



FEMA

Final Exercise Report

Perry Nuclear Power Plant

Licensee: **FirstEnergy Corporation**

Exercise Date: **October 5, 2004**

Report Date: **February 14, 2005**

**U.S. DEPARTMENT OF HOMELAND SECURITY
FEMA REGION V
536 South Clark Street, 6th Floor
Chicago, Illinois 60605-1521**

TABLE OF CONTENTS

Page

I.	EXECUTIVE SUMMARY	1
II.	INTRODUCTION.....	2
III.	EXERCISE OVERVIEW	4
	A. Plume Emergency Planning Zone Description	4
	B. Exercise Participants.....	5
	C. Exercise Timeline	8
IV.	EXERCISE EVALUATION AND RESULTS.....	9
	A. Summary Results of Exercise Evaluation	9
	B. Status of Jurisdictions Evaluated	12
	1. STATE OF OHIO	14
	1.1 Initial Notification Point	14
	1.2 State Emergency Operations Center	14
	1.3 State Assessment Room.....	14
	1.4 Joint Public Information Center.....	15
	1.5 Emergency Operations Facility.....	15
	1.6 Field Monitoring Team I.....	15
	1.7 Field Monitoring Team II.....	16
	1.8 State Communications Van.....	16
	1.9 Sample Screening Point	16
	1.10 Lake County Field Team Manager.....	17
	2. RISK JURISDICTIONS.....	17
	2.1 LAKE COUNTY	17
	2.1.1 Initial Notification Point	17
	2.1.2 Lake County Emergency Operations Center.....	17
	2.1.3 Joint Public Information Center.....	18
	2.1.4 Traffic and Access Control	19
	2.1.5 Lake County Field Monitoring Team I	19
	2.1.6 Lake County Field Monitoring Team II.....	20

2.1.7	Monitoring and Decontamination – Public	
	South High School.....	20
2.1.8	Congregate Care Center/Registration	
	South H. S.....	21
2.1.9	School District	
	Madison School	21
2.1.10	School District	
	Fairport School	22
2.1.11	Back-up Route Alerting.....	22
2.1.12	Medical Services – Transportation	
	Perry Nuclear Power Plant.....	22
2.1.13	Medical Services – Facilities	
	Lake West Hospital.....	22
2.2	ASHTABULA COUNTY	23
2.2.1	Initial Notification Point	23
2.2.2	Ashtabula County Emergency Operations Center	23
2.2.3	Joint Public Information Center	24
2.2.4	Traffic and Access Control Points.....	24
2.2.5	Back-up Route Alerting	24
2.2.6	Monitoring and Decontamination Center - Emergency Workers - Vehicles	
	Saybrook Elementary School.....	25
2.2.7	Monitoring and Decontamination Center -Emergency Workers	
	Saybrook Elementary School.....	25
2.3	GEAUGA COUNTY.....	26
2.3.1	Initial Notification Point.....	26
2.3.2	Geauga County Emergency Operations Center	26
2.3.3	Joint Public Information Center	26
2.3.4	Traffic and Access Control Points.....	27
2.3.5	Monitoring/Decontamination/Registration - Public	
	Newbury High School	27
2.3.6	Back-up Route Alerting.....	28
2.3.7	Congregate Care Center/Registration	
	Newbury High School.	28

List of Appendices

APPENDIX 1 - ACRONYMS AND ABBREVIATIONS29

APPENDIX 2 - EXERCISE EVALUATORS AND TEAM LEADERS31

APPENDIX 3 - EXERCISE CRITERIA AND EXTENT-OF-PLAY AGREEMENT33

APPENDIX 4 - EXERCISE SCENARIO.....81

List of Tables

Table 1 - Exercise Timeline7

Table 2 - Summary Results of Exercise Evaluation10

I. EXECUTIVE SUMMARY

On October 5, 2004, an exercise was conducted in the plume emergency planning zone (EPZ) around the Perry Nuclear Power Plant (PNPP) by the Department of Homeland Security Federal Emergency Management Agency (DHS/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 DHS/FEMA's policies and guidance concerning the exercise of State and local radiological emergency response plans (RERP) and procedures.

The most recent exercise at this site was conducted on April 9, 2002. The qualifying emergency preparedness exercise was conducted on November 28, 1984.

DHS/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 October 5, 2004, biennial exercise and the following out-of-sequence activities:

State of Ohio	Plume Phase Field Measurement and Analysis State Field Monitoring Team I and Team II
State of Ohio	Laboratory Operations Sample Screening Point- Ledgesmont Elementary School
State of Ohio	Equipment and Supplies to Support Operations State Communications Van - Ledgesmont Elementary School
Lake County	Emergency Notification and Public Information Back-up Route Alerting - Concord Fire Department
Lake County	Plume Phase Field Measurement and Analysis Lake County Field Monitoring Team I and Team II
Lake County	Monitoring and Decontamination of Evacuees South High School
Lake County	Temporary Care of Evacuees South High School
Lake County	Implementation of Protective Actions for Schools - (EV-2) Madison School District

Lake County	Implementation of Protective Actions for Schools – (EV-2) Fairport School District
Ashtabula County	Emergency Notification and Public Information Back-up Route Alerting - Harpersfield Volunteer Fire Department
Ashtabula County	Monitoring/Decontamination of Evacuees and Emergency Workers Saybrook Elementary School
Geauga County	Monitoring/Decontamination/Registration of Evacuees Newbury High School
Geauga County	Emergency Notification and Public Information Back-up Route Alerting - Thompson Fire Department

