



# Federal Emergency Management Agency

Region V

536 South Clark Street, 6th Floor  
Chicago, IL 60605-1521

Mr. James E. Dyer, Regional Administrator  
U. S. Nuclear Regulatory Commission, Region III  
801 Warrenville Road  
Lisle, Illinois 60532-4351

Dear Mr. Dyer:

Enclosed is a copy of the final report for the April 9, 2002, Plume Exposure Pathway Exercise for the offsite radiological emergency response plan, site-specific to the Perry Nuclear Power Plant. The State of Ohio, Lake, Ashtabula and Geauga Counties participated in this exercise. First Energy Corporation, the utility owner/operator also participated in this exercise. Copies of this Report were transmitted to the Nuclear Regulatory Commission (NRC) Region III, the FEMA National Office and the State of Ohio.

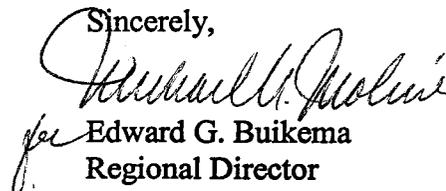
There were no Deficiencies and two Areas Requiring Corrective Action (ARCAs) that were identified as a result of this exercise. The ARCAs were assessed against Ashtabula and Geauga Counties under Criterion 6.a.1, *Support Operations/Facilities*. Monitoring personnel at both facilities demonstrations did not determine the amount of contamination in mR/hr and were unaware that this value was needed to comply with their procedures in the event a contaminated individual needed medical assistance. Ashtabula County corrected the ARCA on the spot through additional training and re-demonstration. The ARCA for Geauga County will remain until they can re-demonstrate. Two prior ARCAs that were corrected during this exercise are identified under Criterion 5.b.1: *Emergency Notification* and *Public Information* and Criterion 6.d.1: *Medical Services – Transportation and Treatment of Contaminated Injured Individuals*.

Based on the results of the April 9, 2002, exercise, the offsite radiological emergency response plans and preparedness for the State of Ohio, Lake, Ashtabula and Geauga Counties, site-specific to the Perry Nuclear Power Plant can be implemented. These plans 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 Ohio, Lake, Ashtabula and Geauga Counties, granted on June 17, 1994, will remain in effect.

If you should have any questions, please call me or have a member of your staff contact Woodie Curtis at (312) 408-5528.

Sincerely,

  
for Edward G. Buikema  
Regional Director

Enclosure (1)



# **Final Exercise Report**

## **Perry Nuclear Power Plant**

Licensee: **FirstEnergy Corporation**

Exercise Date: **April 9, 2002**

Report Date: **August 14, 2002**

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**FEDERAL EMERGENCY MANAGEMENT AGENCY**  
**REGION V**  
**536 S. Clark St., 6<sup>th</sup> Floor**  
**Chicago, Illinois 60605-1521**

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## I. EXECUTIVE SUMMARY

On April 9, 2002, an exercise was conducted in the plume emergency planning zone (EPZ) around the Perry Nuclear Power Plant by the Federal Emergency Management Agency (FEMA) Region V. The purpose of the exercise was to assess the level of State and local preparedness in responding to a radiological emergency. This exercise was held in accordance with FEMA's policies and guidance concerning the exercise of State and local radiological emergency response plans and procedures.

The most recent exercise at this site was conducted on March 21, 2000. The qualifying emergency preparedness exercise was conducted on November 28, 1984.

FEMA wishes to acknowledge the efforts of the many individuals who participated in this exercise. In the State of Ohio, the risk counties of Lake, Ashtabula, and Geauga 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 participants was evident during this exercise.

This report contains the final evaluation of the biennial exercise.

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 and two Areas Requiring Corrective Action (ARCAs) that were identified as a result of this exercise. The ARCAs were assessed against Ashtabula and Geauga Counties under Criterion 6.a.1, *Support Operations/Facilities*. Monitoring personnel at both facilities demonstrations did not determine the amount of contamination in mR/hr and were unaware that this value was needed to comply with their procedures in the event a contaminated individual needed medical assistance. Ashtabula County corrected the ARCA on the spot through additional training and re-demonstration. The ARCA for Geauga County will remain until they can re-demonstrate. Two prior ARCAs that were corrected during this exercise are identified under Criterion 5.b.1: *Emergency Notification and Public Information and Criterion 6.d.1: Medical Services – Transportation and Treatment of Contaminated Injured Individuals*.

## II. INTRODUCTION

On December 7, 1979, the President directed FEMA to assume the lead responsibility for all offsite nuclear planning and response. FEMA's 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.

FEMA Rule 44 CFR 350 establishes the policies and procedures for 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 government participation in joint exercises with licensees.

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

- Taking the lead in offsite 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 Commerce,
  - U.S. Nuclear Regulatory Commission,
  - U.S. Environmental Protection Agency,
  - U.S. Department of Energy,
  - U.S. Department of Health and Human Services,
  - U.S. Department of Transportation,
  - U.S. Department of Agriculture,
  - U.S. Department of the Interior, and
  - U.S. Food and Drug Administration.

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

Formal submission of the RERPs for the Perry Nuclear Power Plant to FEMA Region V by the State of Ohio and involved local jurisdictions occurred on May 24, 1989. Formal approval of the RERP was granted by FEMA on June 17, 1994, under 44 CFR 350.

A REP exercise was conducted on April 9, 2002, by FEMA Region V 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 Perry 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 (ORO) during a simulated radiological emergency.

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

The criteria utilized in the 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, dated 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 that 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 objectives at each jurisdiction or functional entity evaluated in a jurisdiction-based, issues-only format. This section also contains: (1) descriptions of all ARCAs assessed during this exercise, recommended corrective actions, and the State and local governments' schedule of corrective actions for each identified exercise issue and (2) descriptions of resolved ARCAs assessed during previous exercises and the status of the OROs' efforts to resolve them.

### III. EXERCISE OVERVIEW

Contained in this section are data and basic information relevant to the April 9, 2002, exercise to test the offsite emergency response capabilities in the area surrounding the Perry 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 that were evaluated, and a tabular presentation of the time of actual occurrence of key exercise events and activities.

#### A. Plume Emergency Planning Zone Description

The Perry Nuclear Power Plant (PNPP) reactor units one and two are located on the southeast shoreline of Lake Erie in Lake County, Ohio. The site is approximately 7 miles northeast of Painesville, Ohio and thirty-five miles east of Cleveland, Ohio.

The plant site occupies approximately 1100 acres on a lake plain fifty feet above the lake low-water datum. The terrain surrounding the plant is essentially flat within 5 miles of the lakeshore. Rising generally to the south, the site is broken only by a lattice work of shallow, north-south stream beds and low, almost unnoticeable east-west ridges: the latter are remnants of ancient lake-shores. About 5 miles inland, the shoreline plane is abruptly cut by a 100-foot-deep ravine of the Grand River. The terrain south of the river is more rolling, interrupted by north-south ravines of tributaries of the Grand, Kellogg, Big, Paine, and Mill creeks and several smaller streams. A large portion of the site is forested, some two hundred and fifty acres are devoted to the plant structural complex and the remainder is open grassland.

Lake County, where the nuclear power plant is located, is the smallest of Ohio's eighty-eight counties, with two hundred and thirty-two square miles. It has the twelfth largest ranking population with 215,499 residents. The 2000 census approximates the population to be 200,800 residents currently within the 10-mile emergency planning zone (EPZ). An additional 13,715 residents of Geneva and Harpersfield Townships in Ashtabula County are within the 10-mile EPZ. The nuclear power plant EPZ also affects portions of Geauga County to the south, with an estimated 1,997 residents living within the 10-mile EPZ.

The fifty-mile radius of the ingestion Emergency Planning Zone (EPZ) has a census population of 2,782,154.

FirstEnergy Corporation owns the Perry Nuclear Power Plant.

## **B. Exercise Participants**

The following agencies, organizations, and units of government participated in the Perry Nuclear Power Plant exercise on April 9, 2002.

### **STATE OF OHIO**

Ohio Department of Health  
Ohio Department of Public Safety  
Emergency Management Agency  
Highway Patrol  
Ohio Environmental Protection Agency  
Ohio National Guard

### **RISK JURISDICTIONS**

#### **LAKE COUNTY**

Kirtland City Fire Department  
Lake County Emergency Management Agency  
Lake County Emergency Operation Center Staff  
Lake County EOC Executive Group  
Lake County Field Monitoring Teams  
Lake County PIO Liaison at the EOC  
Lake County Public Information Officer (PIO) at the JPIC  
Lake County Sheriff's Department  
Lake East Hospital  
Leroy Township Fire Department  
Mentor City Fire Department  
Painesville City School District  
Painesville City School District Transportation Department  
Painesville Township School District  
Painesville Township School District Transportation Department  
Perry Township Fire Department  
Madison Fire District  
Willowick Fire Department  
Perry Local School District  
Mentor Public School District  
American Red Cross  
Grand River Village Police Department  
Fairport Harbor Village Police Department  
Lake County General Health District  
Lake West Hospital  
Perry Twp. Fire Department  
Willoughby Eastlake School District

## ASHTABULA COUNTY

Ashtabula County Emergency Management Agency  
Ashtabula County Emergency Operations Center Staff  
Ashtabula County EOC Executive Group  
Ashtabula County PIO Liaison at the Ashtabula County EOC  
Ashtabula County Public Information Officer at the JPIC  
Ashtabula County Sheriff's Department  
Ashtabula Township Fire Department  
Geneva Fire Department  
Buckeye Local School District (Edgewood High School)  
Geneva School District  
Ohio State Highway Patrol, Post 4 – Traffic/Access Control  
American Red Cross – Care Center  
Conneaut Police Department  
Geneva-on-the-Lake Fire Department  
Ohio State Highway Patrol

## GEAUGA COUNTY

Geauga County Emergency Operations Center Staff  
Geauga Amateur Radio Association  
Geauga County Department of Emergency Services  
Geauga County EOC Executive Group  
Geauga County PIO at the JPIC  
Geauga County PIO Liaison at the Geauga County EOC  
Geauga County Sheriff's Office  
Ledgemont School District  
Ledgemont School District – Transportation Department  
Middlefield Police Department  
Middlefield Volunteer Fire Department

## **PRIVATE/VOLUNTEER ORGANIZATIONS**

American Red Cross  
County Amateur Radio

**C. Exercise Timeline**

Table 1, on the following page, presents the time at which key events and activities occurred during the Perry Nuclear Power Plant exercise on April 9, 2002. Also included are times notifications were made to the participating jurisdictions/functional entities.

