



FEMA

OCT 24 2008

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

To Whom It May Concern:

Enclosed is one copy of the Final Report for the June 24, 2008, Radiological Emergency Preparedness (REP) Partial Participation Plume Exposure Pathway Exercise for the Beaver Valley Power Station. The State of Ohio, Columbiana County, and the utility owner/operator, FirstEnergy Nuclear Corporation, participated in this exercise.

No Deficiencies were identified for any jurisdiction during this exercise. There were no Areas Requiring Corrective Action (ARCAs) identified for the State of Ohio.

There were two ARCAs identified during this exercise for Columbiana County. One of the two ARCAs was successfully re-demonstrated. One ARCA remains unresolved.

The first ARCA for Columbiana County (issue # 03-08-3.a.1-A-01) was identified under Criterion 3.a.1 - Emergency Worker Exposure Control, whereby the West Point Fire Department monitoring teams were incorrectly briefed in regards to the use of Potassium Iodide (KI) instructions. This ARCA was successfully re-demonstrated.

The second ARCA for Columbiana County (issue # 03-08-6.b.1-A-02) was identified under Criterion 6.b.1 - Monitoring & Decontamination of Emergency Worker Equipment, whereby the West Point Fire Department vehicle monitoring team did not demonstrate sufficient knowledge regarding the use of the CD V-700 RP survey instrument. This ARCA remains unresolved.

There were two previous ARCAs from a past exercise for Columbiana County that was scheduled to be corrected during this exercise. One of the previous ARCAs was resolved and one ARCA remains unresolved.

The resolved ARCA for Columbiana County (issue # 03-06-6.a.1-A-04) was identified under Criterion 6.a.1 - Monitoring and Decontamination of Evacuees and Emergency Workers, and Registration of Evacuees, whereby both, the Negley Fire Department and the West Point Fire Department monitoring teams successfully re-demonstrated the proper use of the equipment when monitoring evacuees.

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The unresolved ARCA for Columbiana County (issue # 03-06-5.b.1-A-01) was identified under Criterion 5.b.1 - Emergency Information and Instructions for the Public and the Media, whereby during the 2008 exercise, press releases continued to provide confusing and conflicting information to the public.

A detailed discussion of these issues can be found in Part IV of the Final Report.

Based on the results of the June 24, 2008, exercise, the offsite radiological emergency response plans and preparedness for the State of Ohio and the affected local jurisdiction, site-specific to the Beaver Valley Power Station, can be implemented and are adequate to provide reasonable assurance that appropriate measures can be taken offsite to protect the health and safety of the public in the event of a radiological emergency at the site.

Therefore, the Title 44 CFR, Part 350, approval of the offsite radiological emergency response plans and preparedness for the State of Ohio site specific to the Beaver Valley Power Station, granted on June 15, 1987, remains in effect.

Copies of this Report were transmitted to the DHS/FEMA National Office, Nuclear Regulatory Commission (NRC) Region III, and the State of Ohio.

If you have any questions, please contact William King, Chairman, Regional Assistance Committee, DHS/FEMA, Region V, at (312) 408-5575.