The State and local organizations demonstrated knowledge of their emergency response plans and procedures and adequately implemented them. There were no Deficiencies. Two Areas Requiring Corrective Action (ARCAs) were identified for Lake County. The first ARCA was related to Criterion 1.c.1: Direction and Control. When Lake County Officials staff received notification that a release at the PNPP began at 1202 hours exceeding Protective Action Guides, this information was not passed on to the staff in the Operations Room. The second ARCA identified was related to Criterion 4.a.3: Plume Phase Measurement and Analysis of Equipment. A small zip lock plastic bag containing the (AgZ) cartridge was placed on the surface designated for potentially contaminated articles and when moved, no attempt was made to ensure that the outside of the bag had not become contaminated. Sample handling and contamination control was successfully re-demonstrated.

One ARCA was identified for Ashtabula County. The ARCA identified was related to Criterion 3.a.1: Implementation of Emergency Worker Exposure Control. The Radiological Officer's briefing to the Public Information Officer, who was leaving the emergency operations center and traversing the emergency planning zone, did not address the following elements: frequency for reading the Direct Reading Dosimeters, maximum radiation exposure limits, and procedures to followed at the conclusion of the emergency or mission. At the conclusion of the exercise the Radiological Officer successfully re-demonstrated a dosimetry briefing that included the information previously omitted.

One prior ARCA for Geauga County identified in Issue: 47-02-6.a.1-A-03, Criterion 6.a.1: Monitoring and decontamination of registration of evacuees and emergency worker. Interviewing the monitoring personnel and their supervision at that time revealed that they did not know the amount of contamination in mR/hr was needed to comply with their procedure and the Geauga County Plan. This ARCA was corrected during this exercise.

II. INTRODUCTION

On December 7, 1979, the President directed DHS/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.

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

DHS/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 DHS/FEMA Region V Regional Assistance Committee (RAC) which is chaired by DHS/FEMA. Formal submission of the RERPs for the Perry Nuclear Power Plant to DHS/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 DHS/FEMA on June 17, 1994, under 44 CFR 350.

A REP exercise was conducted on October 5, 2004, by DHS/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 DHS/FEMA Region V RAC Chairperson, and approved by the Regional Director.

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

- NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980;
- FEMA-REP-14, "Radiological Emergency Preparedness Exercise Manual," September 1991; and
- FEMA "Radiological Emergency Preparedness: Exercise Evaluation Methodology," as published in the Federal Register Notice/Vol. 67, No. 80, 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 October 5, 2004, 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. The 2000 census approximates the population to be 102,920 residents currently within the 10-mile emergency planning zone (EPZ); 13, 591 are residents of Geneva and Harpersfield Townships in Ashtabula County with an estimated 1,930 in Geauga County.

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 October 5, 2004.

STATE OF OHIO

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

RISK JURISDICTIONS

LAKE COUNTY

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 General Health District
Lake County Sheriff's Department
Concord Fire Department
Perry Township Fire Department
Willoughby Fire Department
Fairport School District
Madison School District
South High School
Lake West Hospital
Ohio State Highway Patrol

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
Harpersfield Township Fire Department
Saybrook Fire Department

Saybrook Elementary School
Ohio State Highway Patrol

GEAUGA COUNTY

Geauga County Emergency Operations Center Staff
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
Thompson Township Fire Department
Bainbridge Fire Department
Newbury Fire Department
Newbury School District

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 October 5, 2004. Also, included are times notifications were made to the participating jurisdictions/functional entities.

TABLE 1. EXERCISE TIMELINE

DATE AND SITE: October 5, 2004 Perry Nuclear Power Plant

Emergency Classification Level or Event	Time Utility Declared	Time That Notification Was Received or Action was Taken					
		State Assessment Room	Ohio State	Lake County	Ashtabula County	Geauga County	JPIC
Unusual Event	0800	0805	0810	0810	0810	0810	NA
Alert	0820	0828	0828	0828	0828	0828	NA
Site Area Emergency	0937	0952	0952	0952	0952	0952	0945
General Emergency	1202	1214	1214	1214	1214	1214	1217
Simulated Release of Radio Active Materials Started	1200	1202	1206	1209	1209	1209	1208
Simulated Release of Radio Active Materials Terminated	1425	1428	1434	NA	NA	NA	NA
Facility Declared Operational		0930	1040	0933	0912	0839	1035
Declaration of State of Disaster Emergency (State and Local)		1000	0955	0955	0955	0955	1027
Exercise Terminated: Plume Pathway Phase		1428	1430	1430	1432	1442	1430
Early Precautionary Actions: Daycare, nurseries, and preschools closed		NA	NA	NA	1010	NA	NA
Early Precautionary Actions: Animals on stored feed and protected water out to 10-miles		1007	1035	1037	1037	1037	1045
1 st Protective Action Decision							
Evacuate Sub-areas 1,2,3,5,6 and Lake Erie out to 10-miles		1226	1218	1218	1219	1218	1218
Sub-areas 4 and 7 go inside and listen to local EAS							
1st Siren Activation		NA	NA	1228	NA	NA	NA
1st EAS		NA	NA	1231	NA	NA	NA
2 nd Protective Action Decision							
Evacuate 1,2,3,4,5,6 and Lake Erie out to 10-miles		1342	1348	1348	1348	1348	1400
Sub-Area 7 go inside and listen to local EAS							
2nd Siren Activation		NA	NA	1358	NA	NA	NA
2nd EAS		NA	NA	1401	NA	NA	NA
KI Administration Decision: Emergency Workers out to 10 miles		1207	NA	NA	NA	NA	NA
KI Administration Decision: General Public and Emergency Workers in Sub-areas 1,2,3,5,6		NA	1218	1218	1219	1218	NA
KI Administration Decision: General Public and Emergency Workers in Sub-Area 4		NA	1348	1348	1348	1348	NA