**TABLE 1. EXERCISE TIMELINE**

DATE AND SITE: *April 9, 2002 Perry Nuclear Power Plant*

Emergency Classification Level or Event	Time Utility Declared	OHIO STATE EOC	LAKE COUNTY EOC	ASHTABULA COUNTY EOC	GEAUGA COUNTY EOC	JPIC
Unusual Event		N/A	N/A	N/A	N/A	N/A
Alert	0744	0756	0758	0755	0752	N/A
Site Area Emergency	0938	0952	0958	0951	0959	N/A
General Emergency	1158	1207	1205	1215	1213	N/A
Simulated Radiation Release Started	1158	1207	1206	1212	1206	N/A
Simulated Radiation Release Terminated	1338	1358	1350	1345	1350	N/A
Facility Declared Operational		0850	0915	0905	0850	1135
Declaration of State of Emergency		1025	1030	1038		1023
Exercise Terminated: Plume Pathway Phase		1420	1420	1412	1418	1446
Early Precautionary Actions: Livestock and Poultry sheltered and placed on stored feed and protected water to 10 miles/ General instructional message to standby for additional information.		1004	1009/1023	1003/1023	1003/1023	1023
1st Protective Action Decision: Evacuate Sub-areas 1 and 2 and the Lake area.		1221	1221	1221	1221	N/A
1st Siren Activation		N/A	1230	1230	1230	N/A
1st EAS/EBS Message		N/A	1230	1230	1230	N/A
2nd Protective Action Decision: Evacuate Sub-areas 1, 2, 3 and the Lake area.		1350	1400	1400	1400	N/A
2nd Siren Activation		N/A	1405	1405	1405	N/A
2nd EAS/EBS Message		N/A	1405	1405	1405	N/A
KI Administration Decision:		1224	1228	1228	1228	1228

#### **IV. 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 April 9, 2002, exercise to test the offsite emergency response capabilities of State and local governments in the 10-mile EPZ surrounding the Perry Nuclear Power Plant.

Each jurisdiction and functional entity was evaluated on the basis of its demonstration of criteria delineated in exercise criteria contained in FEMA-REP-14, REP Exercise manual, September 1991. Detailed information on the exercise criterion and the extent-of-play agreement used in this exercise are found in Appendix 3 of this report.

##### **A. Summary Results of Exercise Evaluation - Table 2**

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

- M - Met (No Deficiency or ARCAs assessed and no unresolved ARCA(s) from prior exercises)
- D - Deficiency assessed
- A - ARCA(s) assessed or unresolved ARCA(s) from prior exercise(s)
- N - Not Demonstrated (Reason explained in Subsection B)

Table 2 Summary Results of Exercise Evaluation

Site and Date: Perry Nuclear Power Plant April 9, 2002

JURISDICTION/FUNCTIONAL ENTITY	1a1	1b1	1c1	1d1	1e1	2a1	2b1	2b2	2c1	2d1	2e1	3a1	3b1	3c1	3c2	3d1	3d2	3e1	3e2	3f1	4a1	4a2	4a3	4b1	4c1	5a1	5a2	5a3	5b1	6a1	6b1	6c1	6d1		
<b>STATE OF OHIO</b>																																			
Initial Notification Point	M			M																															
State Emergency Operations Center	M	M	M	M	M											M											M				M				
State Assessment Room			M		M	M	M	M																											
Joint Public Information Center		M	M		M																													M	
<b>RISK JURISDICTIONS</b>																																			
<b>LAKE COUNTY</b>																																			
Initial Notification Point	M																																		
Lake County Emergency Operations Center	M	M	M		M	M			M	M		M	M	M	M	M	M				M						M				M				
Joint Public Information Center		M																										M				M			
Medical Services - Transportation					M							M	M																						M
Medical Services - Facilities					M							M																							M
Lake County Field Monitoring Team I												M	M																						M
Lake County Field Monitoring Team II					M							M	M																						M
Monitoring/Decontamination/Public					M							M	M																						M
Congregate Care/Registration					M																														M
Back-up Route Alerting					M							M	M	M																					M
Protective Actions - Schools EV-2												M	M		M																				M
Traffic and Access Control					M							M	M			M																			
<b>ASHTABULA COUNTY</b>																																			
Initial Notification Point	M			M																															
Ashtabula County Emergency Operations Center	M	M	M		M	M			M	M		M	M	M	M	M	M				M							M				M			
Joint Public Information Center		M			M																														M
Monitoring/Decon - Public					M							M	M																						A
Congregate Care/Registration					M							M																							M
Traffic and Access Control					M							M	M			M																			
Back-up Route Alerting				M	M							M	M															M							
Protective Actions - Schools EV-2												M	M		M																				M

LEGEND:

M = Met (No Deficiency or ARCA's assessed) A = ARCA(s) assessed or prior ARCAs not resolved D = Deficiency(ies) assessed

N = Not Demonstrated Blank = Not Scheduled For Demonstration

Table 2 Summary Results of Exercise Evaluation

Site and Date: Perry Nuclear Power Plant April 9, 2002

JURISDICTION/FUNCTIONAL ENTITY	1a1	1b1	1c1	1d1	1e1	2a1	2b1	2b2	2c1	2d1	2e1	3a1	3b1	3c1	3e2	3d1	3d2	3e1	3e2	3f1	4a1	4a2	4a3	4b1	4c1	5a1	5a2	5a3	5b1	6a1	6b1	6c1	6d1		
<b>GEAUGA COUNTY</b>																																			
Initial Notification Point	M	M		M																															
Geauga County Emergency Operations Center	M	M	M		M	M		M	M		M	M	M	M	M	M	M			M						M				M					
Joint Public Information Center																																	M		
Traffic and Access Control				M									M	M		M																			
Monitoring/Decontamination - Public			M		M	M							M																						
Monitoring/Decon - EW/Vehicles					M								M																					A	
Congregate Care Center/Registration			M																															M	
																																		M	M

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LEGEND:

M = Met (No Deficiency or ARCA's assessed) A = ARCA(s) assessed or prior ARCAs not resolved D = Deficiency(ies) assessed

N = Not Demonstrated Blank = Not Scheduled For Demonstration

## B. 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 is a definition 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 was assessed during this exercise. Included is a description of each Deficiency and recommended corrective actions.
- **Area Requiring Corrective Actions** - Listing of the demonstrated exercise criteria under which one or more ARCAs were assessed during the current exercise or ARCAs assessed during prior exercises that 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 which were not demonstrated as scheduled during this exercise and the reason they were not demonstrated.
- **Prior Issues - Resolved** - Descriptions of ARCAs assessed during previous exercises, which were resolved in this exercise and the corrective actions, demonstrated.
- **Prior Issues - Unresolved** - Descriptions of ARCAs assessed during prior exercises, which 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, which are 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."

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 FEMA Regions and site-specific exercise reports within each Region. It also expedites 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 Codes.
- **Exercise Year** - Last two digits of the year the exercise was conducted.
- **Criterion Number** - A two-digit number corresponding to the criterion in FEMA "Radiological Emergency Preparedness: Exercise Evaluation Methodology," as published in the Federal Register Notice/Vol. 67, dated No. 80, dated April 25, 2002
- **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 letter from the Regional Director.  
Therefore, standardized issue numbers are not assigned to Plan Issues.
- **Exercise Issue Identification Number** - A separate two (or three) digit indexing number, assigned to each issue identified in the exercise.

# **1 STATE OF OHIO**

## **1.1 Initial Notification Point**

- a. **MET:** Criteria 1.a.1 and 1.d.1.
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ARCAs - RESOLVED:** NONE
- f. **PRIOR ARCAs - UNRESOLVED:** NONE

## **1.2 State Emergency Operations Center**

- a. **MET:** Criteria 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 2.b.2, 3.d.1, 5.a.1 and 5.b.1.
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ARCAs - RESOLVED:** NONE
- f. **PRIOR ARCAs - UNRESOLVED:** NONE

## **1.3 State Assessment Room**

- a. **MET:** Criteria 1.c.1, 1.e.1, 2.a.1, 2.b.1, and 2.b.2.
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ARCAs - RESOLVED:** NONE
- f. **PRIOR ARCAs - UNRESOLVED:** NONE

## **1.4 Joint Public Information Center**

- a. **MET:** Criteria 1.b.1, 1.c.1, 1.e. and 5.b.1.
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ARCAs - RESOLVED:** NONE
- f. **PRIOR ARCAs - UNRESOLVED:** NONE

## **2 RISK JURISDICTIONS**

### **2.1 LAKE COUNTY**

#### **2.1.1 Initial Notification Point**

- a. **MET:** Criterion 1.a.1
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ARCAs - RESOLVED:** NONE
- f. **PRIOR ARCAs - UNRESOLVED:** NONE

#### **2.1.2 Lake County Emergency Operations Center**

- a. **MET:** Criteria 1.a.1, 1.b.1, 1.c.1, 1.e.1, 2.a.1, 2.b.2, 2.c.1, 2.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 3.f.1, 4.a.2, 5.a.1, and 5.b.1.
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- e. **NOT DEMONSTRATED:** NONE
- f. **PRIOR ARCAs - UNRESOLVED:** NONE

**2.1.3 Joint Public Information Center**

- a. **MET:** Criterion 1.b.1, 5.a.1 and 5.b.1.
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ARCAs - RESOLVED:** Criteria 5.b.1. (formerly Objective 12)

**Issue No.:** 47-00-12-A-02

**Description:** School omitted from Lake County Evacuation List. The Lake County EOC issued "Special News Bulletin D – Evacuation Recommended", at 1153 hours, which omitted a Perry School District school, New Life Christian Academy. The Academy is listed in the annual public information brochure for Lake, Geauga, and Ashtabula Counties. The school is not listed in the Perry Power Plant section of the Lake County telephone book. The County explained that the school opened last year and that is why it is not in the current telephone book. The EOC needs to revise its pre-scripted press releases to include the new school.

**Corrective Action Demonstrated:** The current Perry Power Plant section of the Lake County telephone book contains the New Life Christian Academy. Also the latest version of the public information brochure also contains the New Life Christian Academy. The Lake County pre-scripted press release has also been revised to include the New Life Christian Academy.

- f. **PRIOR ARCAs - UNRESOLVED:** NONE

**2.1.4 Medical Services - Transportation**

- a. **MET:** Criteria 1.e.1, 3.a.1, 3.b.1 and 6.d.1.
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ARCAs - RESOLVED:** Criterion 6.d.1.

**Issue No.:** 47-00-20-A-03

**Description:** The Utility health physics technician (HPT) used improper procedures for monitoring ambulance personnel at the hospital. He did not wear gloves and used his index finger to maintain a fixed distance from skin and clothing surfaces, thus dragging his finger tip along the survey path while cupping the detector portion of the "frisker" between his fingers and thumb. At other times, when the frisker was held by the handle, the detector made frequent contact with clothing surfaces. The probe was not covered during the demonstration. These practices could have contributed to the spread of contamination to the HPT and anything handled by the HPT. (Objective 20: NUREG 0654, L.3.)