Sincerely,



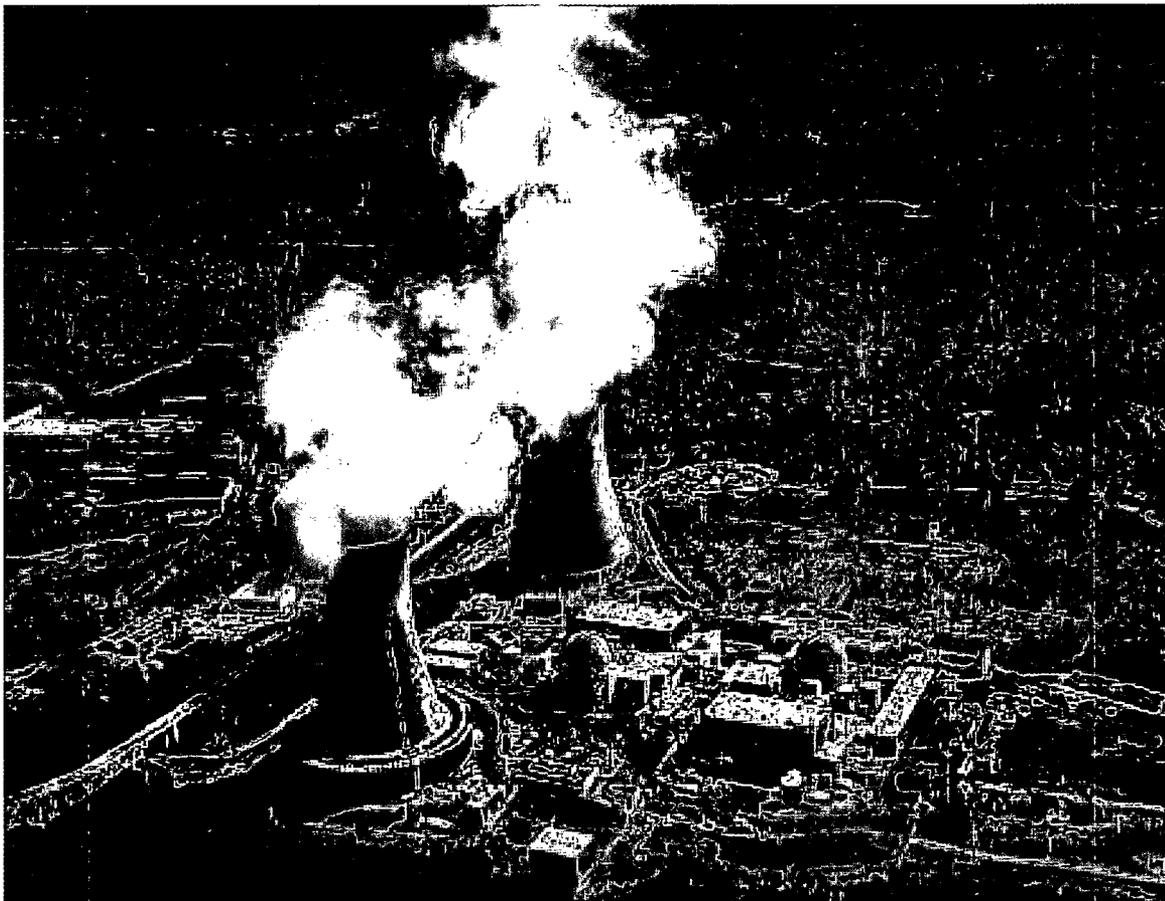
 Edward G. Buikema
Regional Administrator

Enclosure (1)

Beaver Valley Power Station
Exercise Report - 2008-06-24
Final Report - Radiological Emergency
Preparedness (REP) Program
2008-10-17



FEMA





FEMA

Exercise Report

Beaver Valley Power Station

Exercise Date: 2008-06-24

Report Date: 2008-10-17

U.S. DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

REP Program

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1. Executive Summary

On June 24, 2008, a Radiological Emergency Preparedness (REP) Partial Participation Plume Exposure Pathway Exercise was conducted in the 10-mile Emergency Planning Zone (EPZ) around the Beaver Valley Power Station by the U.S. Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA). The purpose of the exercise was to assess the level of preparedness of State and local jurisdictions in responding to a radiological emergency. This exercise was held in accordance with DHS/FEMA policies and guidance concerning the exercise of State and local Radiological Emergency Response Plans (RERPs) and procedures.

The most recent exercise at this site was conducted on June 26-27, 2006. The qualifying emergency preparedness exercise was conducted on November 28, 1984.