LEGEND: S – Support Jurisdiction D – Decision Making Jurisdiction A – Activating Jurisdiction N/A – Not Applicable

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 October 5, 2004, 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 exercise criteria contained in FEMA "Radiological Emergency Preparedness: Exercise Evaluation Methodology," as published in the Federal Register Notice/Vol. 67, dated No. 80, dated April 25, 2002. 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 is 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)
- Blank - Not scheduled for demonstration

11

JURISDICTION/FUNCTIONAL ENTITY	1a	1b	1c	1d	1e	2a	2b	2c	2d	2e	3a	3b	3c	3d	3e	3f	4a	4a2	4a3	4b	4c	5a	5a2	5a3	5b	6a	6b	6c	6d		
ASHTABULA COUNTY																															
Initial Notification Point	M			M																											
Ashtabula County Emergency Operations Center	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		M																	
Back-up Route Alerting											M	M													M						
Monitoring/Decon Center- Emergency Workers - Vehicles Saybrook Elementary School					M							M																		M	
Monitoring/Decon Center- Emergency Workers Saybrook Elementary School		M									M																			M	
GEAUGA COUNTY																															
Initial Notification Point	M			M																											
Gauga County Emergency Operations Center	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																	
Monitoring/Decon/Regis - Public Newbury High School		M			M						M	M																	M		
Back-up Route Alerting				M	M						M	M													M						
Congregate Care Center/Registration Newbury High School																															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

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 were 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 was 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 in adequacy of organizational performance in an exercise that is not considered, by

itself, to adversely impact public health and safety."

DHS/FEMA has developed a standardized system for numbering exercise issues (Deficiencies and ARCAs). This system is used to achieve consistency in numbering exercise issues among DHS/FEMA Regions and site-specific exercise reports within each Region. It also 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** – An alpha and two-digit number corresponding to the criterion in as published in the Federal Register Notice/Vol. 67, No. 80, dated April 25, 2002, which amends FEMA-REP14, Radiological Emergency Preparedness Manual.
- **Issue Classification Identifier** - (D = Deficiency, A = ARCA)
Only Deficiencies and ARCAs are included in exercise reports.
Plan issues are reported to the State(s) via 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: 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.1, 2.b.2, 3.b.1, 5.a.1. and 5.b.1.
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION: 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, 2.b.2, 3.a.1, 3.b.1. and 3.d.1
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION: NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ARCAs - RESOLVED: NONE
- f. PRIOR ARCAs - UNRESOLVED: NONE

1.3 Joint Public Information Center

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

1.4 Emergency Operations Facility

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

1.5 Field Monitoring Team I

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

1.6 Field Monitoring Team II

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

1.7 State Communications Van

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

1.8 Sample Screening Point

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

1.9 Lake County Field Team Manager

- a. MET: Criterion 4.a.2.
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION: 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: Criteria 1.a.1 and 1.d.1.
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION: 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.e.1, 1.d.1, 2.a.1, 2.b.2, 2.c.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 4.a.2, 5.a.1. and 5.b.1.
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION: 1.c.1.

Issue Number: 47-04-1.c.1-A-01

Condition: In the Operations Room, the Operations Officer, and at various times throughout the exercise, the Emergency Management Agency Director or the Assessment Center Coordinator briefed the Operations Group staff of actions being taken by the County. However, when Lake County Officials staff received notification that a release at the Perry Nuclear Power Plant (PNPP) began at 1202 hours, exceeding Protective Action Guides, this information was not passed on to the staff in the Operations Group.

Possible Cause: No mechanism is in place to remind those who brief the Operations Group that release data needs to be provided in a timely fashion.

Reference: NUREG-0654, A.1.d; 2.a,b

Effect: Operations Group Staff could make inappropriate decisions based upon the lack of current release data from the Utility which could affect the public's health and safety.

Recommendation: Placement of a notification of a "release" in an obvious location in the Operations Room.

Schedule of Corrective Action: Lake County will ensure a sign is placed in the Operations Room that can be activated when there is a "release in progress" and that will have an audible alarm and be visible to the entire room.

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

2.1.3 Joint Public Information Center

- a. **MET:** Criteria 1.c.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**

2.1.4 Traffic and Access Control

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

2.1.5 Lake County Field Monitoring Team I

- a. **MET:** Criteria 1.d.1, 3.b.1. and 4.a.3
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION (ARCA):** 4.a.3

Issue Number: 47-04-4.a.3-A-02

Condition: A small zip lock plastic bag containing the (AgZ) cartridge was placed on the surface designated for potentially contaminated articles. When the bag was picked up to be placed in the counter, no attempt was made to ensure that that the outside of the bag had not become contaminated.

Possible Cause: The team member was focusing on the fact that the cartridge was possibly internally contaminated, and therefore should be with the contaminated items and forgot about the contamination barrier that had just been established by putting the cartridge inside of the plastic bag. The team member was also focusing on that gamma radiation was being counted and would penetrate the bag.