**Corrective Action Demonstrated:** The Perry Nuclear Power Plant Health Physics Technicians demonstrated knowledge of proper offsite procedures, which were to use gloves when monitoring and assisting offsite at the Lake West Hospital.

f. **PRIOR ARCAs - UNRESOLVED: NONE**

#### **2.1.5 Medical Services - Facilities**

a. **MET:** Criteria 1.e.1, 3.a.1, 5.a.3, and 6.d.1.

b. **DEFICIENCY: NONE**

c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**

d. **NOT DEMONSTRATED: NONE**

e. **PRIOR ARCAs - RESOLVED: NONE**

f. **PRIOR ARCAs - UNRESOLVED: NONE**

#### **2.1.6 Lake County Field Monitoring Team I**

a. **MET:** Criteria 1.e.1, 3.a.1, 3.b.1, 4.a.1, and 4.a.3.

b. **DEFICIENCY: NONE**

c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**

d. **NOT DEMONSTRATED: NONE**

e. **PRIOR ARCAs - RESOLVED: NONE**

- f. **PRIOR ARCAs - UNRESOLVED: NONE**

**2.1.7 Lake County Field Monitoring Team II**

- a. **MET: Criteria 1.e.1, 3.a.1, 3.b.1, 4.a.1, 4.a.2 and 4.a.3.**
- b. **DEFICIENCY: NONE**
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. **NOT DEMONSTRATED: NONE**
- e. **PRIOR ARCAs - RESOLVED: NONE**
- f. **PRIOR ARCAs - UNRESOLVED: NONE**

**2.1.8 Monitoring/Decontamination/Registration - Public**

- a. **MET: Criteria 1.e.1, 3.a.1, 3.b.1 and 6.a.1**
- b. **DEFICIENCY: NONE**
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. **NOT DEMONSTRATED: NONE**
- e. **PRIOR ARCAs - RESOLVED: NONE**
- f. **PRIOR ARCAs - UNRESOLVED: NONE**

**2.1.9 Congregate Care Center**

- a. **MET: Criteria 1.e.1. and 6.c.1.**
- b. **DEFICIENCY: NONE**
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. **NOT DEMONSTRATED: NONE**
- e. **PRIOR ARCAs - RESOLVED: NONE**
- f. **PRIOR ARCAs - UNRESOLVED: NONE**

**2.1.10 Back-up Route Alerting**

- a. **MET:** Criteria 1.e.1, 3.a.1, 3.b.1, 3.c.1. and 5.a.3.
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ARCAs - RESOLVED:** NONE
- f. **PRIOR ARCAs - UNRESOLVED:** NONE

**2.1.11 Protective Actions - Schools EV-2**

- a. **MET:** Criteria 3.a.1, 3.b.1 and 3.c.2.
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ARCAs - RESOLVED:** NONE
- f. **PRIOR ARCAs - UNRESOLVED:** NONE

**2.1.12 Traffic and Access Control**

- a. **MET:** Criteria 1.e.1, 3.a.1, 3.b.1. and 3.d.1.
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ARCAs - RESOLVED:** NONE
- f. **PRIOR ARCAs - UNRESOLVED:** NONE

## **2.2 ASHTABULA COUNTY**

### **2.2.1 Initial Notification Point**

- a. **MET: Criteria 1.a.1 and 1.d.1.**
- b. **DEFICIENCY: NONE**
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- a. **NOT DEMONSTRATED: NONE**
- e. **PRIOR ARCAs - RESOLVED: NONE**
- f. **PRIOR ARCAs - UNRESOLVED: NONE**

### **2.2.2 Ashtabula County Emergency Operations Center**

- a. **MET: Criteria 1.a.1, 1.b.1, 1.c.1, 1.e.1, 2.a.1, 2.b.1, 2.b.2, 2.c.1, 2.e.1, 3.a.1, 3.b.1, 3.c.1, 2.b.1, 2.c.1, 3.c.2, 3.d.1, 3.d.2, 3.f.1, 5.a.1, and 5.b.1.**
- b. **DEFICIENCY: NONE**
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. **NOT DEMONSTRATED: NONE**
- e. **PRIOR ARCAs - RESOLVED: NONE**
- f. **PRIOR ARCAs - UNRESOLVED: NONE**

### **2.2.3 Joint Public Information Center**

- a. **MET: Criteria 1.b.1, 1.e.1, 5.a.1 and 5.b.1.**
- b. **DEFICIENCY: NONE**
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. **NOT DEMONSTRATED: NONE**
- e. **PRIOR ARCAs - RESOLVED: NONE**
- f. **PRIOR ARCAs - UNRESOLVED: NONE**

## 2.2.4 Monitoring and Decontamination Center - Public

- a. **MET:** Criteria 1.e.1, 3.a.1, 3.b.1. and 6.a.1.
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** 6.a.1

**Issue No.:** 47-02-6.a.1-A-02

**Condition:** The amount of contamination in mR/hr that was simulated to be present on one of the volunteer evacuees was not determined or recorded by monitoring personnel. Interviewing the monitoring personnel and their supervisor at that time revealed that they did not know that this value was needed to comply with their procedure and the Ashtabula County Plan.

**Possible Cause:** The monitoring person found the simulated contaminated areas but he never looked at the meter, thereby not determining a mR/hr value or a detection that would have identified a contaminated individual who would have had to be referred to a hospital.

**Reference:** NUREG-0654, J.10.h.; K.5.b.

**Effect:** Monitors were not aware of mR/hr readings.

**Recommendation:** Provide training on correct radiation monitoring methods and on the requirements of the Ashtabula County Radiological Response Plan and the Standard Operating Procedure for Ashtabula Township Fire Department. This training should include actual monitoring performance utilizing an exercise controller to ensure that students are familiar with the process.

**Corrective Action Demonstrated:** Provided training on correct radiation monitoring methods and on the requirements of the Ashtabula County Radiological Response Plan and the Standard Operating Procedure for Ashtabula Township Fire Department. This training included the actual monitoring performance utilizing an exercise controller to ensure that students were familiar with the process.

- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ARCAs - RESOLVED:** NONE
- f. **PRIOR ARCAs - UNRESOLVED:** NONE

**2.2.5 Congregate Care Center/Registration**

- a. MET: Criteria 1.e.1, 3.a.1. and 6.c.1.
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ARCAs - RESOLVED: NONE
- f. PRIOR ARCAs - UNRESOLVED: NONE

**2.2.6 Traffic and Access Control Points**

- a. MET: Criteria 1.e.1, 3.a.1, 3.b.1. and 3.d.1.
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ARCAs - RESOLVED: NONE
- f. PRIOR ARCAs - UNRESOLVED: NONE

**2.2.7 Back-up Route Alerting**

- a. MET: Criteria 1.d.1, 1.e.1, 3.a.1, 3.b.1, 5.a.1. and 5.a.3.
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ARCAs - RESOLVED: NONE
- f. PRIOR ARCAs - UNRESOLVED: NONE

## **2.2.8 Protective Actions – Schools EV-2**

- a. **MET:** Criteria 3.a.1, 3.b.1. and 3.c.2.
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ARCAs - RESOLVED:** NONE
- f. **PRIOR ARCAs - UNRESOLVED:** NONE

## **2.3 GEAUGA COUNTY**

### **2.3.1 Initial Notification Point**

- a. **MET:** Criteria 1.a.1, 1.b.1. and 1.d.1.
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ARCAs - RESOLVED:** NONE
- f. **PRIOR ARCAs - RESOLVED:** NONE

### **2.3.2 Geauga County Emergency Operations Center**

- a. **MET:** Criteria 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 2.c.1, 2.e.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 3.f.1, 5.a.1 and 5.b.1.
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ARCAs - RESOLVED:** NONE
- f. **PRIOR ARCAs – RRSOLVED:** NONE

### 2.3.3 Joint Public Information Center

- a. MET: Criterion 5.b.1.
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ARCAs - RESOLVED: NONE
- f. PRIOR ARCAs - UNRESOLVED: NONE

### 2.3.4 Traffic and Access Control

- a. MET: Criteria 1.d.1, 3.a.1, 3.b.1, and 3.d.1.
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ARCAs - RESOLVED: NONE
- f. PRIOR ARCAs - UNRESOLVED: NONE

### 2.3.5 Monitoring/Decontamination Registration - Public

- a. MET: Criteria 1.c.1, 1.e.1, 2.a.1. and 3.a.1.
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): 6.a.1

Issue No.: 47-02-6.a.1-A-03

**Condition:** The amount of contamination in mR/hr that was simulated to be present on one of the volunteer evacuees was not determined or recorded by monitoring personnel. Interviewing the monitoring personnel and their supervision at that time revealed that they did not know that this value was needed to comply with their procedure and the Geauga County Plan.

**Possible Cause:** The monitoring person found the simulated contaminated areas but he never looked at the meter, thereby not determining a mR/hr value or a detection that would have identified a contaminated individual who would have had to be referred to a hospital.

**Reference:** NUREG-0654, J.10.h.; K.5.b.

**Effect:** Monitors were not aware of mR/hr readings.

**Recommendation:** Provide training on correct radiation monitoring methods and on the requirements of the Geauga County Radiological Response Plan and the Standard Operating Procedure for Geauga County Bainbridge Fire Department. This training should include actual monitoring performance utilizing an exercise controller to ensure that students are familiar with the process.

d. **NOT DEMONSTRATED: NONE**

e. **PRIOR ARCAs - RESOLVED: Issue No.: 47-02-6.a.1-A-03**

**Description:** The amount of contamination in mR/hr that was simulated to be present on one of the volunteer evacuees was not determined or recorded by monitoring personnel. Interviewing the monitoring personnel and their supervision at that time revealed that they did not know that this value was needed to comply with their procedure and the Geauga County Plan.

**Corrective Action Demonstrated:** Provided training on correct radiation monitoring methods and on the requirements of the Geauga County Radiological Response Plan and the Standard Operating Procedure for Geauga County Bainbridge Fire Department. This training included actual monitoring performance utilizing an exercise controller to ensure that students are familiar with the process.

f. **PRIOR ARCAs - UNRESOLVED: NONE**

### 2.3.6 **Monitoring/Decontamination Registration – Emergency Workers/Vehicles**

a. **MET:** Criteria 1.e.1, 3.a.1. and 6.b.1.

b. **DEFICIENCY: NONE**

c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**

d. **NOT DEMONSTRATED: NONE**

- e. **PRIOR ARCAs - RESOLVED: NONE**
- f. **PRIOR ARCAs - UNRESOLVED: NONE**

**2.3.6 Congregate Care/Registration**

- a. **MET: Criteria 1.c.1, 6.b.1. and 6.c.1.**
- b. **DEFICIENCY: NONE**
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA): NONE**
- d. **NOT DEMONSTRATED: NONE**
- e. **PRIOR ARCAs - RESOLVED: NONE**
- f. **PRIOR ARCAs - UNRESOLVED: NONE**

## APPENDIX 1

### ACRONYMS AND ABBREVIATIONS

The following is a list of the acronyms and abbreviations that were used in this report.

CFR	Code of Federal Regulations
CPM	Counts Per Minute
DRD	Direct Reading Dosimeter
EAL	Emergency Action Level
EAS	Emergency Alert System
EBS	Emergency Broadcast System
ECL	Emergency Classification Level
EEM	Exercise Evaluation Methodology
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EPA	U.S. Environmental Protection Agency
EPZ	Emergency Planning Zone
ETA	Estimated Time of Arrival
ETE	Evacuation Time Estimate
EWMS	Emergency Worker Monitoring and Decontamination Station
FEMA	Federal Emergency Management Agency
FTC	Field Team Coordinator
ft/min	feet per minute
ft <sup>3</sup> /min	cubic feet per minute
GE	General Emergency
GM	Guidance Memorandum
JPIC	Joint Public Information Center
KI	Potassium Iodide
mR	milliroentgen
mR/h	milliroentgen per hour
NOUE	Notification of Unusual Event
NRC	U.S. Nuclear Regulatory Commission
NUREG-0654	NUREG-0654/FEMA-REP-1, Rev. 1, <i>"Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980</i>

NWS	National Weather Service
PAD	Protective Action Decision
PAG	Protective Action Guide
PAR	Protective Action Recommendation
PIO	Public Information Officer
ORO	Offsite Response Organizations
RAC	Regional Assistance Committee
RACES	Radio Amateur Civil Emergency Service
RERP	Radiological Emergency Response Plan
R/h	Roentgen(s) per hour
SAE	Site Area Emergency
SEOC	State Emergency Operations Center
TL	Team Leader
TLD	Thermoluminescent Dosimeter

## APPENDIX 2

### EXERCISE EVALUATORS AND TEAM LEADERS

The following is a list of the personnel who evaluated the Perry Nuclear Power Plant exercise on April 9, 2002. Evaluator Team Leaders are indicated by the letters "(TL)" after their names. The organization which each evaluator represents is indicated by the following abbreviations:

FEMA - Federal Emergency Management Agency  
ICF - Consulting Inc.