DHS/FEMA wishes to acknowledge the efforts of the many individuals in the State of Ohio and Columbiana County, who participated in this exercise 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 Final Report contains the evaluation of the biennial exercise and the evaluation of the following out of sequence activities:

Columbiana County:

- Traffic and Access Control Point (TACP)
- East Liverpool School District School Interview (EV-2)
- Backup Route Alerting
- Route Verification (Interview)
- Evacuee Registration
- Evacuee Monitoring/Decontamination
- Evacuee Vehicle Monitoring/Decontamination
- Emergency Worker Monitoring/Decontamination

Emergency Worker Equipment Monitoring/Decontamination
Temporary Care of Evacuees/Congregate Care Center
Relocation, Re-entry and Return – Decision Making
Relocation, Re-entry and Return – Implementation

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

No Deficiencies were identified for the State of Ohio or for Columbiana County. There were no Areas Requiring Corrective Action (ARCAs) identified during this exercise for the State of Ohio.

There were two ARCAs identified during this exercise for Columbiana County. One of the two ARCA's was successfully re-demonstrated. One ARCA remains unresolved. The first ARCA for Columbiana County was identified under Criterion 3.a.1 - Emergency Worker Exposure Control, whereby the West Point Fire Department monitoring teams were incorrectly briefed in regards to the use of Potassium Iodide (KI) instructions. This ARCA was successfully re-demonstrated.

The second ARCA for Columbiana County was identified under Criterion 6.b.1 - Monitoring & Decontamination of Emergency Worker Equipment, whereby the West Point Fire Department vehicle monitoring team did not demonstrate sufficient knowledge regarding the use of the CD V-700 RP survey instrument. This ARCA remains unresolved.

There were two previous ARCAs from a past exercise for Columbiana County that were scheduled to be corrected during this exercise. One of the previous ARCAs was resolved and one ARCA remains unresolved.

The resolved ARCA for Columbiana County was identified under Criterion 6.a.1 - Monitoring and Decontamination of Evacuees and Emergency Workers, and Registration of Evacuees, whereby both, the Negley Fire Department and the West Point Fire Department monitoring teams successfully re-demonstrated the proper use of the equipment when monitoring evacuees.

The unresolved ARCA for Columbiana County was identified under Criterion 5.b.1 - Emergency Information and Instructions for the Public and the Media, whereby during

the 2008 exercise, press releases continued to provide confusing and inconsistent information to the public.

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

2. Introduction

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

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

DHS/FEMA 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. 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 Regional Assistance Committee (RAC), which is chaired by DHS/FEMA.

Formal submission of the RERPs for the Beaver Valley Power Station to DHS/FEMA Region V by the State of Ohio and involved local jurisdictions occurred on January 23, 1986. Formal approval of these RERPs was granted by FEMA on June 15, 1987, under 44 CFR 350.

A Partial Participation Plume Exposure Pathway REP Exercise was conducted on June 24, 2008, by DHS/FEMA to assess the capabilities of State and local emergency preparedness organizations in implementing their RERPs and procedures to protect the public health and safety during a radiological emergency involving the Beaver Valley Power Station. 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 Evaluation Team, with final determinations made by the DHS/FEMA Region V RAC Chairman, and approved by DHS/FEMA Headquarters.

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

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

Section III of this report, entitled "Exercise Overview," presents basic information and data relevant to the exercise. This section of the report contains a description of the

plume pathway EPZ, a listing of all participating jurisdictions and functional entities 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 criteria at each jurisdiction or functional entity evaluated in a jurisdiction-based, issues-only format. This section also contains: (1) descriptions of all Deficiencies and ARCAs assessed during this exercise, recommended corrective actions, and (2) descriptions of resolved ARCAs assessed during previous exercises and the status of the OROs' efforts to resolve them.