Reference: NUREG-0654, I.8, 9, 11.

Effect: Contamination of the detector and counter could have occurred. The team member used the same gloved hand, presuming that this hand was “clean”, to place the new air filter and AgZ cartridge into the air sample assembly. These items could have become contaminated. The contamination would have been recorded as positive readings on the next sample.

Corrective Action Demonstrated: Sample handling and contamination control was successfully re-demonstrated by Lake County Field Monitoring Team I members on October 7, 2004, at 110 hours, at the Lake County Emergency Operations Center. The AgZ cartridge was removed from the sampling probe by the member with the “dirty hands.” The team member with the “clean hands” held the small plastic zip-lock bag open as the AgZ cartridge was placed into the bag. The bag was sealed and placed directly onto the counter.

Results of the field measurements were transmitted to the Field Monitoring Team Coordinator using the 800 MHz radio system. Results were established by controller inject.

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

2.1.6 Lake County Field Monitoring Team II

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

2.1.7 Monitoring/Decontamination - Public South High School

- 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

2.1.8 Congregate Care Center/Registration South High School

a. MET: Criterion 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

2.1.9 School District Madison School

a. MET: Criteria 1.e.1, 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

2.1.10 School District Fairport School

a. MET: Criteria 1.e.1, 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**

2.1.11 Back-up Route Alerting

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

2.1.12 Medical Services – Transportation Perry Nuclear Power Plant

- a. **MET: Criteria 1.d.1, 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: NONE**
- f. **PRIOR ARCAs - UNRESOLVED: NONE**

2.1.13 Medical Services – Facilities Lake West Hospital

- a. **MET: Criteria 1.d.1, 1.e.1, 3.a.1.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

2.2 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
- d. 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.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 2.c.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.2, 5.a.1.and 5.b.1.
- b. DEFICIENCY: NONE
- c. AREAS REQUIRING CORRECTIVE ACTION (ARCA): 3.a.1.

Issue Number: 47-02-3.a.1.-A-03

Condition: The Radiological Officer's (RO) briefing to the Public Information Officer (PIO), who was leaving the emergency operations center and traversing the emergency planning zone, did not address the following elements: frequency for reading the Direct Reading Dosimeters, maximum radiation exposure limits, and procedures to followed at the conclusion of the emergency or mission.

Possible Cause: The RO did not use available informational checklists when giving his briefing.

Effect: The PIO, traversing the emergency planning zone, was not provided with a briefing on how to manage his radiological exposure. Therefore he could have been exposed to radioactive materials without his knowledge of his exposure rates.

Corrective Action Demonstrated: At the end of the exercise, at 1430 hours, the Radiological Officer re-demonstrated his briefing to a Controller acting in the role of the PIO. The briefing included the information previously omitted, was accurate, and complete. Therefore, the issue was successfully resolved during the re-demonstration.

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

2.2.3 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**

2.2.4 Traffic and Access Control Points

- a. **MET: Criteria 1.d.1, 1.e.1, 3.a.1, 3.a.b. 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**

2.2.5 Back-up Route Alerting

- a. **MET: Criteria 3.a.1, 3.b.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**

**2.2.6 Monitoring and Decontamination Center – Emergency Workers - Vehicles
Saybrook Elementary School**

- a. **MET: Criteria 1.e.1, 3.b.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**

**2.2.7 Monitoring and Decontamination Center - Emergency Workers
Saybrook Elementary School**

- a. **MET: Criteria 1.b.1, 3.a.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**

2.3 GEAUGA COUNTY

2.3.1 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 - RESOLVED:** NONE

2.3.2 Geauga County Emergency Operations Center

- a. **MET:** Criteria 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 2.c.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.2, 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:** 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.e.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 Newbury High School

- a. MET: Criteria 1.b.1, 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-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.

Corrective Action Demonstrated: The monitoring personnel were interviewed and knew that the contamination action level was 300 counts per minute above

background with a CD V – 700RP or 0.1 mR/hr above background with a CD V - 700. The second phase of initial monitoring (for levels on shoes) used the CD V-700RP and performed this function adequately.

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

2.3.6 Back-up Route Alerting

- a. **MET: Criteria 1.d.1, 1.e.1, 3.a.1, 3.b.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**

2.3.7 Congregate Care Center/Registration Newbury High School

- a. **MET: Criterion 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 ³ /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 October 5, 2004. Evaluator Team Leaders are indicated by the letters "(TL)" after their names. The organization which each evaluator represents is indicated by the following abbreviations:

DHS/FEMA	-	Federal Emergency Management Agency
ICF	-	ICF Consulting Inc.
EPA	-	U. S. Environmental Protection Agency
FHWA	-	Federal Highway Administration

<u>EVALUATION SITE</u>	<u>EVALUATOR</u>	<u>ORGANIZATION</u>
Exercise Director	Gary Naskrent	DHS/FEMA
Site Specialist	Terri Connors-Hartman	DHS/FEMA
STATE OF OHIO		
Roy Smith (TL)	Evaluator	DHS/FEMA
Hollis Berry	Evaluator	ICF
Earnest Boaze	Evaluator	ICF
Terry Blackman	Evaluator	ICF
Deborah Blunt	Evaluator	ICF
Richard Grundstrom	Evaluator	ICF
Harry Harrison	Evaluator	ICF
Larry Jensen	Evaluator	EPA
James McClanahan	Evaluator	ICF
LAKE COUNTY		
Terri Connors- Hartman (TL)	Evaluator	DHS/FEMA
Rowena Argall	Evaluator	ICF
Hollis Berry	Evaluator	ICF
Walter Gawlick	Evaluator	ICF
Jan Jackson	Evaluator	ICF
AL Lookabough	Evaluator	ICF
Paul Nied	Evaluator	ICF
Patrick Taylor	Evaluator	ICF
Larry Visniesky	Evaluator	ICF
ASHTABULA COUNTY		
Sandra Bailey (TL)	Evaluator	DHS/FEMA
Terry Blackman	Evaluator	ICF
Paul Nied	Evaluator	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 October 5, 2004, extent-of-play agreement approved by FEMA Region V on September 30, 2004.

