonstrate these items, a controller inject will be issued to demonstrate the ability to perform these actions.

Note: The Chair of the Regional Assistance Committee on a case-by-case basis may approve of the re-demonstrated of this criterion.

Monroe and Wayne County

This criterion does not apply to the counties.

Criterion 2.b.1: Appropriate protective action recommendations are based on available information on plant conditions, field monitoring data and licensee and ORO dose projections, as well as knowledge of on-site and off-site environmental conditions.

State of Michigan

1. The Technical Support Group in the SEOC will evaluate licensee and FTC Cell provided information and complete an independent analysis of scenario data.
2. Dose assessment evaluation will be conducted via interview with the individual performing the FTC Cell role at the MSP/EMHSD office in Lansing MI.

Note: The Chair of the Regional Assistance Committee on a case-by-case basis may approve of the re-demonstrated of this criterion.

Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make protective action decisions (PADs) for the general public (including the recommendation for the use of KI, if ORO policy).

State of Michigan

The SEOC Executive Group in conjunction with applicable support staff will demonstrate this criterion; i.e. FTC cell, Tech Support Group.

Note: The Chair of the Regional Assistance Committee on a case-by-case basis may approve of the re-demonstrated of this criterion.

Monroe and Wayne County

This criterion does not apply to the counties.

Criterion 2.c.1: Protective action decisions are made, as appropriate, for special population groups.

State of Michigan

This criterion will be demonstrated by the SEOC Executive Group in conjunction with applicable support staff, through the decision to recommend the use of KI to institutionalized persons.

Monroe County

1. Lists of transportation dependent and special needs populations are kept by the county. No personnel will be moved. No phone calls to transportation dependent persons will be made. Simulation of calls will be logged as such.
2. Equipment lists and rosters will be available in the county EOC.
3. The School Services Representatives in the Monroe County EOC will make phone contact with affected school districts if schools are in session. No scenario information will be discussed during these calls.

Wayne County

1. Lists of transportation dependent and special needs populations are kept by the county. No personnel will be moved. No phone calls to transportation dependent persons will be made. Simulation of calls will be logged as such.
2. Equipment lists and rosters will be available in the county EOC.
3. The School Services Representatives in the Wayne County EOC will make phone contact with affected school districts if schools are in session. No scenario information will be discussed during these calls.

Criterion 2.d.1: Radiological consequences for the ingestion pathway are assessed and appropriate protective action decisions are made based on the ORO's planning criteria.

This criterion will not be demonstrated during this exercise.

Criterion 2.e.1: Timely re-location, re-entry and return decisions are made and coordinated as appropriate, based on assessments of the radiological conditions and criteria in the OROs plan and/or procedures.

This criterion will not be demonstrated during this exercise.

EVALUATION AREA 3 - PROTECTIVE ACTION IMPLEMENTATION

Criterion 3.a.1: The OROs issue appropriate dosimetry and procedures, and manage radiological exposure to emergency workers in accordance with the plan and procedures. Emergency workers periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart.

State of Michigan

This criterion does not apply to the state for this exercise.

Monroe County

1. Monroe County will demonstrate this criterion out of sequence at the reception center and decontamination centers.
2. Monroe County will demonstrate this criterion at the access control point when emergency workers are issued dosimeters for use.

Wayne County

1. Wayne County will demonstrate this criterion out of sequence at the reception center and decontamination centers.
2. Wayne County will demonstrate this criterion at the access control point when emergency workers are issued dosimeters for use.

Note: The evaluator at his/her discretion may approve immediately for credit of the re-demonstrated of this criterion.

Criterion 3.b.1: KI and appropriate instructions are available should a decision to recommend use of KI be made. Appropriate record keeping of the administration of KI for emergency workers and institutionalized individuals (not the general public) is maintained.

State of Michigan

The State will demonstrate this objective through decision-making and directives to implement appropriate Protective Action Orders.

Monroe County

1. This criterion will be demonstrated during the traffic and access control demonstrations for Monroe County. Response personnel will demonstrate knowledge of when it is appropriate to take KI, but not actually ingest it.
2. KI will be distributed to emergency workers in Monroe County along with their dosimeters.