3. Exercise Overview

Contained in this section are data and basic information relevant to the June 24, 2008, Partial Participation Plume Exposure Pathway Exercise to test the offsite response organizations emergency capabilities in the area surrounding the Beaver Valley Power Station. This section of the exercise report includes a description of the 10-mile Plume Exposure Pathway Emergency Planning Zone, and a listing of all participating jurisdictions and functional entities that were evaluated, and a tabular presentation of the time of the actual occurrence of key exercise events and activities.

3.1. EPZ Description

The Beaver Valley Power Station (BVPS) is located 22 miles northwest of Pittsburgh, Pennsylvania and in Northwestern Beaver County, Pennsylvania, immediately on the Ohio River and within five miles of the Ohio-Pennsylvania line. The BVPS was constructed by Stone and Webster along the Ohio River at Shippingport, Pennsylvania and is separate from but adjacent to the Shippingport Atomic Power Station.

The 10-mile radius of the plume Emergency Planning Zone (EPZ) of the Beaver Valley Power Station incorporates the planning for all or part of the following Counties: Columbiana County, Ohio; Beaver County, Pennsylvania and Hancock County, West Virginia. The major topographic features are the Ohio River, the Beaver River and the numerous steep ridges and small valleys. The 2000 census approximates the total population to be 21,250. There are no parks or recreational areas within this area. Large industries work three shifts per day and a majority of the employees live relatively close to their jobs. The following protective action areas are included within the 10-mile EPZ: Sub-areas 1, 2, 3, and 4.

3.2. Exercise Participants

Agencies and organizations of the following jurisdictions participated in the Beaver Valley Power Station exercise:

State Jurisdictions

- Ohio Emergency Management Agency (OEMA)
- Ohio Department of Health (ODH)
- Ohio Department of Mental Health
- Ohio Department of Insurance

Ohio Department of Job and Family Services
Ohio State University Extension
Public Utilities Commission of Ohio
Ohio Department of Public Safety/State Highway Patrol (OSHP)
Ohio Department of Agriculture (ODA)
Ohio National Guard (ONG)
Ohio Department of Natural Resources (ODNR)
Ohio Department of Transportation (ODOT)
Ohio Governor's Office
Attorney General's Office
Federal Aviation Administration
American Red Cross
Department of Administrative Services
Ohio Environmental Protection Agency

Risk Jurisdictions

Columbiana County Commissioners
Columbiana County Emergency Management Agency
Columbiana County Sheriff Department
Columbiana County Health Department
Columbiana County Engineer
Ohio State Patrol
Ohio National Guard
Ohio Department of Public Safety
Columbiana County Education Services Center
Ohio Environmental Protection Agency
Ohio Department of Health

Private Jurisdictions

Columbiana (OH) North Chapter of the American Red Cross
Salvation Army
Radio Amateur Civil Emergency Services (RACES)
Beaver Valley Power Station/First Energy
Negley Fire Department and EMS
West Point Fire Department
EAS Radio Station WKBN
East Liverpool School District
East Liverpool Fire Station

3.3. Exercise Timeline

Table 1 on the following page, presents the time at which key events and activities occurred during the Beaver Valley Power Station Radiological Emergency Preparedness Partial Participation Plume Exposure Pathway Exercise on June 24, 2008. Also included are times notifications were made to the participating jurisdictions/functional entities.