The exercise criterion, contained in FEMA "Radiological Emergency Preparedness Exercise Evaluation Methodology," as published in the Federal Register Notice/Vol. 67, dated No. 80, dated April 25, 2002, 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

FULL PARTICIPATION EXERCISE

EXTENT OF PLAY AGREEMENT

State of Ohio

OCTOBER 5, 2004

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 24-hour phone line. Once the SEOC Assessment Room is activated all phone communications will be received there. SEOC personnel will notify and mobilize State agencies to respond at the appropriate Emergency Classification Level (ECL) in accordance with procedures. The following State Agencies will participate in the exercise:

American Red Cross	Ohio Dept of Public Safety/Highway Patrol
Attorney General's Office	Ohio Emergency Management Agency
Governor's Office	Ohio Dept of Mental Health
Ohio Dept of Agriculture	Ohio Dept of Natural Resources
Ohio Dept of Health	Ohio Dept of Transportation
Ohio National Guard	Ohio Environmental Protection Agency
Ohio Dept of Insurance	Ohio Dept of Job and Family Services
Public Utilities Commission of Ohio	

State personnel who staff field positions will be pre-positioned. These functions are:

- Communications Van
- Emergency Operations Facility
- Field Monitoring Teams
- Field Sample Screening Point
- Joint Public Information Center
- County Liaison

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

Extent of Play

The baseline exercise for demonstration of this criterion was conducted in April 2002. 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 Operations Officer will conduct periodic briefing for the SEOC Operations Room staff. 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. The state will demonstrate the use of dosimetry and potassium iodide supplies during the state field team demonstrations.

The baseline for the State EOC, including Assessment Room, was established in April 2002.

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 consider PAGs and Administrative Limits to develop recommendations, including KI, based on their technical evaluation of the available data. Recommendations will be forwarded to the State Field Monitoring Teams and 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 designee will demonstrate the ability to make appropriate protective action recommendations based on technical information from the EOC Assessment Room. Recommendations concerning the use of KI for the general public and emergency workers are the responsibility of the Ohio Department of Health. They are made in the SEOC Dose Assessment Room and will accompany the protective action recommendation.

Coordination will take place in the Executive Room with Ashtabula, Geauga and Lake Counties to ensure consideration of local needs. After the decision is made, counties will disseminate protective actions to the general public.

At least two (2) Protective Action Decisions will be demonstrated.

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

Direct reading dosimeters and KI will be issued to State of Ohio workers who have assignments in the 10-mile EPZ. The Field Monitoring Team Leader will record the exposure of the Field Monitoring Teams, Communications Van and Sample Screening Point. All State field activities are pre-positioned.

If the scenario does not provide for the demonstration of turn back limits, turn back values will be covered by interview with the evaluator.

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

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

Two Field Monitoring Teams (FMTs) will participate in the exercise. The teams will be demonstrated out-of-sequence *at the Lake County EOC 10:00 AM on October 4th*. FMTs will be fully equipped to perform field measurements and will function in accordance with their SOPs. However, charcoal cartridges will be used in the air samplers instead of the more costly silver zeolite filters. Samples will be taken to the Field Sample Screening point, but will not be transported to the lab in Columbus.

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

FMTs will be demonstrated *out-of-sequence at 10:00 AM on October 4th*. They will receive information about predicted plume location and direction, travel speed, and exposure control procedures by controller messages to the FMT Leader. Controllers will provide FMT radiation readings to the State Dose Assessment Room during the plume phase demonstration.

Chain of Custody will be demonstrated by the use of forms that are filled out by FMTs and passed on to the Sample Screening Point when samples are dropped off.

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.

Measurements will be made by Department of Health/Ohio EMA FMTs in accordance with their Standard Operating Procedures (SOPs). Two mobile monitoring teams will demonstrate ambient radiation monitoring, radioiodine and particulate sampling. FMTs will be equipped with appropriate dosimetry and KI. The FMT Leader will direct each team from the Columbiana County EOC. FMTs will perform radiation measurements and air samples. Readings will be reported to the FMT Leader and samples will be taken to the Sample Screening Point. In place of silver zeolite cartridges, charcoal cartridges will be used for the exercise. *Evaluators will meet the FMTs at the Lake County EOC at 10:00 AM on October 4th*. Controllers will provide FMT radiation readings to the State Dose Assessment Room during the plume phase demonstration.

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 Ashtabula, Geauga and Lake 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 at the State EOC and driven by controller injects. Public Inquiry will address an average of 3 calls per hour once Site Area Emergency is declared for two (2) hours. Trends in rumors will be identified and responded to as needed.

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
October 4, 2004**

**Perry Nuclear Power Plant
Lake County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

The exercise will take place on October 5, 2004.