Wayne County

1. This criterion will be demonstrated during the traffic and access control demonstrations for Wayne County. Response personnel will demonstrate knowledge of when it is appropriate to take KI, but not actually ingest it.
2. KI will be distributed to emergency workers in Wayne County along with their dosimeters.

Criterion 3.c.1: Protective action decisions are implemented for special population groups within areas subject to protective actions.

State of Michigan

This criterion will not be demonstrated by the state.

Monroe County

1. This criterion will be demonstrated in the county EOC via EOC staff discussions that may include evacuation of hospitals, nursing homes, correctional facilities, mobility impaired individuals, and transportation dependent. These discussions will be documented in situation logs.
2. Actual contacts to special population groups will not be made. Simulation of calls will be logged as such.
3. Monroe County will contact a minimum of four providers of transportation services, which may include public transit authorities, school systems for buses, ambulance services, or fire/rescue services. An endeavor will be made to contact a third of the total number of transportation providers. There will be no discussion of scenario information during these calls.

Wayne County

1. This criterion will be demonstrated in the county EOC via EOC staff discussions that may include evacuation of hospitals, nursing homes, correctional facilities, mobility impaired individuals, and transportation dependent. These discussions will be documented in situation logs.
2. Actual contacts to special population groups will not be made. Simulation of calls will be logged as such.
3. Wayne County will contact a minimum of four providers of transportation services, which may include public transit authorities, school systems for buses, ambulance services, or fire/rescue services. An endeavor will be made to contact a third of the total number of transportation providers. There will be no discussion of scenario information during these calls.

Criterion 3.c.2: OROs/School officials decide upon and implement protective actions for schools.

State of Michigan

This criterion will not be demonstrated by the state.

Monroe County

1. This criterion will be demonstrated in the Monroe County EOC as driven by the scenario. If schools are not in session, the DHS/FEMA evaluator will conduct an interview with the schools representative in the county EOC.
2. An EV-2 interview will be conducted in Monroe County on October 23, 2008. Refer to the Table of Exercise Demonstrations for specific times and locations.

Wayne County

1. This criterion will be demonstrated Wayne County EOC as driven by the scenario. If schools are not in session, the DHS/FEMA evaluator will conduct an interview with the schools representative in the county EOC.
2. An EV-2 interview will be conducted in Wayne County on October 23, 2008. Refer to the Table of Exercise Demonstrations for specific times and locations.

Criterion 3.d.1: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel.

State of Michigan

This criterion will be demonstrated by the SEOC through the opening or closing of: air, rail and waterways.

Monroe County

1. Decisions related to traffic and access control will be demonstrated in the Monroe County EOC. Monroe County demonstration locations will be determined during the exercise at a time agreed upon by the DHS/FEMA evaluator, the MSP/EMHSD Controller, and the county emergency management coordinator.
2. Staffing of all other access and traffic control points will be simulated.

Wayne County

1. Decisions related to traffic and access control will be demonstrated in the Wayne County EOC. Wayne County demonstration locations will be determined during the exercise at a time agreed upon by the DHS/FEMA evaluator, the MSP/EMHSD Controller, and the county emergency management coordinator.
2. Staffing of all other access and traffic control points will be simulated.

Note: The evaluator at his/her discretion may approve immediately, for credit, the re-demonstrated of this criterion.

Criterion 3.d.2: Impediments to evacuation are identified and resolved.

State of Michigan

This criterion will not be demonstrated by the state.

Monroe County

This will be demonstrated through discussions at the Monroe County EOC. Messages will be injected by MSP/EMHSD Controllers to drive these demonstrations. Personnel will deal with the impediments by discussing the need for equipment, discussing its estimated time of arrival, etc. If the impediment posed involves road closures that would have been known to exercise participants during the course of normal operations, this information will be provided to the players as part of the initial conditions for the exercise. All contacts, actual or simulated will be logged.

Wayne County

This will be demonstrated through discussions at the Wayne County EOC. Messages will be injected by MSP/EMHSD Controllers to drive these demonstrations. Personnel will deal with the impediments by discussing the need for equipment, discussing its estimated time of arrival, etc. If the impediment posed involves road closures that would have been known to exercise participants during the course of normal operations, this information will be provided to the players as part of the initial conditions for the exercise. All contacts, actual or simulated will be logged.