Table 1 Exercise Timeline

DATE AND SITE: June 24, 2008

Beaver Valley Power Station

Emergency Classification Level or Event	Time Utility Declared	Time That Notification Was Received or Action Was Taken				
		State of Ohio	State Assessment Room	EOF	JIC	Columbiana County EOC
Notification of Unusual Event	NA	NA	NA	NA	NA	NA
Alert	1625	1636	1623	1639	NA	1628
Site Area Emergency	1800	1803	1803	1804	1807	1804
General Emergency	1920	1925	1925	1922	1934	1925
Simulated Radiation Release Started	1800/2038	1827	1827	1812/2038	1934/2040	1804/2040
Simulated Radiation Release Terminated	N/A	NA	NA	NA	NA	NA
Facility Declared Operational		1730	1730	1717	1755	1637
State: Declaration of State of Disaster		1905	NA	NA	NA	NA
Local: Declaration of State of Emergency		NA	NA	NA	NA	1830
Exercise Terminated		2155	2155	2155	2200	2150
1st Early Precautionary Action Decision: restrict air space and rail traffic.		1816	NA	NA	NA	NA
1st Early Precautionary Action Decision: All livestock should be taken off pasture and placed on stored feed & water.		1823	1823	1819	1827	1825
General Informational Message Decision		1832	NA	1834	1850	1830
1 st Siren Activation		NA	NA	NA	NA	1840
1 st EAS Message		NA	NA	NA	NA	1843
1st Protective Action Recommendation: Evacuate sub-area 1, shelter 2, 3, and 4.		1828	NA	NA	NA	NA
1st Protective Action Decision: Evacuate 0-2 miles, 5 miles downwind (sub-area 1) and shelter sub-areas 2, 3, and 4 within the 10-mile EPZ and continue to monitor the local EAS Station.		NA	NA	NA	NA	1940
2 nd Siren Activation		NA	NA	NA	NA	1950
2 nd EAS Message		NA	NA	NA	NA	1953
2nd Protective Action Recommendation: Evacuate 5 miles downwind (sub-area 1), shelter sub-areas 2, 3, and 4 and continue to monitor the local EAS Station.		2137	NA	NA	NA	NA
2nd Protective Action Decision: Evacuate 0-5 miles downwind and shelter 2, 3, and 4 and continue to monitor the local EAS Station.		NA	NA	NA	NA	2108
KI Administration Decision: EWs and Special Needs Individuals.		1928	1928	1948	1948	1940

4. Exercise Evaluation and Results

Contained in this section are results and findings of the evaluation of all jurisdictions and functional entities that participated in the June 24, 2008, Radiological Emergency Preparedness Partial Participation Plume Exposure Pathway Exercise to test the offsite emergency response capabilities of State and local governments within the 10-mile EPZ surrounding the Beaver Valley Power Station.

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

4.1. Summary Results of Exercise Evaluation

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

M – Met (No Deficiency or ARCAs)

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

Table 2 - Summary of Exercise Evaluation (2 pages)

DATE: 2008-06-24 SITE: Beaver Valley Power Station, OH A: ARCA, D: Deficiency, M: Met														
		State - INP - OHP Dispatch	State - EOC - ER	State - EOC - AR	State - JIC - EOC	State - JIC - BVPS	State - EOF	State - State Analyst - CC	CC - INP	CC - EOC	CC - DCO Briefing - Backup Rte Alerting - East Liverpool	CC - Backup Rte. Alerting. - East Liverpool FD	CC - Route Verification - East Liverpool FD	CC - DCO Briefing - Negley FD Reception Ctr.
Emergency Operations Management														
Mobilization	1a1	M	M	M	M	M	M	M	M					
Facilities	1b1													
Direction and Control	1c1		M	M	M		M		M					
Communications Equipment	1d1	M	M	M	M	M			M	M		M		
Equip & Supplies to support operations	1e1		M	M	M	M				M	M	M		M
Protective Action Decision Making														
Emergency Worker Exposure Control	2a1		M	M						M				
Radiological Assessment and PARs	2b1		M	M										
Decisions for the Plume Phase -PADs	2b2		M	M						M				
PADs for protection of special populations	2c1		M	M						M				
Rad Assessment and Decision making for the Ingestion Exposure Pathway	2d1													
Rad Assessment and Decision making concerning Relocation, Reentry, and Return	2e1													
Protective Action Implementation														
Implementation of emergency worker exposure control	3a1						M			M	M	M		M
Implementation of KI decision	3b1						M			M	M	M		M
Implementation of protective actions for special populations - EOCs	3c1									M				
Implementation of protective actions for Schools	3c2									M				
Implementation of traffic and access control	3d1		M	M						M				
Impediments to evacuation are identified and resolved	3d2									M				
Implementation of ingestion pathway decisions - availability/use of info	3e1													
Materials for Ingestion Pathway PADs are available	3e2													
Implementation of relocation, re-entry, and return decisions	3f1													
Field Measurement and Analysis														
Adequate Equipment for Plume Phase Field Measurements	4a1													
Field Teams obtain sufficient information	4a2													
Field Teams Manage Sample Collection Appropriately	4a3													
Post plume phase field measurements and sampling	4b1													
Laboratory operations	4c1													
Emergency Notification and Public Info														
Activation of the prompt alert and notification system	5a1		M	M				M		M				
Activation of the prompt alert and notification system - Fast Breaker	5a2													