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:

Concord Fire District – Back-up Route Alerting
Willoughby Fire Department – Public Monitoring & Decontamination
Fairport School District – Risk School
Madison School District – Risk School
American Red Cross – Care Center
Lake County General Health District Field Monitoring Teams
Lake West Hospital - Medical Services (MS-1)
Lake County Sheriff's Department – Traffic/Access Control – at EOC
Ohio State Highway Patrol – Traffic/Access Control – at EOC
Perry Twp. Fire Department – Medical Services Transportation
South High School – Care Center

Perry Nuclear Power Plant
Lake County
October 2004 Evaluated Exercise
Extent-of-Play Agreement

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

Extent of Play

Participating facilities other than the EOC and Sheriff's Dispatch Office will be evaluated during this exercise in order to establish a baseline. The EOC and Sheriff's Dispatch Office were evaluated during the 2002 Exercise.

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, Agency SOP 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

Baselines were established during the 2002 Exercise for the EOC maps, displays and equipment.

**Perry Nuclear Power Plant
Lake County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

During 2003, KI was pre-distributed to the general public at designated locations by the Ohio Department of Health (ODH) through the local health department. Additional KI is stockpiled at the EOC and would be transported to the care centers by the local health department and distributed by the local health department, as requested.

Dosimetry and KI have been pre-distributed to Offsite Response Organizations (OROs); the monitoring kits and dosimetry are exchanged annually by the State of Ohio. Supporting documentation is included in the Annual Letter of Certification.

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.

The Director, or designee, of the Ohio Department of Health (ODH) makes the decision for the general public and emergency workers to take KI.

**Perry Nuclear Power Plant
Lake County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

The ODH, through the local health departments makes KI available to the general public, by pre-distribution and by supplies available for distribution at the time of the emergency at care centers.

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

N/A – This criterion was successfully demonstrated during the 2002 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 Lake 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.

**Perry Nuclear Power Plant
Lake County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

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 and to the general public, if they chose to pick it up at designated centers. 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 EMA.

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 4 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 supervisor and 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

**Perry Nuclear Power Plant
Lake County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

schools in the EPZ will be notified as identified in Criterion 1.a.1, Extent of Play. There will be no movement of buses or students.

Field Agency Participants:

Fairport School District – Superintendent and Principal Only
Madison 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

A representative of the Lake County Sheriff's Department (Law Enforcement Coordinator) and a representative of the Ohio State Highway Patrol (OSHP) will demonstrate Traffic and Access Control by interview at the Lake County EOC during the exercise. 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.

**Perry Nuclear Power Plant
Lake County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

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

N/A – This criterion was successfully demonstrated during the 2002 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

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.

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.

**Perry Nuclear Power Plant
Lake County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

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 quiet 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 Local Primary Station, with the exception that the telephone number to

**Perry Nuclear Power Plant
Lake County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

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

The Concord Fire Department will demonstrate back-up route alerting as an out-of-sequence, propositioned field activity. One predetermined siren located in Concord Township will not sound (simulated) and back-up route alerting will be conducted in the siren coverage area. Use of the mobile PA system will be simulated. The demonstration will be initiated by the exercise controller.

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

**Perry Nuclear Power Plant
Lake County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

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:

Willoughby Fire Department
South High School
American Red Cross

Extent of Play

Willoughby Fire Department will demonstrate the evacuee portion of this criterion out-of-sequence at South High School, 5000 Shankland Road, Willoughby. 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. Set-up of care center equipment and/or supplies will be at the discretion of the American Red Cross Disaster Action Team Leader.

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.

**Perry Nuclear Power Plant
Lake County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

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 South High School, 5000 Shankland Road, Willoughby. 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.

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
October 4, 2004**

**Perry Nuclear Power Plant
Ashtabula County
October 2004 Evaluated Exercise
Extent of Play Agreement**

The exercise will take place on October 5, 2004.

Criteria that can be re-demonstrated immediately for credit, by a 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:

Harpersfield Township Fire Department – Back-up Route Alerting
Saybrook Fire Department – Emergency Worker Monitoring/Decon
Saybrook Elementary School – Emergency Worker Monitoring/Decon Station
Ashtabula County Sheriff's Department – Traffic/Access Control – at EOC

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

Extent of Play

Participating facilities other than the EOC and Sheriff's Dispatch Office will be evaluated during this exercise in order to establish a baseline. The EOC and Sheriff's Dispatch Office were evaluated during the 2002 Exercise.

**Perry Nuclear Power Plant
Ashtabula County
October 2004 Evaluated Exercise
Extent of Play Agreement**

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, Agency SOP 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

Baselines were established during the 2002 Exercise for the EOC maps, displays and equipment.

During 2003, KI was pre-distributed to the general public at designated locations by the Ohio Department of Health (ODH) through the local health department. Additional KI is stockpiled at the EOC and would be transported to the care centers by the local health department and distributed by the local health department, as requested.

Dosimetry and KI have been pre-distributed to Offsite Response Organizations (OROs); the monitoring kits and dosimetry are exchanged annually by the State of Ohio. Supporting documentation is included in the Annual Letter of Certification.

Perry Nuclear Power Plant
Ashtabula County
October 2004 Evaluated Exercise
Extent of Play Agreement

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.

**Perry Nuclear Power Plant
Ashtabula County
October 2004 Evaluated Exercise
Extent of Play Agreement**

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. The Director, or designee, of the Ohio Department of Health makes the decision for the general public and emergency workers to take KI.