Note: The evaluator at his/her discretion may approve immediately for credit of the re-demonstrated of this criterion.

Criterion 3.e.1: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk and agricultural production within the ingestion exposure pathway emergency planning zone for implementation of protective actions.

This criterion will not be demonstrated during this exercise.

Criterion 3.e.2: Appropriate measures, strategies and pre-printed instructional material are developed for implementing protective action decisions for contaminated water, food products, milk and agricultural production.

This criterion will not be demonstrated during this exercise.

Criterion 3.f.1: Decisions regarding controlled re-entry of emergency workers and relocation and return of the public are coordinated with appropriate organizations and implemented.

This criterion will not be demonstrated during this exercise.

EVALUATION AREA 4 - FIELD MEASUREMENTS AND ANALYSIS

Criterion 4.a.1: The field teams are equipped to perform field measurements of direct radiation exposure (cloud and ground shine) and to sample airborne radioiodine and particulates.

This criterion will not be demonstrated during this exercise.

Criterion 4.a.2: Field teams are managed to obtain sufficient information to help characterize the release and to control radiation exposure.

This criterion will not be demonstrated during this exercise.

Criterion 4.a.3: Ambient radiation measurements are made and recorded at appropriate locations, and radioiodine and particulate samples are collected. Teams will move to an appropriate low background location to determine whether any significant (as specified in the plan and/or procedures) amount of radioactivity has been collected on the sampling media.

This criterion will not be demonstrated during this exercise.

Criterion 4.b.1: The field teams demonstrate the capability to make appropriate measurements and to collect appropriate samples (e.g., food crops, milk, water, vegetation, and soil) to support adequate assessments and protective action decision-making.

This criterion will not be demonstrated during this exercise.

Criterion 4.c.1: The laboratory is capable of performing required radiological analyses to support protective action decisions.

This criterion will not be demonstrated during this exercise.

EVALUATION AREA 5 - EMERGENCY NOTIFICATION AND PUBLIC INFORMATION

Criterion 5.a.1: Activities associated with primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include as a minimum the elements required by current FEMA REP guidance.

State of Michigan

The State will provide information to each county for release in the Emergency Alert System messages.

Monroe and Wayne County

The Monroe County Sheriff Department central dispatch is the primary activation point for the public warning sirens. The Emergency Alert System is activated by Wayne County. To demonstrate this criterion, the State will provide information to Monroe and Wayne Counties for

release in the Emergency Alert System messages. An interview with WJR personnel will be conducted by DHS following transmittal of EAS messages.

Note: The Chair of the Regional Assistance Committee on a case-by-case basis may approve of the re-demonstrated of this criterion.

Criterion 5.a.2: [RESERVED]

Criterion 5.a.3: Activities associated with FEMA approved exception areas (where applicable) are completed within 45 minutes following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. Backup alert and notification of the public is completed within 45 minutes following the detection by the ORO of a failure of the primary alert and notification system.

The Fermi 2 EPZ does not contain any DHS/FEMA approved exception areas. This criterion will not be demonstrated during this exercise.

Criterion 5.b.1: OROs provide accurate emergency information and instructions to the public and the news media in a timely manner.

State of Michigan, Monroe and Wayne County

1. This will be demonstrated at the JIC via dissemination of Emergency Alert System announcements in coordination with the SEOC, Monroe County EOC, and Wayne County EOC. All media briefings will be conducted at the JIC.
2. A public inquiry hotline will be operated by Monroe County during the exercise by personnel based at the Monroe County Emergency Management Office. Trending is performed by the Rumor Control Coordinator, who identifies trends and ensures appropriate information is provided to the public inquiry operators and the JIC for inclusion in press briefings.

Note: The Chair of the Regional Assistance Committee on a case-by-case basis may approve of the re-demonstrated of this criterion.

EVALUATION AREA 6 - SUPPORT OPERATION/FACILITIES

Criterion 6.a.1: The reception center/emergency worker facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees and/or emergency workers.

State of Michigan

State DEQ HP personnel will provide assistance as requested during these demonstrations.