Activation of the prompt alert and notification system - Exception areas	5a3									M		M	M	
Emergency information and instructions for the public and the media	5b1				M	M		M		A				
Support Operations/Facilities														
Mon / decon of evacuees and emergency workers, and registration of evacuees	6a1													
Mon / decon of emergency worker equipment	6b1													
Temporary care of evacuees	6c1													
Transportation and treatment of contaminated injured individuals	6d1													

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

<p>DATE: 2008-06-24 SITE: Beaver Valley Power Station, OH A: ARCA, D: Deficiency, M: Met</p>												
Emergency/Operations Management												
Mobilization	1a1											
Facilities	1b1											
Direction and Control	1c1											
Communications Equipment	1d1	M						M	M			M
Equip & Supplies to support operations	1e1				M			M	M			M
Protective Action/Decision Making												
Emergency Worker Exposure Control	2a1											
Radiological Assessment and PARs	2b1											
Decisions for the Plume Phase -PADs	2b2											
PADs for protection of special populations	2c1											
Rad Assessment and Decision making for the Ingestion Exposure Pathway	2d1											
Rad Assessment and Decision making concerning Relocation, Reentry, and Return	2e1									M		
Protective Action Implementation												
Implementation of emergency worker exposure control	3a1							M	M	M		M
Implementation of KI decision	3b1				M			M	M	M		M
Implementation of protective actions for special populations - EOCs	3c1											
Implementation of protective actions for Schools	3c2								M			
Implementation of traffic and access control	3d1								M			
Impediments to evacuation are identified and resolved	3d2											
Implementation of ingestion pathway decisions - availability/use of info	3e1											
Materials for Ingestion Pathway PADs are available	3e2											
Implementation of relocation, re-entry, and return decisions	3f1										M	
Field Measurement and Analysis												

4.2. Status of Jurisdictions Evaluated

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

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

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

- A Deficiency is defined in FEMA-REP-14 as "...an observed or identified inadequacy of organizational performance in an exercise that could cause a finding that offsite emergency preparedness is not adequate to provide reasonable assurance that

appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a nuclear power plant."

- An ARCA is defined in FEMA-REP-14 as "...an observed or identified 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 Region V 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 – The last two digits of the year the exercise was conducted.

- Criterion Number – An alpha and two-digit number corresponding to the criteria numbers in the six Exercise Evaluation Areas described in Federal Register Notice/Vol. 67, No. 80, April 25, 2002, which amends FEMA- REP 14, Radiological Emergency Preparedness Exercise Manual.

- Issue Classification Identifier - (D = Deficiency, A = ARCA). Only Deficiencies and ARCAs are included in exercise reports. Plan issues are reported to the State(s) via letter from the RAC Chairman. 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.