The ODH through the local health departments makes KI available to the general public, by pre-distribution and by supplies available for distribution at the time of the emergency at care centers.

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 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 - 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

N/A – This criterion was successfully demonstrated during the 2002 Exercise.

Perry Nuclear Power Plant
Ashtabula County
October 2004 Evaluated Exercise
Extent of Play Agreement

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 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. Ashtabula County's preparedness measures for KI include pre-distribution to emergency response agencies and the general public, if they chose to pick it up at designated centers. 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.

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

**Perry Nuclear Power Plant
Ashtabula County
October 2004 Evaluated Exercise
Extent of Play Agreement**

of the EPZ will be simulated. The Ashtabula County EMA maintains a list of special needs residents within the Ashtabula County portion of the EPZ. 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

N/A – Ashtabula County will not demonstrate this Criterion. It was demonstrated in 2002 by the Geneva School District, the only Ashtabula County EPZ 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

A representative of the Sheriff's Department (Law Enforcement Coordinator) will demonstrate Traffic and Access Control by interview at the Ashtabula EOC during the exercise. 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

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.

**Perry Nuclear Power Plant
Ashtabula County
October 2004 Evaluated Exercise
Extent of Play Agreement**

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

N/A - This criterion was successfully demonstrated during the 2002 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

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

**Perry Nuclear Power Plant
Ashtabula County
October 2004 Evaluated Exercise
Extent of Play Agreement**

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.

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.

**Perry Nuclear Power Plant
Ashtabula County
October 2004 Evaluated Exercise
Extent of Play Agreement**

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 quiet 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 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 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)

**Perry Nuclear Power Plant
Ashtabula County
October 2004 Evaluated Exercise
Extent of Play Agreement**

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

Harpersfield Township Fire Department will demonstrate back-up route alerting as an out-of-sequence, pre-positioned field activity. One pre-determined siren located in Harpersfield 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. The demonstration will be initiated by the exercise controller.

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

**Perry Nuclear Power Plant
Ashtabula County
October 2004 Evaluated Exercise
Extent of Play Agreement**

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:

Saybrook Fire Department
Saybrook Elementary School

Extent of Play

Saybrook Fire Department will demonstrate the emergency worker facility out-of-sequence at Saybrook Elementary School, Saybrook Township. 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

Saybrook Township Fire Department will demonstrate the emergency worker facility out-of-sequence at Saybrook Elementary School, Saybrook Township. Vehicle monitoring will be demonstrated by interview. If requested, 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

**Perry Nuclear Power Plant
Ashtabula County
October 2004 Evaluated Exercise
Extent of Play Agreement**

been monitored for contamination and have been decontaminated as appropriate prior to entering congregate care facilities.

Extent of Play

N/A – Ashtabula County has 2 care centers. The American Red Cross (ARC) successfully demonstrated this criterion at the Edgewood H. S. Care Center in 2002. The ARC will demonstrate at Conneaut Middle School in the 2006 Exercise.

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
October 4, 2004**

**Perry Nuclear Power Plant
Geauga County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

The exercise will take place on October 5, 2004.

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:

Newbury Fire Department – Public Monitoring & Decontamination
Newbury School District – Care Center
American Red Cross – Care Center
Thompson Township Fire Department – Back-Up Route Alerting
Geauga County Sheriff's Office – Traffic/Access Control – at EOC
Bainbridge Fire Department - to clear ARCA – Issue No.:47-02-6.a.1-A-03

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

Extent of Play

Participating facilities other than the EOC and Sheriff's Office will be evaluated during this exercise in order to establish a baseline. The EOC and Sheriff's Office were evaluated during the 2002 Exercise.

**Perry Nuclear Power Plant
Geauga County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

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, Agency SOP 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

Baselines were established during the 2002 Exercise for the EOC maps, displays and equipment.

During 2003, KI was pre-distributed to the general public at designated locations by the Ohio Department of Health (ODH) through the local health department. Additional KI is stockpiled at the EOC and would be transported to the care centers by the local health department and distributed by the local health department, as requested.

Dosimetry and KI have been pre-distributed to Offsite Response Organizations (OROs); the monitoring kits and dosimetry are exchanged annually by the State of Ohio. Supporting documentation is included in the Annual Letter of Certification.

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

**Perry Nuclear Power Plant
Geauga County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

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. The Director, or designee, of the Ohio Department of Health (ODH) makes the decision for the general public and emergency workers to take KI.

The ODH through the local health department makes KI available to the general public, by pre-distribution and by supplies available for distribution at the time of the emergency at care centers.

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.

**Perry Nuclear Power Plant
Geauga County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

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

N/A – This criterion was successfully demonstrated during the 2002 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 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 and to the general public, if they chose to pick it up at designated centers. 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

**Perry Nuclear Power Plant
Geauga County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

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 2 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

N/A – Geauga County will not demonstrate this criterion. It was demonstrated in 2000 by the Ledgemont School District, the only Geauga County EPZ 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

A representative of the Geauga County Sheriff's Office (Sheriff's Designate) will demonstrate Traffic and Access Control by interview at the Geauga County EOC during the exercise. 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.

**Perry Nuclear Power Plant
Geauga County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

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

N/A - This criterion was successfully demonstrated during the 2002 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

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.