Monroe County

1. Monroe County will fully demonstrate separate emergency worker and public reception/ decontamination centers out-of sequence from the exercise.
2. Public reception centers will demonstrate 1/3 of the monitoring teams required to monitor 20% of the population allocated to that facility within a 12-hour period. Each team will monitor six individuals.

Wayne County

1. Wayne County will fully demonstrate separate emergency worker and public reception/ decontamination centers out-of sequence from the exercise.
2. Public reception centers will demonstrate 1/3 of the monitoring teams required to monitor 20% of the population allocated to that facility within a 12-hour period. Each team will monitor six individuals.

Note: The evaluator at his/her discretion may approve immediately, for credit, the re-demonstrated of this criterion.

Criterion 6.b.1: The facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of emergency worker equipment including vehicles.

State of Michigan

State DEQ HP personnel will provide assistance as requested during these demonstrations.

Monroe County

1. Monroe County will each fully demonstrate an emergency worker/equipment decontamination center out of sequence with the exercise.
2. Emergency vehicles will be monitored and decontaminated as appropriate.

Wayne County

1. Wayne County will each fully demonstrate an emergency worker/equipment decontamination center out of sequence with the exercise.
2. Emergency vehicles will be monitored and decontaminated as appropriate

Note: The evaluator at his/her discretion may approve immediately, for credit, the re-demonstrated of this criterion.

Criterion 6.c.1: Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with American Red Cross planning guidelines. Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate prior to entering congregate care facilities.

Monroe County

Monroe County will each fully demonstrate a congregate care center out of sequence with the exercise. This facility will be set up in advance of the demonstration. Personnel operating the center will not go through alert, mobilization, activation, or shift changes.

Wayne County

Wayne County will each fully demonstrate a congregate care center out of sequence with the exercise. This facility will be set up in advance of the demonstration. Personnel operating the center will not go through alert, mobilization, activation, or shift changes.

Note: The evaluator at his/her discretion may approve immediately, for credit, the re-demonstrated of this criterion.

Criterion 6.d.1: The facility/ORO has the appropriate space, adequate resources, and trained personnel to provide transport, monitoring, decontamination, and medical services to contaminated injured individuals.

This criterion will be demonstrated during the MS-1 exercise on Oct 22, 2008

Note: The evaluator at his/her discretion may approve immediately, for credit, the re-demonstrated of this criterion.

APPENDIX 4

EXERCISE SCENARIO

This appendix contains a summary of the simulated sequences of events that were used as the basis for invoking emergency response actions by OROs in the Enrico Fermi 2 Nuclear Power Plant Partial Participation Plume Pathway Exposure Exercise on May 20, 2008.

The Partial Participation Plume Exposure Pathway Exercise scenario was submitted by the State of Michigan and Detroit Edison, and approved by DHS/FEMA Region V on May 16, 2008.

During the exercise, controllers from the State of Michigan either gave or telephoned "inject messages", containing scenario events and/or relevant data, to those persons or locations who would normally receive notification of such events. These inject messages were the method used for invoking response actions by the OROs.

	Events	SEOC Actions	MCEOC Actions	WCEOC Actions	JIC Actions	FTC Actions
0700	<ul style="list-style-type: none"> Initial conditions provided to SCR. 					State FTC not activated for this exercise.
0730	<ul style="list-style-type: none"> Exercise begins at plant. 					
0745	<ul style="list-style-type: none"> Unusual Event declared based on fire in Protected Area Boundary not extinguished within 15 minutes. Local and State notifications made. 	<ul style="list-style-type: none"> MSP Operations notified by plant. MSP Operations notifies MSP/EMHSD. MSP Operations sends LEIN to Monroe and Wayne Counties. MSP Operations notifies Ontario. 	<ul style="list-style-type: none"> Sheriff Dispatch notified by Fermi 2 and MSP LEIN. Dispatch notifies EM 	<ul style="list-style-type: none"> Sheriff Dispatch notified by Fermi 2 and MSP LEIN. Dispatch notifies EM 		
0830	<ul style="list-style-type: none"> Alert declared based on loss of Main Circulating Pumps. Turbine trips, RX Scram. Local and State notifications made. OSC, TSC, and EOF activated. 	<ul style="list-style-type: none"> MSP Operations notified by plant. MSP Operations notifies MSP/EMHSD. SEOC activation begun. MSP Operations sends LEIN to Monroe and Wayne Counties. Activation of JIC and FTC (sim) begun. 	<ul style="list-style-type: none"> Sheriff Dispatch notified by plant and MSP LEIN. Dispatch notifies EM & Chairperson. EOC activation begun. 	<ul style="list-style-type: none"> Sheriff Dispatch notified by plant and MSP LEIN. Dispatch notifies EM & Chairperson. EOC activation begun. 		<ul style="list-style-type: none"> FTC not activated for exercise.