<u>EVALUATION SITE</u>	<u>EVALUATOR</u>	<u>ORGANIZATION</u>
Exercise Director	Bill King	FEMA
State Liaison	Terri Connors-Murphy	FEMA
STATE OF OHIO		
Gary Naskrent (TL)	Evaluator	FEMA
Richard Marks	Evaluator	ICF
Lawrence Boyle	Evaluator	ICF
Richard Grundstrom	Evaluator	ICF
Robert Neisius	Evaluator	ICF
Alejandro Fernandez	Evaluator	ICF
Harry Harrison	Evaluator	ICF
LAKE COUNTY		
Terri Connors- Murphy (TL)	Evaluator	FEMA
AL Lookabough	Evaluator	ICF
John Turley	Evaluator	ICF
Rod Arpin	Evaluator	ICF
Robert Neisius	Evaluator	ICF
Warren Parks	Evaluator	ICF
Jerry Stroba	Evaluator	ICF
Kathleen Barrett	Evaluator	USDA
Alejandro Fernandez	Evaluator	ICF
ASHTABULA COUNTY		
Cleven Lloyd (TL)	Evaluator	FEMA
Roy Smith	Evaluator	ICF
Paul Nied	Evaluator	ICF
Jim Hickey	Evaluator	ICF
Robert Neisius	Evaluator	ICF
Robert Bradshaw	Evaluator	ICF
Robert Fernandez	Evaluator	ICF

GEAUGA COUNTY

Sandra Bailey (TL)

Bob Rospenda

Lynn Mariano

Neil Gaeta

Robert Neisius

Bill Neidermeyer

Evaluator

Evaluator

Evaluator

Evaluator

Evaluator

Evaluator

FEMA

ICF

ICF

ICF

ICF

ICF

## APPENDIX 3

### EXERCISE OBJECTIVES AND EXTENT-OF-PLAY AGREEMENT

This appendix lists the exercise criterion that were scheduled for demonstration in the Perry Nuclear Power Plant exercise on April 9, 2002, extent-of-play agreement approved by FEMA Region V on March 22, 2002.

The exercise criterion, contained in FEMA "Radiological Emergency Preparedness Exercise Evaluation Methodology," September 12, 2001, represents 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 criterion are intended for use at all nuclear power plant sites, and because of variations among offsite plans and procedures, an extent-of-play agreement is prepared by the State and approved by FEMA to provide evaluators with guidance on expected actual demonstration of the objectives.

#### A. Exercise Criterion

Listed below are the specific radiological emergency preparedness criteria scheduled for demonstration during this exercise.

**PERRY NUCLEAR POWER PLANT  
PARTIAL PARTICIPATION EXERCISE**

**EXTENT OF PLAY AGREEMENT**

State of Ohio

**APRIL 9, 2002**

Criteria that can be re-demonstrated immediately for credit, at the decision of the evaluator, include the following: 3.a.1, 3.d.1, 3.d.2, 6.a.1, 6.b.1, 6.c.1 and 6.d.1. Criteria that may be re-demonstrated, as approved on a case-by-case basis by the Chairperson of the Regional Assistance Committee, include the following: 2.a.1, 2.b.1, 2.b.2, 5.a.1 and 5.b.1.

## **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.

### Extent of Play

The State Emergency Operations Center (SEOC) and the Ohio Highway Patrol Dispatch Center will receive initial notification over the dedicated phone line. Once the SEOC Assessment Room is activated all dedicated phone communications will be received there. The State will mobilize all the agencies that have responsibilities in the Executive Room, Dose Assessment, Support Services, the Joint Public Information Center, and the Emergency Operations Facility. The Emergency Operations Facility and Joint Public Information Center representatives will be prepositioned.

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

### Extent of Play

The State of Ohio will demonstrate the availability of facilities to support the accomplishment of emergency operations (e.g., adequate space, furnishings, lighting, restrooms and ventilation).

**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.

### Extent of Play

Direction and control of state activities will be demonstrated at the SEOC. The Executive Director of Ohio EMA will be positioned in the SEOC Executive Room and will coordinate decisions on behalf of the Governor's office. The Ohio Department of Health is responsible for the decision making process in the SEOC Assessment Room.

**Criterion 1.d.1:** At least two communication systems are available and operate properly and communication links are established with appropriate locations. Communications capabilities are managed in support of emergency operations.

Extent of Play

The primary means of communications between the State EOC and the County EOC, JPIC, and the EOF is by commercial and/or dedicated telephone. Backup communications (radio and/or cellular phones) will be demonstrated.

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

Extent of Play

The state will demonstrate the use of equipment, maps and displays to support emergency operations. The maps traditionally used in the EOC will be available and used for exercise evaluation purposes.

**EVALUATION AREA 2 – PROTECTIVE ACTION DECISION MAKING**

**Criterion 2.a.1:** OROs use a decision-making process, considering relevant factors and appropriate coordination, to insure 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.

Extent of Play

The State EOC Assessment Room staff will recommend PAGs and Administrative Limits, including KI, based on their technical evaluation of the available data. Recommendations will be forwarded to the Ashtabula, Geauga and Lake County EOCs. County EOCs will disseminate recommendations to their emergency workers.

**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.

Extent of Play

The State EOC Assessment Room will evaluate the licensee information and complete independent dose projections based on that information and simulated field-monitoring data. Assessment Room staff will evaluate the data and forward protective action recommendations to the EOC Executive Room. Approved recommendations will then be forwarded to the Ashtabula, Geauga and Lake County EOCs via a dedicated conference line established in the Assessment Room.

**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).

Extent of Play

The Governor or his/her designee will demonstrate the ability to make appropriate protective action decisions based on recommendations from the EOC Assessment Room. As a home rule state, the Governor or his/her designee makes recommendations but implementation decisions ultimately reside with the chief elected official or county sheriff who may modify recommendations based on local needs or considerations. The decision is coordinated with the County EOCs to ensure that they are able to fully respond at the designated time.

Decisions about the use of KI are the responsibility of the Ohio Department of Health and are made in the SEOC Dose Assessment Room. The State FMTs, Communications Van and Sample Screening Point will not be demonstrated in this exercise. The State Plan does not specify the use of KI by the general public.

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

Extent of Play

N/A - This is a county function.

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

Extent of Play

The State demonstrated this criterion at the May 2001 DBNPS exercise. It will be demonstrated again at the June 2006 BVPS 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 ORO's plan and/or procedures.

Extent of Play

The State demonstrated this criterion at the May 2001 DBNPS exercise. It will be demonstrated again at the June 2006 BVPS 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.

Extent of Play

The State FMTs, Communications Van and Sample Screening Point will not be demonstrated in this exercise.

**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.

Extent of Play

KI and appropriate instructions will be available when a decision to recommend use of KI be made. The State FMTs, Communications Van and Sample Screening Point will not be demonstrated in this exercise. The State plan does not specify the use of KI by the general public. All emergency workers and institutionalized personnel have pre-distributed KI.

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

Extent of Play

N/A - This is a county function.

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

Extent of Play

N/A - This is a county function.

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

Extent of Play

The State EOC Dose Assessment Room will procedurally demonstrate restricting air, water and rail traffic within the Emergency Planning Zone.

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

Extent of Play

N/A - This is a county function.

**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.

Extent of Play

The State demonstrated this criterion at the May 2001 DBNPS exercise. It will be demonstrated again at the June 2006 BVPS 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.

Extent of Play

The State demonstrated this criterion at the May 2001 DBNPS exercise. It will be demonstrated again at the June 2006 BVPS 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.

Extent of Play

The State demonstrated this criterion at the May 2001 DBNPS exercise. It will be demonstrated again at the June 2006 BVPS exercise.

**EVALUATION AREA 4 – FIELD MEASUREMENT 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.

Extent of Play

The State FMTs, Communications Van and Sample Screening Point will not be demonstrated in this exercise.

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

Extent of Play

The State FMTs, Communications Van and Sample Screening Point will not be demonstrated in this exercise. There will be no federal play in 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.

The State FMTs, Communications Van and Sample Screening Point will not be demonstrated in 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.

Extent of Play

The State demonstrated this criterion at the May 2001 DBNPS exercise. It will be demonstrated again at the June 2006 BVPS exercise.

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

Extent of Play

The State demonstrated this criterion at the May 2001 DBNPS exercise. It will be demonstrated again at the June 2006 BVPS 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 off-site emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include:

1. Identification of the state or local government organization and the official with the authority for providing the alert signal and instructional message

2. Identification of the commercial nuclear power plant and a statement that an emergency situation exists at the plant
3. Reference to REP-specific emergency information (e.g., brochures and information in telephone books) for use by the general public during an emergency
4. A closing statement asking the affected and potentially affected population to stay tuned for additional information.

Extent of Play

The State will consult with the county EOCs to determine the best immediate protective action for the populace. Once a decision is reached that requires the activation of the alert and notification system, Lake County will simulate the initiation of the sirens. EAS messages will be prepared by Lake County EMA who will simulate providing them to the EAS Station. (See Lake County Extent of Play Agreement for further details.)

**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.

Extent of Play

N/A - This is a county function.

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

Extent of Play

The State PIO and a representative from the Ohio Department of Health will be present at the JPIC to address protective actions being implemented and the activities taking place at the State and county level. Public information representatives from Ohio EMA will be

present in the State EOC to communicate with the JPIC. A Public Inquiry telephone will be established and demonstrated.

**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.

Extent of Play

N/A - This is a county function.

**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.

Extent of Play

N/A - This is a county function.

**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.

Extent of Play

N/A - This is a county function.

**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.

Extent of Play

N/A - This is a county function.

# **LAKE COUNTY OHIO**

## **Extent-of-Play Agreement**

**For the  
Perry Nuclear Power Plant  
Evaluated Exercise**

**Week of  
April 8, 2002**

**Perry Nuclear Power Plant  
2002 Evaluated Exercise  
Extent of Play Agreement**

The exercise will take place on April 9, 2002.

Criteria that can be re-demonstrated immediately for credit, by a decision of the evaluator, include the following: 3.a.1, 3.d.1, 3.d.2, 6.a.1, 6.b.1, 6.c.1 and 6.d.1. Criteria that may be re-demonstrated, as approved on a case-by-case basis by the Chairperson of the Regional Assistance Committee, include the following: 2.a.1, 2.b.1, 2.b.2, 5.a.1 and 5.b.1.

**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.

Extent of Play

Lake County EOC Staff will mobilize upon notification from the Lake County Sheriff's Central Communications Dispatch Center. Full field notification utilizing primary means of communication will be completed one time only from the EOC, at the Site Area Emergency classification. All other notifications will be simulated. The primary means of notification is a dedicated line; therefore, a verification call will not be performed. If a back-up means of communication is necessary, then a verification call will be made.

Field agency demonstrations will be conducted out-of sequence and participants will be pre-positioned.