4.2.1. State Jurisdictions

4.2.1.1. State - Initial Notification Point - Ohio

Highway Patrol Dispatch Center

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

4.2.1.2. State - Emergency Operations Center -

Executive Room

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

4.2.1.3. State - Emergency Operations Center -

Assessment Room

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

4.2.1.4. State - Joint Information Center - EOC

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

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

4.2.1.5. State - Joint Information Center - Beaver Valley Power Station

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

4.2.1.6. State - Emergency Operations Facility

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

4.2.1.7. State - State Analyst - Columbiana County

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

4.2.2. Risk Jurisdictions

4.2.2.1. Columbiana County - Initial Notification Point

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

4.2.2.2. Columbiana County - Emergency

Operations Center

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

ISSUE NO.: 03-06-5b1-A-01

ISSUE: Press Releases 6, 7, 8 and 9 contained inaccurate and/or conflicting or incomplete information for dissemination to the public. Press Release 6 contained inaccurate information on the time of the GE ECL declaration; advice to the public for evacuation transportation pickup sites for sub-areas 2 and 3 that were instructed to shelter-in-place; EAS broadcast stations were not identified; and the EAS Message-D (for KI only), was issued. Press Release 8 contained inaccurate information. Sub-areas 2, 3, and 4 were under a recommendation to shelter-in-place and instructed to take KI. Press Release 9 contained inaccurate information regarding a designated evacuation route with an impending impediment.

REASON UNRESOLVED: During the 2008 exercise, press releases provided to the JIC from Columbiana County continued to provide confusing and inconsistent information to the public. For example: Press Release 08 included instructions regarding KI that were in conflict with those provided in the first Protective Action Recommendation (PAR). The first PAR directed the evacuation of Sub-area 1 and the ingestion of KI by the public, emergency workers and immobile populations, and residents in Sub-areas 2,

3 and 4 were directed to shelter in place. But according to Press Release 08, residents in Sub-areas 2, 3 and 4 were directed to shelter in place and take KI. The ingestion of KI was not included in the first PAR.

Press Release 08 included conflicting and confusing instructions to the public regarding sheltering in place in Sub-areas 2, 3 and 4. The instructional block in the middle of attached EAS Message – C (SHELTERING REQUIRED SUB AREA 2,3,4) mixes instructions for evacuees with those for persons sheltering in place.

In Press Release 07, directions given to reception centers are inconsistent with those provided in “The User-Friendly Phone Book” (page 24) and the “Columbiana County EMA and LEPC 2008 Calendar” (which contains the same information as The User Friendly Phone Book).

In Press Release 07, evacuees in Sub-areas 2 and 3 were instructed to shelter in place and at the same time to report to designated Pickup Points to be transported to the Reception Centers.

NEW SCHEDULE OF CORRECTIVE ACTIONS: To address Press Release 08. As part of our previous corrective action plan we believe that attaching a copy of the appropriate EAS message would provide clarification of intended instructions. This was not the case. In the future to avoid duplication of errors of this nature, Columbiana County will not attach copies of the EAS messages with outgoing Supplemental News Bulletins. Furthermore, to avoid potential confusion of the part of the general with emergency information, one news bulletin will be issued covering all instructions (e.g. Evacuation of Sub Area #1, Shelter Sub Area 2, 3 and 4) that are consistent with the Protective Action Decision (PAD) issued by the County.

Regarding Press Release 07, inconsistent direction will be changed within all appropriate parts of the plan and corresponding Standard Operating Guidance to reflect directions listed within the User Friendly Phone Book. The instruction to report to the Pickup Points was a clerical error that should not have been part of the message sent. We believe papers were inadvertently shuffled between messages when corrections were made to the evacuation message. One singular message will correct these types of errors in the future.

4.2.2.3. Columbiana County - Dosimetry Control
Officer Briefing - Backup Route Alerting - East
Liverpool Fire Department

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

4.2.2.4. Columbiana County - Backup Route Alerting
- East Liverpool Fire Department

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

4.2.2.5. Columbiana County - Route Verification -
East Liverpool Fire Department

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

4.2.2.6. Columbiana County - Dosimetry Control
Officer Briefing - Negley Fire Department Reception

Center

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

4.2.2.7. Columbiana County - Monitoring and Decontamination of Evacuees - Negley Fire

Department Reception Center

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

ISSUE NO.: 03-06-6a1-A-04

ISSUE: Staff members of the Negley Volunteer Fire Department (VFD) and the West Point Fire Department (FD) using CD V-700 RP survey meters did not adequately conduct operability tests and employ the survey meter to effectively identify the location and magnitude of radioactive material contamination. A Negley VFD staff member moved the probe to fast (in excess of the recommended six-inches per second rate of speed) while monitoring an emergency worker.