	Events	SEOC Actions	MCEOC Actions	WCEOC Actions	JIC Actions	FTC Actions
0940	<ul style="list-style-type: none"> Hotline established to SEOC. TSC and OSC operational. 	<ul style="list-style-type: none"> SEOC notifies FEMA and Ontario. SEOC operational. Hotlines opened to plant and counties. Plant instructed to terminate notifications to counties. Notifications to counties via SEOC 	<ul style="list-style-type: none"> EOC activation underway. Hotline opened to SEOC. R/D and CCCs placed on standby. 	<ul style="list-style-type: none"> EOC activation underway. Hotline opened to SEOC. R/D and CCCs placed on standby. 	<ul style="list-style-type: none"> Communications initiated with SEOC. 	
0955	LOCA in Containment.					
1005	<ul style="list-style-type: none"> Site Area Emergency declared based on breach of 2 out of 3 barriers. Non-essential personnel evacuated from site. 	<ul style="list-style-type: none"> Plant notifies SEOC within 15 minutes. Notifications to counties via SEOC. If not previously, recommend Governor declare State of Disaster. SEOC/MDA issues agricultural advisories. 	<ul style="list-style-type: none"> R/D and CCCs activated. 	<ul style="list-style-type: none"> R/D and CCCs activated. 	<ul style="list-style-type: none"> JIC activation begun. Utility personnel will not demonstrate A/N or facility setup. State and Wayne County JIC personnel pre-positioned. Monroe County JIC personnel dispatched real time. 	
1135	<ul style="list-style-type: none"> General Emergency (GE) declared based on rad release. Protective action recommendation (PAR) made to State Director. 	<ul style="list-style-type: none"> Evaluates PAR. Decides on a Protective Action Order (PAO). Issues PAO to counties. 	<ul style="list-style-type: none"> Provides necessary EAS information to WEOC. Sounds sirens. Implements PAO. 	<ul style="list-style-type: none"> Sounds sirens. Issues EAS message. Implements PAO. 	<ul style="list-style-type: none"> Informed of GE and PAO by SEOC. Informs media. 	
1200		<ul style="list-style-type: none"> Issues agricultural PAOs and lake warning and evacuation. Requests federal assistance via FEMA. Issues further PAOs as needed. 				

	Events	SEOC Actions	MCPOC Actions	WCEO Actions	JIC Actions	FTC Actions
1230	<ul style="list-style-type: none"> Plant issues second PAR to SEOC based on effluent release and increase dose assessment. 	<ul style="list-style-type: none"> Evaluates PAR. Decides on a Protective Action Order (PAO). Issues PAO to counties. Notifies JIC, FTC, Ontario and FEMA of GE and PAO. 	<ul style="list-style-type: none"> Provides necessary EAS information to WEOC. Sounds sirens. Implements PAO. 	<ul style="list-style-type: none"> Issues EAS message. Implements PAO. 	<ul style="list-style-type: none"> Informed of PAO by SEOC. Informs media. 	
1330-1400	<ul style="list-style-type: none"> Plant terminates exercise play with State. 	<ul style="list-style-type: none"> Exercise play terminated when all objectives demonstrated. 	<ul style="list-style-type: none"> Exercise play terminated when all objectives demonstrated. 	<ul style="list-style-type: none"> Exercise play terminated when all objectives demonstrated. 	<ul style="list-style-type: none"> Exercise play terminated when all objectives demonstrated. 	

Note: All times are approximate and may change due to player actions.