Field activity participants:

Madison Fire District – Back-up Route Alerting  
Willowick Fire Department – Public Monitoring & Decontamination  
Perry Local School District – Risk School  
Mentor Public School District – Risk School  
American Red Cross – Care Center  
Grand River Village Police Department – Traffic Control Point  
Fairport Harbor Village Police Department – Traffic Control Point  
Lake County General Health District Field Monitoring Teams  
Lake West Hospital - Medical Services (MS-1)  
Perry Twp. Fire Department – Medical Services Transportation  
Willoughby Eastlake School District (Willowick Middle School) – Care Center

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

Extent of Play

The availability of facilities to support emergency operations will be shown at the Lake County Emergency Operations Center (EOC). Back-up power 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.

Extent of Play

Direction and control of emergency operations will be demonstrated in accordance with the exercise scenario, the Lake County Radiological Emergency Response Plan and, as appropriate for out-of-sequence field demonstrations.

**Criterion 1.d.1:** At least two communication systems are available and operate properly and communication links are established with appropriate locations. Communications capabilities are managed in support of emergency operations.

Extent of Play

Primary (dedicated phone lines and commercial telephone) and secondary (radio/pagers/cell phones) means of communications will be demonstrated at the EOC and as appropriate for out-of-sequence field demonstrations. Controllers will drive field play.

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

Extent of Play

The availability of equipment and supplies to support emergency operations will be shown at the Lake County Emergency Operations Center (EOC) and at the appropriate field demonstrations.

## EVALUATION AREA 2 – PROTECTIVE ACTION DECISION MAKING

**Criterion 2.a.1:** OROs use a decision-making process, considering relevant factors and appropriate coordination, to insure 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.

### Extent of Play

Lake County relies on the Ohio Department of Health for the recommendation to take KI and for the authorization to exceed Protective Action Guides. For field agency demonstrations, this will be demonstrated by interview with exercise participants or, if necessary, by controller inject.

**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.

N/A - Lake County does not demonstrate this criterion; it relies on the State of Ohio.

**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).

### Extent of Play

The Lake County EOC Executive Group will demonstrate this criterion in coordination with Geauga and Ashtabula counties' Executive Groups and the State of Ohio.

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

### Extent of Play

The Lake County EOC Executive Group will demonstrate this criterion in coordination with Geauga and Ashtabula counties' Executive Groups. Schools follow the protective action decisions for the general public; they are not considered a special population group.

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

Extent of Play

N/A - Lake County relies on the State of Ohio.

**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 ORO's plan and/or procedures.

Extent of Play

Lake County will demonstrate this criterion in a tabletop discussion to be conducted at the conclusion of the full-scale exercise.

Relocation: The standard method will be used to determine the boundary for relocation. Decisions to relocate individuals who have not yet been evacuated but live in areas that exceed the PAGs, and control of access to restricted areas will be demonstrated. Members of the public who have been evacuated but who lived in areas that now exceed the PAGs will be relocated.

Re-entry: A restricted area will be established based on PAGs. The location of control points will be indicated and policies regarding access and exposure control for emergency workers and members of the general public who need to enter the restricted area will be discussed.

Return: The ORO will permit return to the restricted area based on the relocation PAGs. Conditions that permit cancellation of the Emergency Classification Level and the relaxation of associated restrictive measures will be discussed.

**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.

Extent of Play

The Lake County EOC Radiological Officer will demonstrate radiation exposure control capabilities. Dosimetry and exposure control procedures will be demonstrated by field agencies during out-of-sequence exercise activities by interview with participants or, if necessary, by controller inject.

**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.

Extent of Play

The Ohio Department of Health (ODH) will make recommendations regarding the use of KI. Lake County's preparedness measures for KI include pre-distribution to emergency response agencies. At the time of the emergency, the agencies distribute the dosimetry and KI to the emergency workers. Demonstration of this criterion may be facilitated by discussion with the Lake County General Health District Coordinator at the EOC. For field agency demonstrations, KI procedures will be demonstrated by interview with exercise participants or, if necessary, by exercise controller inject.

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

Extent of Play

Notification to individuals with special needs within the Lake County portion of the EPZ will be simulated. A list of special needs residents within the Lake County portion of the EPZ is maintained by the Lake County Department of Job and Family Services and the Lake County EOC. The Department of Job and Family Services Coordinator at the EOC will coordinate special needs notification activities and, upon request, will present the confidential list for review by the FEMA evaluator. At least four transportation providers, which in Lake County include school districts, will be contacted to ensure availability of buses and drivers.

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

Extent of Play

The school districts will demonstrate this criterion out-of-sequence, by interview with the superintendent, high school principal, transportation department; to include a bus operator. School officials follow the protective action decisions made by the elected officials for the general public. The use of dosimetry and KI will be discussed with transportation personnel only. All schools in the EPZ will be notified in accordance with the specifics identified in Criterion 1.a.1, Extent of Play. No movement of students or vehicles will occur.

Field Agency Participants:

Perry Local School District  
Mentor Public School District

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

Extent of Play

Traffic and access control will be demonstrated by interview with the Grand River Village and the Fairport Harbor Village Police Departments, out-of-sequence. Notification of rail, water and air traffic is a State function.

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

Extent of Play

Lake County EOC will demonstrate the capability to identify and take the appropriate actions in dealing with impediments to evacuation. Actual resources will not be utilized. If an impediment cannot be removed in a timely manner, the decision to reroute traffic will be discussed and implemented by the appropriate EOC Staff.

**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.

Extent of Play

N/A - Lake County relies on the State of Ohio.

**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.

Extent of Play

N/A - Lake County relies on the State of Ohio.

**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.

Extent of Play

The period from mid-to-late afternoon of April 9, 2002, will be allocated to re-entry, relocation and return activities. Select EOC Staff members will demonstrate this criterion.

The emergency phase of the exercise will terminate at mid-afternoon. After a short break, an Exercise Controller will explain to the EOC Staff that a time lapse will be assumed in order to facilitate this demonstration. Activities and events that have taken place between the emergency phase and the current "time and date" will be identified by the Controller.

Communications to outside agencies or individuals will be simulated.

Relocation: The standard method will be used to determine the boundary for relocation. Decisions to relocate individuals who have not yet been evacuated but live in areas that exceed the PAGs, and control of access to restricted areas will be demonstrated. Members of the public who have been evacuated but who lived in areas that now exceed the PAGs will be relocated. Methods used to communicate instructions to the public regarding relocation decisions will be discussed.

Re-entry: A restricted area will be established based on PAGs. The location of control points will be indicated and policies regarding access and exposure control for emergency workers and members of the general public who need to enter the restricted area will be discussed. Monitoring and decontamination facilities will be established, as appropriate. The assignment of, and checking for direct-reading and permanent reading dosimetry for emergency workers, individuals' objectives and locations expected to be visited and associated timeframes, advice on areas to avoid and procedures for exit, including monitoring and decontamination of personnel and vehicles will be discussed.

Return: The ORO will demonstrate the capability to implement policies concerning return to the restricted area based on the relocation PAGs. Services and facilities that require restoration and the procedures and resources required will be identified and prioritized through discussion. All communications, both actual and simulated will be documented. The notification of State of Federal resources will be simulated.

#### **EVALUATION AREA 4 – FIELD MEASUREMENT 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.

##### Extent of Play

Lake County General Health District will demonstrate the use of two Field Monitoring Teams (FMTs), in sequence.

Prior to the exercise and at the Lake County EOC, a FEMA evaluator will review contents of the FMT vehicles; an equipment inventory list will be provided to the evaluator to verify availability of supplies and equipment. At the conclusion of the equipment review, all seals will be replaced in order to indicate that all required supplies and equipment are contained within.

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

##### Extent of Play

Lake County Health District will demonstrate the use of two Field Monitoring Teams (FMTs), in sequence. There will not be a transfer of samples; no State or federal agencies are participating in 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.

##### Extent of Play

For the exercise, expired silver zeolite cartridges will be used; new cartridges will be available for the FEMA evaluator's observation. There will be no transfer of samples; no State or federal agencies are participating in 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.

Extent of Play

N/A - Lake County relies on the State of Ohio

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

Extent of Play

N/A - Lake County relies on the State of Ohio

**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 off-site emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include:

1. Identification of the state or local government organization and the official with the authority for providing the alert signal and instructional message
2. Identification of the commercial nuclear power plant and a statement that an emergency situation exists at the plant
3. Reference to REP-specific emergency information (e.g., brochures and information in telephone books) for use by the general public during an emergency
4. A closing statement asking the affected and potentially affected population to stay tuned for additional information.

Extent of Play

Upon a protective action decision (PAD) by the combined Executive Groups of Ashtabula, Geauga and Lake counties, the Lake County EOC Staff will prepare the appropriate Emergency Alert System (EAS) message and simulate sounding the sirens and sending the message over the EAS system. A silent siren test will be demonstrated by the Lake County EOC in lieu of an actual siren sounding.

Simulation of sending the EAS message(s) will be conducted as follows:

The procedure for the EAS encoder will be followed to deliver the message to WTAM, the #1 Local Primary Station, with the exception that the telephone number to the station will not be dialed. By not connecting to WTAM, there is no possibility of accidentally broadcasting the message over one or more of the participating EAS stations. The "send" button on the Lake County EAS encoder will be depressed, and this action will activate the outgoing alert light and playback of the recorded message. Also, a data sheet will automatically be printed by the encoder and the time recorded on the data sheet. Ashtabula and Geauga counties have EAS equipment (encoder) and could perform this function, if required.

Lake County will fax a copy of the EAS message(s) to the Joint Public Information Center (JPIC) where Public Information Officers (PIOs) may distribute hard copies to the news media representatives and may, if time and circumstances permit, make an announcement regarding the message. Otherwise, the EAS message can be announced at the next scheduled press briefing or in response to news media inquiries about the PAD message. In delivering information about the EAS message just released, the counties' PIOs may indicate that a corresponding Special News Bulletin (SNB) will be issued soon. Lake County will also fax a copy of the EAS message to Ashtabula and Geauga counties' EOCs.

**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.

Extent of Play

One predetermined siren located in Madison (L-1) will not sound (simulated) and back-up route alerting will be demonstrated. Back-up Route Alerting will be demonstrated out-of-sequence by the Madison Fire District. The teams will be pre-positioned; the mobile PA system will not be used. The demonstration will be initiated by the exercise controller. There are no exception or dead areas in the EPZ.

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

Extent of Play

Based upon the combined PAD(s) of the Executive Groups of Ashtabula, Geauga and Lake counties, the Lake County EOC Staff will prepare and issue the appropriate EAS message(s) and the corresponding Special News Bulletins(s) (SNB). SNB's are the same message as their corresponding EAS message except SNB's provide greater detail. Lake County will FAX the SNB(s) to the Joint Public Information Center (JPIC) where one of the counties' PIOs will represent the three counties by directly proceeding to the briefing room and reading the contents of the message to the assembly of news media representatives and answering any questions pertaining to the message. This briefing should begin in a timely manner after transmission of the EAS message from the Lake County EOC to the Local Primary EAS Station. Hard copies of the SNB(s) will be distributed to the news media representatives.

Ashtabula, Lake and Geauga counties will also coordinate release of other informational and instructional message as necessary. Such messages may include Special Information Bulletins (SIBs), which are a third category of prepared messages contained in the counties' "SOP for EAS Messages, Special News Bulletins, and Special Information Bulletins pertaining to the Perry Nuclear Power Plant." These SIBs are considered routine, meaning that they are to be delivered by one of the counties' PIOs at the next scheduled press briefing.

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.