**Perry Nuclear Power Plant
Geauga County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

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

**Perry Nuclear Power Plant
Geauga County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

appropriate Emergency Alert System (EAS) message and simulate sounding the sirens and sending the message over the EAS system. A quiet 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 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

The Thompson Volunteer Fire Department will demonstrate back-up route alerting as an out-of-sequence, pre-positioned field activity. One pre-determined siren located in Thompson Township will be out-of-service (simulated) and back-up route alerting will be conducted in the siren coverage area. Use of the mobile PA system will be simulated. The demonstration will be initiated by the exercise controller.

**Perry Nuclear Power Plant
Geauga County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

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:

Newbury Volunteer Fire Department
Newbury High School
American Red Cross

Bainbridge Fire Department – Representative for interview to clear the ARCA –
Issue No.:47-02-6.a.1-A-03

Extent of Play

**Perry Nuclear Power Plant
Geauga County
October 2004 Evaluated Exercise
Extent-of-Play Agreement**

Newbury Volunteer Fire Department will demonstrate the evacuee portion of this criterion out-of-sequence at Newbury High School, 14775 Auburn Road, Newbury 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. Set-up of care center equipment and/or supplies will be at the discretion of the American Red Cross Disaster Action Team Leader.

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.

ARCA – Issue No.: 47-02-6.a.1-A-03

A representative of the Bainbridge Fire Department will be available for interview by the Evaluator the night of the Newbury High School demonstration to clear this issue. The representative will discuss the monitoring process to demonstrate awareness of the value that indicates a person is contaminated. No actual demonstration of monitoring will take place.

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 – Geauga 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 Newbury High School, 14775 Auburn Road, Newbury 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.

Perry Nuclear Power Plant
Geauga County
October 2004 Evaluated Exercise
Extent-of-Play Agreement

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 October 5, 2004

This exercise scenario was submitted by the State of Ohio and First Energy Corporation, and approved by FEMA Region V on September 30, 2004.

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 Initial conditions have been established in the Control Room Simulator. The 2004 ERO Team "A" Drill commences following the announcement from the Simulator.

Preparation being made to raise reactor power to 100%.

0735 Fire

0750 The Shift Manager declares an **Unusual Event using EPI-A1, initiating condition FU-1, Fire within a Safe Shutdown Building NOT extinguished within 15 minutes.**

0805 Report from the field that an earthquake was felt. (First Earthquake)

0807 CDR A trips due to suction filter diff. Press.
Crew dispatches NLOs to swap suction filters.

0820 Contaminated Injured person

0820 The Shift Manager declares an **Alert using EPI-A1, initiating condition LA-1, Natural OR destructive phenomena affecting Safe Shutdown Buildings Failure, or OS-1, Emergency Coordinator Judgment.**

Upon declaring the Alert, the Shift manager should activate the Technical Support Center (TSC), Operations Support Center (OSC), and Public Information Response Team (PIRT).

0920 Report from the field that another earthquake is felt. (Second Earthquake)

0920 Reactor scram due to loss of scram air pressure. On the scram, all control rods do not insert. Operators take actions per PEI-B13, RPV Control (ATWS), and power stabilizes at ~8%

0925 SLC will be initiated – SLC-A pump is defective and does not start. SLC-B will start but will not inject due to pipe break.

0935 The Shift Manager declares a **Site Area Emergency using EPI-A1, initiating condition CS-1, Failure to initiate or complete an automatic Reactor Scram once an RPS function is required, AND a manual Scram was NOT successful, or OS-1, Emergency Coordinator Judgment.**

Upon declaring the SAE, THE Shift Manager should activate the Emergency Operations Facility (EOF) and the Joint Public Information Center (JPIC).

~0935 Operator actions taken per PEI: SPIs 1.1-1.8 are successful in shutting down the reactor.

1130 Mode select will only allow individual mode, insert can only be accomplished using the insert pushbutton (in timer skip is not working. 1C11F0003 PCV fails as is.

~1130 A steam leak develops in the STM Tunnel causing an MSIV isolation signal and initiation of the 29 minute RCIC isolation timer on high temperature. MSL B fails to isolate with 1B21F0022B & 1B21F0028B fail to close. 1N11F0020B will not close.

The failure of the 1B21F0022B, 1B21F0028B & 1N11F0020B close and isolate the steam line break results in a challenge of the Reactor Coolant System (RCS) and a loss of the Containment barrier, resulting in a second event classifiable (AS3) as a SITE AREA EMERGENCY.

- 1200 Report from the field that another earthquake is felt. (Third Earthquake)
- 1200 LOCA initiates leads to ED not able to maintain level >-2" or not able to maintain PSP – (Third Earthquake)

~1215 The event classification should be escalated to a **GENERAL EMERGENCY** per EPI-A1, **Initiating Condition:**

1. AGI, "Loss of two barriers, AND a loss or challenge to the third barrier" OR
2. HG-1, "Site Boundary Release Limits" OR
3. OG-1, "Emergency Coordinator Judgement.

Based on the wind direction of 329 degrees, wind speed of 6mph the General Emergency default recommendation of EVACUATION Sub-areas 1, 2, 3, 5 & 6 should be recommended.

1330 PAR change based on stability and wind direction change – 325 degrees EVACUATION Sub-areas 1, 2, 3, 4, 5 & 6 should be recommended.

1400 Offsite release plume has dissipated. Preliminary plant re-entry/recovery discussions should focus on actions required to terminate from the Emergency Phase and entry into the Recovery Phase.

STATE AND LOCAL PARTICIPATION IS TERMINATED