Field activity participants:

Willowick Fire Department  
Willoughby Eastlake School District (Willowick Middle School)  
American Red Cross

Extent of Play

Willowick Fire Department will demonstrate the evacuee portion of this criterion out-of-sequence at Willowick Middle School (Willoughby-Eastlake School District). One locker room will be fully set up and demonstrated. A walk-through of the remaining locker room will be conducted upon request. An American Red Cross representative will describe registration procedures. Set-up of care center equipment and/or supplies will be at the discretion of the American Red Cross Disaster Action Team Leader. Monitoring and decontamination of the general public's vehicles will be conducted by interview.

Six (6) monitoring demonstrations will be conducted using a portal monitor. One individual with simulated contamination will be walked through the monitoring/decontamination process, which includes whole body monitoring using a CDV-700RP survey meter; contamination levels will be provided by a controller. Decontamination will be simulated.

**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.

Extent of Play

N/A - Lake County will not demonstrate 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.

Extent of Play

The American Red Cross will demonstrate the congregate care center portion of this criterion out-of-sequence at Willowick Middle School (Willoughby-Eastlake School District). American Red Cross personnel will provide a walk-through of the facility and describe their capabilities. Set-up of care center equipment or supplies will be at the discretion of the American Red Cross Disaster Action Team Leader.

**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.

Extent of Play

The Perry Township Fire Department will demonstrate this criterion in sequence with the on-site scenario. A simulated contaminated/injured victim from the Perry Power Plant will be transported to Lake West Hospital. No emergency lights and/or sirens will be used.

Dosimetry (CDV-138s) and survey instruments owned by the Perry Fire Department may be used in addition to that issued by the State of Ohio and the Utility.

**ASHTABULA COUNTY  
OHIO**

**Extent-of-Play Agreement**

**For the  
Perry Nuclear Power Plant  
Evaluated Exercise**

**Week of  
April 8, 2002**

**Perry Nuclear Power Plant  
Ashtabula County  
April 2002 Evaluated Exercise  
Extent of Play Agreement**

The exercise will take place on April 9, 2002.

Criteria that can be re-demonstrated immediately for credit, at the decision of the evaluator, including the following: 3.a.1, 3.d.1, 3.d.2, 6.a.1, 6.b.1, 6.c.1, and 6.d.1. Criteria that may be re-demonstrated, as approved on a case-by-case basis by the Chairperson of the Regional Assistance Committee, including the following: 2.a.1, 2.b.1, 2.b.2, 5.a.1 and 5.b.1

**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.

**Extent of Play**

Ashtabula County EOC Staff will mobilize upon notification from the Ashtabula County Sheriff's Dispatch Center. Full field notification utilizing primary means of communication will be completed one time only from the EOC, at the Site Area Emergency classification. All other notifications will be simulated. The primary means of notification is a dedicated line, therefore, a verification call will not be performed. If a backup means of communication is required, then verification will be performed.

Field agency demonstrations will be conducted out-of sequence and participants will be pre-positioned.

Field activity participants:

Ashtabula Township Fire Department – Public Monitoring/Decontamination  
Geneva Fire Department – Back-up Route Alerting  
Buckeye Local School District (Edgewood High School) – Care Center  
Geneva School District – Risk School District  
Ohio State Highway Patrol, Post 4 – Traffic/Access Control  
American Red Cross – Care Center

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

Extent of Play

The availability of facilities to support emergency operations will be shown at the Ashtabula County Emergency Operations Center (EOC). Back-up power 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.

Extent of Play

Direction and control of emergency operations will be demonstrated in accordance with the exercise scenario, the Ashtabula County Radiological Emergency Response Plan and, as appropriate for out-of-sequence field demonstrations.

**Criterion 1.d.1:** At least two communication systems are available and operate properly and communication links are established with appropriate locations. Communications capabilities are managed in support of emergency operations.

Extent of Play

Primary (Dedicated phone lines and commercial telephone) and secondary (radio/pagers/cell phones) means of communications will be demonstrated at the EOC and as appropriate for out-of-sequence field demonstrations. Controllers will drive field play.

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

Extent of Play

The availability of equipment and supplies to support emergency operations will be shown at the Ashtabula County Emergency Operations Center (EOC) and at the appropriate field demonstrations.

Perry Nuclear Power Plant  
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EVALUATION AREA 2 – PROTECTIVE ACTION DECISION MAKING

**Criterion 2.a.1:** OROs use a decision-making process, considering relevant factors and appropriate coordination, to insure 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.

Extent of Play

Ashtabula County relies on the Ohio Department of Health for the recommendation to take KI and for the authorization to exceed Protective Action Guides. For field agency demonstrations, this will be demonstrated by interview with exercise participants or, if necessary, by controller inject.

**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.

Extent of Play

N/A - Ashtabula County does not demonstrate this criterion. It relies on the State of Ohio for field monitoring.

**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).

Extent of Play

The Ashtabula County EOC Executive Group will demonstrate this criterion in coordination with Lake and Geauga counties' Executive Groups and the State of Ohio.

**Perry Nuclear Power Plant  
Ashtabula County  
April 2002 Evaluated Exercise  
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**Criterion 2.c.1:** Protective action decisions are made, as appropriate, for special population groups.

Extent of Play

The Ashtabula County EOC Executive Group will demonstrate this criterion in coordination with Lake and Geauga counties' Executive Groups. Schools follow the protective action decisions for the general public. They are not considered special population groups.

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

Extent of Play

N/A - Ashtabula County relies on the State of Ohio.

**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 ORO's plan and/or procedures.

Extent of Play

Ashtabula County will demonstrate this criterion in a tabletop discussion to be conducted at the conclusion of the full-scale exercise.

Relocation: The standard method will be used to determine the boundary for relocation. Decisions to relocate individuals who have not yet been evacuated but live in areas that exceed the PAGs, and control of access to restricted areas, will be demonstrated. Members of the public who have been evacuated and who lived in areas that now exceed the PAGs, will be relocated.

Re-entry: A restricted area will be established based on PAGs. The location of control points will be indicated, and policies regarding access and exposure control for emergency workers and members of the general public who need to enter the restricted area will be discussed.

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Return: The ORO will permit return to the restricted area based on the relocation PAGs. Conditions that permit cancellation of the Emergency Classification Level and the relaxation of associated restrictive measures will be discussed.

**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.

Extent of Play

The Ashtabula County EOC Radiological Officer will demonstrate radiation exposure control capabilities by interview. Dosimetry and exposure control procedures will be demonstrated by field agencies during out-of-sequence exercise activities by interview.

**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.

Extent of Play

The Ohio Department of Health (ODH) will make recommendations regarding the use of KI. Ashtabula County's preparedness measures for KI include pre-distribution to emergency response agencies. At the time of the emergency, the agencies distribute the dosimetry and KI to the emergency workers. If the ODH recommendation for use of KI excludes the portion of the EPZ that is in Ashtabula County, demonstration of this criterion will be facilitated by discussion with the Ashtabula County Radiological Officer at the EOC. For field agency demonstrations, KI procedures will be demonstrated by interview with exercise participants or, if necessary, by exercise controller inject.

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

Extent of Play

Notification to individuals with special needs within the Ashtabula County portion of the EPZ will be simulated. A list of special needs residents within the Ashtabula County portion of the EPZ is maintained by the Ashtabula County Department of Job and Family Services. The EOC Job and Family Services Representative will coordinate special needs notification activities and, upon request, will present the confidential list for review by the FEMA evaluator. At least 2 transportation providers will be notified to determine the number of buses and drivers available for evacuation.

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

Extent of Play

School officials will follow the protective action decisions made by elected officials. The Geneva School District will demonstrate this criterion out-of-sequence, by interview with the superintendent, high school principal, transportation supervisor and a bus driver. The use of dosimetry and KI will be discussed with transportation personnel only. No movement of students or vehicles will occur. All school districts within the 10-Mile EPZ will be notified in accordance with criterion 1.a.1.

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

Extent of Play

A representative of the Ohio State Highway Patrol will demonstrate Access Control by interview at the Ashtabula EOC. Notification of rail, water, and air traffic is a State function.

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

Extent of Play

Ashtabula County EOC will demonstrate the capability to identify and take the appropriate actions in dealing with impediments to evacuation. Actual resources will not be utilized. If an impediment cannot be removed in a timely manner, the decision process to re-route traffic will be discussed with the Transportation Officer.

**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.

Extent of Play

N/A - Ashtabula County relies on the State of Ohio.

**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.

Extent of Play

N/A - Ashtabula County relies on the State of Ohio.

**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.

Extent of Play

The period from mid-to-late afternoon of April 9, 2002, will be allocated to re-entry, relocation and return activities. Select EOC Staff members will demonstrate this criterion.

The emergency phase of the exercise will terminate at mid-afternoon. After a short break, an Exercise Controller will explain to the EOC Staff that a time lapse will be assumed in order to facilitate this demonstration.

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Activities and events that have taken place between the emergency phase and the current "time and date" will be identified by the Controller.

If Ashtabula County is not directly affected by the restricted zone, the EOC Staff will demonstrate its ability to decide matters concerning re-entry, relocation and return via an Exercise Controller led discussion.

Communications to outside agencies or individuals will be simulated.

Relocation: The standard method will be used to determine the boundary for relocation. Decisions to relocate individuals who have not yet been evacuated but live in areas that exceed the PAGs, and control of access to restricted areas, will be demonstrated. Members of the public who have been evacuated and who lived in areas that now exceed the PAGs, will be relocated. Methods used to communicate instructions to the public regarding relocation decisions will be discussed.

Re-entry: A restricted area will be established based on PAGs. The location of control points will be indicated, and policies regarding access and exposure control for emergency workers and members of the general public who need to enter the restricted area will be discussed. Monitoring and decontamination facilities will be established as appropriate. The assignment of, and checking for, direct-reading and permanent reading dosimetry for emergency workers, individuals' objectives and locations expected to be visited and associated timeframes, advice on areas to avoid and procedures for exit, including monitoring and decontamination of personnel and vehicles, will be discussed.

Return: The ORO will demonstrate the capability to implement policies concerning return to the restricted area based on the relocation PAGs. Services and facilities that require restoration, and the procedures and resources required, will be identified and prioritized through discussion. All communications, both actual and simulated, will be documented. The notification of State and Federal resources will be simulated.

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**EVALUATION AREA 4 – FIELD MEASUREMENT 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.

Extent of Play

N/A - Ashtabula County does not demonstrate this criterion.

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

Extent of Play

N/A - Ashtabula County does not demonstrate this criterion.

**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.

Extent of Play

N/A - Ashtabula County does not demonstrate this criterion.

**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.

Extent of Play

N/A - Ashtabula County does not demonstrate this criterion.

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

Extent of Play

N/A - Ashtabula County does not demonstrate this criterion.

**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 off-site emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include:

1. Identification of the state or local government organization and the official with the authority for providing the alert signal and instructional message
2. Identification of the commercial nuclear power plant and a statement that an emergency situation exists at the plant
3. Reference to REP-specific emergency information (e.g., brochures and information in telephone books) for use by the general public during an emergency
4. A closing statement asking the affected and potentially affected population to stay tuned for additional information.

Extent of Play

Upon a protective action decision (PAD) by the combined Executive Groups of Ashtabula, Lake and Geauga counties, the Lake County EOC Staff will prepare the appropriate Emergency Alert System (EAS) message and simulate sounding the sirens and sending the message over the EAS system. A silent siren test will be demonstrated by the Lake County EOC in lieu of an actual siren sounding. Lake County will send a fax of the EAS message to Ashtabula and Geauga Counties.

Simulation of sending the EAS message(s) will be conducted as follows:

The procedure for the EAS encoder will be followed to deliver the message to WTAM, the #1 Local Primary Station, with the exception that the telephone number to the station will not be dialed. By not connecting to WTAM, there is no possibility of accidentally broadcasting the message over one or more of the participating EAS stations. The "send" button on the Lake

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County EAS encoder will be depressed, and this action will activate the outgoing alert light and playback of the recorded message. Also, a data sheet will automatically be printed by the encoder and the time recorded on the data sheet. Ashtabula and Geauga counties have equipment (encoder) and could provide this function if required.

Lake County will fax a copy of the EAS message(s) to the Joint Public Information Center (JPIC) where Public Information Officers (PIOs) may distribute hard copies to the news media representatives and may, if time and circumstances permit, make an announcement regarding the message. Otherwise, the EAS message can be announced at the next scheduled press briefing or in response to news media inquiries about the PAD message. In delivering information about the EAS message just released, the counties' PIOs may indicate that a corresponding Special News Bulletin (SNB) will be issued soon. Lake County will also fax a copy of the EAS message to Ashtabula and Geauga counties' EOC's.

**Criterion 5.a.2:** (Reserved) per federal document. Cannot select this criteria at this time – cannot be demonstrated per FEMA.

**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. Ashtabula County has no exception areas.

Extent of Play

Geneva Fire Department will demonstrate back-up route alerting as an out-of-sequence, pre-positioned field activity. One pre-determined siren located in Geneva Township will be out-of-service (simulated) and back-up route alerting will be conducted in the siren coverage area. Use of the mobile Public Address (PA) system will be simulated. There are no exception areas in Ashtabula County.

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

Extent of Play

Based upon the combined PAD(s) of the Executive Groups of Ashtabula, Geauga and Lake counties, the Lake County EOC Staff will prepare and issue the appropriate EAS message(s) and the corresponding Special News Bulletins(s) (SNB). SNB's are the same message as their corresponding EAS message except SNB's provide greater detail. Lake County will FAX the SNB(s) to the Joint Public Information Center (JPIC) where one of the counties' PIOs will represent the three counties by directly proceeding to the briefing room and reading the contents of the message to the assembly of news media representatives and answering any questions pertaining to the message. This briefing should begin in a timely manner after transmission of the EAS message from the Lake County EOC to the Local Primary EAS Station. Hard copies of the SNB(s) will be distributed to the news media representatives.

Ashtabula, Geauga and Lake counties will also coordinate release of other informational and instructional message as necessary. Such messages may include Special Information Bulletins (SIBs), which are a third category of prepared messages contained in the counties' "SOP for EAS Messages, Special News Bulletins, and Special Information Bulletins pertaining to the Perry Nuclear Power Plant." These SIBs are considered routine, meaning that they are to be delivered by one of the counties' PIOs at the next scheduled press briefing.

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**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.

Field Activity Participants:

Ashtabula Township Fire Department  
Buckeye Local School District (Edgewood High School)  
American Red Cross

**Extent of Play**

Ashtabula Township Fire Department will demonstrate the evacuee portion of this criterion out-of-sequence at Edgewood High School, 2428 Blake Road, Ashtabula Township. One locker room will be fully set up and demonstrated. Decontamination will be simulated, demonstrated by interview. A walk-through of the remaining locker room will be conducted upon request. An American Red Cross representative will describe registration procedures. Monitoring and decontamination of the general public's vehicles will be conducted by interview.

Six (6) monitoring demonstrations will be conducted using a portal monitor. One individual with simulated contamination will be walked through the monitoring/decontamination process, which includes whole body monitoring using a CDV-700RP survey meter. Contamination levels will be provided by a controller. Decontamination will be simulated.

**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.

**Extent of Play**

N/A - Ashtabula County will not demonstrate this criterion.

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**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.

Extent of Play

The American Red Cross will demonstrate the congregate care center portion of this criterion out-of-sequence at Edgewood High School, 2428 Blake Road, Ashtabula Township. American Red Cross personnel will provide a walk-through of the facility and describe their capabilities. Set-up of care center equipment or supplies will be at the discretion of the Red Cross Disaster Action Team Leader.

**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.

Extent of Play

N/A - Ashtabula County does not demonstrate this criterion.

# **GEAUGA COUNTY OHIO**

## **Extent-of-Play Agreement**

### **For the Perry Nuclear Power Plant Evaluated Exercise**

**Week of  
April 8, 2002**

**Perry Nuclear Power Plant  
Geauga County  
April 2002 Evaluated Exercise**

## Extent of Play Agreement

The exercise will take place on April 9, 2002.

Criteria that can be re-demonstrated immediately for credit, by a decision of the evaluator, include the following: 3.a.1, 3.d.1, 3.d.2, 6.a.1, 6.b.1, 6.c.1 and 6.d.1. Criteria that may be re-demonstrated, as approved on a case-by-case basis by the Chairperson of the Regional Assistance Committee, include the following: 2.a.1, 2.b.1, 2.b.2, 5.a.1 and 5.b.1.

### 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.

#### Extent of Play

Geauga County EOC Staff will mobilize upon notification from the Geauga County Sheriff's Dispatch Center. Full field notification utilizing primary means of communication will be completed one time only from the EOC, at the Site Area Emergency classification. All other notifications will be simulated. The primary means of notification is a dedicated line, therefore a verification call will not be performed. If a back-up means of communication is necessary, then verification will be conducted.

Field agency demonstrations will be conducted out-of sequence and participants will be pre-positioned.

Field activity participants:

Bainbridge Fire Department – Public Monitoring & Decontamination  
Russell Fire Department – Public Monitoring & Decontamination  
Kenston School District – Care Center  
Chardon Fire Department – Emergency Worker Monitoring/Decontamination  
Chardon School District – Emergency Worker Monitor/Decon Station  
American Red Cross – Care Center  
Ohio State Highway Patrol, Post 28 – Traffic & Access Control

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

Extent of Play

The availability of facilities to support emergency operations will be shown at the Geauga County Emergency Operations Center (EOC). Back-up power 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.

Extent of Play

Direction and control of emergency operations will be demonstrated in accordance with the exercise scenario, the Geauga County Radiological Emergency Response Plan and, as appropriate for out-of-sequence field demonstrations.

**Criterion 1.d.1:** At least two communication systems are available and operate properly and communication links are established with appropriate locations. Communications capabilities are managed in support of emergency operations.

Extent of Play

Primary (dedicated phone lines and commercial telephone) and secondary (radio/pagers/cell phones) means of communications will be demonstrated at the EOC and as appropriate for out-of-sequence field demonstrations. Controllers will drive field play.

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

Extent of Play

The availability of equipment and supplies to support emergency operations will be shown at the Geauga County Emergency Operations Center (EOC) and at the appropriate field demonstrations.

## EVALUATION AREA 2 – PROTECTIVE ACTION DECISION MAKING

**Criterion 2.a.1:** OROs use a decision-making process, considering relevant factors and appropriate coordination, to insure 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.

### Extent of Play

Geauga County relies on the Ohio Department of Health for the recommendation to take KI and for the authorization to exceed Protective Action Guides. For field agency demonstrations, this will be demonstrated by interview with exercise participants or, if necessary, by controller inject.

**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.

### Extent of Play

N/A - Geauga County does not demonstrate this criterion; it relies on the State of Ohio for field monitoring.

**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).

### Extent of Play

The Geauga County EOC Executive Group will demonstrate this criterion in coordination with Lake and Ashtabula counties' Executive Groups and the State of Ohio.

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

### Extent of Play

The Geauga County EOC Executive Group will demonstrate this criterion in coordination with Lake and Ashtabula counties' Executive Groups. Schools follow the protective action decisions for the general public; they are not considered a special population group.

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

Extent of Play

N/A - Geauga County relies on the State of Ohio.

**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 ORO's plan and/or procedures.

Extent of Play

Gauga County will demonstrate this criterion in a tabletop discussion to be conducted at the conclusion of the full-scale exercise.

Relocation: The standard method will be used to determine the boundary for relocation. Decisions to relocate individuals who have not yet been evacuated but live in areas that exceed the PAGs, and control of access to restricted areas will be demonstrated. Members of the public who have been evacuated but who lived in areas that now exceed the PAGs will be relocated.

Re-entry: A restricted area will be established based on PAGs. The location of control points will be indicated and policies regarding access and exposure control for emergency workers and members of the general public who need to enter the restricted area will be discussed.

Return: The ORO will permit return to the restricted area based on the relocation PAGs. Conditions that permit cancellation of the Emergency Classification Level and the relaxation of associated restrictive measures will be discussed.

**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.

#### Extent of Play

The Geauga County EOC Radiological Officer will demonstrate radiation exposure control capabilities by interview. Dosimetry and exposure control procedures will be demonstrated by field agencies during out-of-sequence exercise activities by interview with participants or, if necessary, by controller inject.

**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.

#### Extent of Play

The Ohio Department of Health (ODH) will make recommendations regarding the use of KI. Geauga County's preparedness measures for KI include pre-distribution to emergency response agencies. At the time of the emergency, the agencies distribute the dosimetry and KI to the emergency workers. If the ODH recommendation for use of KI excludes the portion of the EPZ that is in Geauga County, demonstration of this criterion may be facilitated by discussion with the Geauga County Radiological Officer at the EOC. For field agency demonstrations, KI procedures will be demonstrated by interview with exercise participants or, if necessary, by exercise controller inject.

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

#### Extent of Play

Notification to individuals with special needs within the Geauga County portion of the EPZ will be simulated. A list of special needs residents within the Geauga County portion of the EPZ is maintained by the Geauga County Department of Emergency Services (DES).

The Fire/EMS Officer at the EOC will coordinate special needs notification activities and, upon request, will present the confidential list for review by the FEMA evaluator. At least two transportation providers, which in Geauga County are school districts, will be contacted to ensure availability of buses and drivers.

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

Extent of Play

Geauga County will notify the one school district that has a school (Ledgemont High School) within the 10-mile EPZ. Ledgemont School District demonstrated this criterion successfully in the 2000 exercise; therefore, no field demonstration will take place.

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

Extent of Play

An Access Control Point will be demonstrated by interview with the Ohio State Highway Patrol Representative at the EOC. Notification of rail, water and air traffic is a State function.

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

Extent of Play

Geauga County EOC will demonstrate the capability to identify and take the appropriate actions in dealing with impediments to evacuation. Actual resources will not be utilized. If an impediment cannot be removed in a timely manner, the decision to reroute traffic will be discussed and implemented by the appropriate EOC staff.

**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.

Extent of Play

N/A - Geauga County relies on the State of Ohio.

**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.

Extent of Play

N/A - Geauga County relies on the State of Ohio.

**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.

Extent of Play

The period from mid-to-late afternoon of April 9, 2002, will be allocated to re-entry, relocation and return activities. Select EOC Staff members will demonstrate this criterion.

The emergency phase of the exercise will terminate at mid-afternoon. After a short break, an Exercise Controller will explain to the EOC Staff that a time lapse will be assumed in order to facilitate this demonstration. Activities and events that have taken place between the emergency phase and the current "time and date" will be identified by the Controller.

If Geauga County is not directly affected by the restricted zone, the EOC Staff will demonstrate its ability to decide matters concerning re-entry, relocation and return via an Exercise Controller led discussion.

Communications to outside agencies or individuals will be simulated.

Relocation: The standard method will be used to determine the boundary for relocation. Decisions to relocate individuals who have not yet been evacuated but live in areas that exceed the PAGs, and control of access to restricted areas will be demonstrated. Members of the public who have been evacuated but who lived in areas that now exceed the PAGs will be relocated. Methods used to communicate instructions to the public regarding relocation decisions will be discussed.

Re-entry: A restricted area will be established based on PAGs. The location of control points will be indicated, and policies regarding access and exposure controls for emergency workers and members of the general public who need to enter the restricted area will be discussed. Monitoring and decontamination facilities will be established, as appropriate. The assignment of, and checking for direct-reading and permanent reading dosimetry for emergency workers, individuals' objectives and locations expected to be visited and associated timeframes, advice on areas to avoid and procedures for exit, including monitoring and decontamination of personnel and vehicles will be discussed.

Return: The ORO will demonstrate the capability to implement policies concerning return to the restricted area based on the relocation PAGs. Services and facilities that require restoration and the procedures and resources required will be identified and prioritized through discussion. All communications, both actual and simulated will be documented. The notification of State and Federal resources will be simulated.

#### EVALUATION AREA 4 – FIELD MEASUREMENT 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.

##### Extent of Play

N/A - Geauga County does not demonstrate this criterion.

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

##### Extent of Play

N/A - Geauga County does not demonstrate this criterion.

**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.

##### Extent of Play

N/A - Geauga County does not demonstrate this criterion.

**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.

##### Extent of Play

N/A - Geauga County does not demonstrate this criterion.

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

Extent of Play

N/A - Geauga County does not demonstrate this criterion.

**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 off-site emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include:

1. Identification of the state or local government organization and the official with the authority for providing the alert signal and instructional message
2. Identification of the commercial nuclear power plant and a statement that an emergency situation exists at the plant
3. Reference to REP-specific emergency information (e.g., brochures and information in telephone books) for use by the general public during an emergency
4. A closing statement asking the affected and potentially affected population to stay tuned for additional information.

Extent of Play

Upon a protective action decision (PAD) by the combined Executive Groups of Ashtabula, Lake and Geauga counties, the Lake County EOC Staff will prepare the appropriate Emergency Alert System (EAS) message and simulate sounding the sirens and sending the message over the EAS system. A silent siren test will be demonstrated by the Lake County EOC in lieu of an actual siren sounding. Lake County will fax a copy of the EAS message to Ashtabula and Geauga counties.

Simulation of sending the EAS message(s) will be conducted as follows:

The procedure for the EAS encoder will be followed to deliver the message to WTAM, the #1 Local Primary Station, with the exception that the telephone number to the station will not be dialed. By not connecting to WTAM, there is no possibility of accidentally broadcasting the message over one or more of the participating EAS stations. The "send" button on the Lake County EAS encoder will be depressed, and this action will activate the outgoing alert light and playback of the recorded message. Also, a data sheet will automatically be printed by the encoder and the time recorded on the data sheet. Ashtabula and Geauga counties have EAS equipment (encoder) and could perform this function, if required.

Lake County will fax a copy of the EAS message(s) to the Joint Public Information Center (JPIC) where Public Information Officers (PIOs) may distribute hard copies to the news media representatives and may, if time and circumstances permit, make an announcement regarding the message. Otherwise, the EAS message can be announced at the next scheduled press briefing or in response to news media inquiries about the PAD message. In delivering information about the EAS message just released, the counties' PIOs may indicate that a corresponding Special News Bulletin (SNB) will be issued soon. Lake County will also fax a copy of the EAS message to Ashtabula and Geauga counties' EOCs.

**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.

Extent of Play

Gauga County will not demonstrate this criterion

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

Extent of Play

Based upon the combined PAD(s) of the Executive Groups of Ashtabula, Geauga and Lake counties, the Lake County EOC Staff will prepare and issue the appropriate EAS message(s) and the corresponding Special News Bulletins(s) (SNB). SNB's are the same message as their corresponding EAS message except SNB's provide greater detail.

Lake County will FAX the SNB(s) to the Joint Public Information Center (JPIC) where one of the counties' PIOs will represent the three counties by directly proceeding to the briefing room and reading the contents of the message to the assembly of news media representatives and answering any questions pertaining to the message. This briefing should begin in a timely manner after transmission of the EAS message from the Lake County EOC to the Local Primary EAS Station. Hard copies of the SNB(s) will be distributed to the news media representatives.

Ashtabula, Geauga and Lake counties will also coordinate release of other informational and instructional message as necessary. Such messages may include Special Information Bulletins (SIBs), which are a third category of prepared messages contained in the counties' "SOP for EAS Messages, Special News Bulletins, and Special Information Bulletins pertaining to the Perry Nuclear Power Plant." These SIBs are considered routine, meaning that they are to be delivered by one of the counties' PIOs at the next scheduled press briefing.

#### 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.

Field activity participants:

Bainbridge Fire Department  
Russell Fire Department  
Kenston School District  
American Red Cross

#### Extent of Play

Bainbridge Fire Department and Russell Fire Department will demonstrate the evacuee portion of this criterion out-of-sequence at Kenston High School, 17425 Snyder Road, Bainbridge Township. One locker room will be fully set up and demonstrated. A walk-through of the remaining locker room will be conducted upon request. An American Red Cross representative will describe registration procedures. Set-up of care center equipment and/or supplies will be at the discretion of the American Red Cross Disaster Action Team Leader. Monitoring and decontamination of the general public's vehicles will be conducted by interview.

Six (6) monitoring demonstrations will be conducted using a portal monitor. One individual with simulated contamination will be walked through the monitoring/decontamination process, which includes whole body monitoring using a CDV-700RP survey meter; contamination levels will be provided by a controller. Decontamination will be simulated.

Chardon Fire Department will demonstrate the emergency worker facility out-of-sequence at Chardon High School, City of Chardon. Two monitoring demonstrations will be conducted using a portal monitor. One individual with simulated contamination will be walked through the monitoring and decontamination process, which includes whole body monitoring using a CDV 700RP-survey meter; contamination levels will be provided by a controller. Decontamination will be simulated.

**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.

Extent of Play

Chardon Fire Department will demonstrate the emergency worker facility out-of-sequence at Chardon High School, City of Chardon. One emergency response vehicle will be monitored. Contamination levels will be provided by a controller. Vehicle decontamination procedures will be simulated.

**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.

Extent of Play

The American Red Cross will demonstrate the congregate care center portion of this criterion out-of-sequence at Kenston High School, 17425 Snyder Road, Bainbridge Township. American Red Cross personnel will provide a walk-through of the facility and describe their capabilities. Set-up of care center equipment or supplies will be at the discretion of the American Red Cross Disaster Action Team Leader.

**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.

Extent of Play

N/A - Geauga County does not demonstrate this criterion.

## APPENDIX 4

### EXERCISE SCENARIO

This appendix contains a summary of the simulated exercise scenario events, which was used as the basis for invoking emergency response actions by Offsite Response Organizations in the Perry Nuclear Power Plant exercise on April 9, 2002

This exercise scenario was submitted by the State of Ohio and First Energy Corporation, and approved by FEMA Region V on March 27, 2002.

During the exercise, controllers from the State of Ohio "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 OROs.

#### SCENARIO SUMMARY:

0730 Exercise begins

0735 A fire breaks out on the 620' evaluation of the Intermediate Building (IB) when used oil and cleaning chemicals, temporarily stored outside the AEGTS 'B' Fan Room during turnover, ignite due to an unknown cause. A Plant Operator on rounds is not successful in extinguishing the fire. The Plant Operator reports the fire to the Control Room.

Additionally, the Secondary Alarm Station (SAS) receive a smoke detector computer alarm for AUX. Building Exhaust system. SAS tones out the Fire Brigade and requests off-site fire fighting assistance through the Lake County '911' Dispatcher.

0752 ESW 'A' pump auto starts due to a hot short condition in a control cables as a result of the fire in the IB 620.

0800 Control Room Shift Manager should declare an **ALERT** classification per EPI-A1, Initiating Condition FA1, "Fire within a Safe Shutdown Building NOT extinguished within 15 minutes", if the impact on safe shutdown equipment has not been determined.

Note: The Control Room Shift manager may initially declare an **UNUSUAL EVENT**, EPI-A1, Initiating Condition FU1, "Fire within a Safe Shutdown Building NOT extinguished within 15 minutes", if the impact on safe shutdown equipment has not been determined.

- 0930 The velocity feedback signal for Flow Control Valve (FCV), 1B33D0004A, fails low. The RECIRC Flow Control System responds by driving FCV "A" open, causing a reactor power excursion and subsequent Reactor Protection System (RPS) actuation. RPS fails.

Reactor power is reduced to between 5-10% due to manual operator actions at panel 1H13-P680 per Plant Emergency instruction (PEI) B13, ATWS. These actions are successful in inserting additional control rods. Reactor power stabilizes at greater than 4%. Operators should initiate boron injection using SLC "A" based on control rod pattern.

**The criterion for a SITE AREA EMERGENCY (SAE) classification per EPI-A1, Initiating Condition CS1 is met to manual operator actions being unsuccessful in lowering Rx power to <4%. A site evacuation should be initiated for personnel accountability per EPI-B5, and the activation of the EOF and Joint Public Information Center (JPIC) initiated.**

- 1030 Based on increasing Steam Tunnel temperatures and radiation levels, Operators should determine that the RCIC steam supply line has not been isolated. An additional **SITE AREA EMERGENCY** is classified per **EPI-A1, Initial Condition AS3** due to an unisolable primary system discharging outside Containment per PEI-N11, "Containment Leakage Control," based on a challenge of the Reactor Coolant System (RCS) and a loss of the Containment barrier.

- 1105 A weld failure occurs on the upstream (RPV) side of RCIC Steam Supply Outboard Isolation Valve. Position indication is lost for the valve due to an electrical short at the valve caused by the release of steam.

Steam Tunnel temperatures increase dramatically above isolation set points. Elevated radiation levels are indicated the Steam Tunnel and at the Turbine Building/Heater Bay Vent monitor.

- 1110 A RCIC steam line break at the E51F064 valve fails catastrophically (10" line), resulting in a gradual RPV depressurization. RPV water level is maintained using the motor feed pump (MFP).

Radiation levels increase in the Drywell/Containment, Steam Tunnel, and out the TB/HB Vent indicating a challenge or loss to the Fuel Clad barrier.

- 1155 **GENERAL EMERGENCY** is declared based on Initiating Conditions AG1 "Loss of two barriers, and a loss or challenge to the third barrier," or HG1 "Site Boundary dose resulting from an actual or imminent release of radioactivity that exceeds 1000 mrem TEDE dose or 5000 mrem CDE Child Thyroid dose for actual or projected duration of the release.

Based on projected doses, the General Emergency default recommendation of EVACUATION Sub areas 1, 2 and Lake should be recommended.

- 1315 A wind shift occurs that should result in the issuance of a revised offsite protective action recommendation (PAR) by the Perry Plant to EVACUATE Sub areas 1, 2, 3 and Lake.
- 1340 Either the RPV is depressurized, or repairs to the RCIC Inboard Isolation Valve, E51F063, are complete and the valve is successfully closed isolating the release pathway.
- 1400 Offsite release plume has dissipated. Commence onsite Recovery discussion.