A West Point FD staff member did not correctly test the survey meter with a check source before monitoring for vehicle contamination. Another West Point FD staff member monitored a contaminated evacuee using the CD V-700 RP survey meter while the meter had been left in x10 scale after the source check instead of being re-set to the x1 scale, and consequently did not identify the correct magnitude of the evacuee's contamination. The same individual also failed to monitor the evacuee's backside. While each individual situation was remedied and successfully re-demonstrated, the three

situations together indicate an overall weakness in the use of the survey meters.

CORRECTIVE ACTION DEMONSTRATED: The Negley Volunteer Fire Department re-demonstrated this criterion on Monday night, July 23, 2008. The West Point Fire Department re-demonstrated this criterion on Wednesday night, July 25, 2008.

Six CD V-700/RP survey instruments were checked for operability using the check source attached to the instrument's case. Operability checks were correctly performed following procedures in Attachment 3 ("Radiological Monitoring Equipment Check"). Although two of the CD V -700/RP survey instruments failed to respond within the range specified on the attached sticker, several backup instruments were available and passed operability checks. The failed instruments were not placed in service. This demonstration of performing operability checks corrected the first component of prior Area Requiring Corrective Action (ARCA) Number 03-06-6.a.1-A-04.

The monitor followed the monitoring technique described in Attachment 4 ("Surveying and Decontamination Procedures – Reception Center") holding the probe one inch from the surface and moving the probe over the surface at six inches per second using the times one (x1) scale. Teammates provided corrective suggestions, such as slowing-up or holding the probe closer if they thought the monitor was proceeding too fast or was holding the instrument too far from the surface being monitored. The monitor knew that when contamination was identified, and the meter pegged, the scale should be switched to the times ten (x10) scale while surveying the affected area and then returned to the times one (x1) scale when the rate on the meter dropped. This demonstration of using the proper rate and distance for monitoring corrected the second component of prior ARCA Number 03-06-6.a.1-A-04.

f. **PRIOR ISSUES - UNRESOLVED:** None

4.2.2.8. Columbiana County - Monitoring and Decontamination of Evacuee Vehicle - Negley Fire

Department Reception Center

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

4.2.2.9. Columbiana County - Registration of Evacuee - Negley Fire Department Reception Center

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

4.2.2.10. Columbiana County - KI Distribution for General Population - Negley Fire Department Reception Center

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

4.2.2.11. Columbiana County - Congregate Care Center - McKinley Elementary School

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

4.2.2.12. Columbiana County Sheriff Department - Dosimetry Control Officer Briefing - Traffic & Access Control Point

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

4.2.2.13. Columbiana County - Traffic and Access Control Point

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

4.2.2.14. Columbiana County - EV-2 School Interview - East Liverpool School District

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

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

4.2.2.15. Columbiana County - Decision Making - Relocation, Re-entry & Return

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

4.2.2.16. Columbiana County - Implementation - Relocation, Re-entry & Return

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

4.2.2.17. Columbiana County - Dosimetry Control Officer Briefing - Emergency Worker Monitoring & Decontamination Center - West Point Fire Department - Beaver Local School Complex

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

ISSUE NO.: 03-08-3a1-A-01

ISSUE: OROs issue appropriate dosimetry and procedures, and manage radiological exposure to emergency workers IAW plans and procedures. Emergency workers periodically and at the end of each mission read and

record dosimeter reading. (NUREG-0654, K.3)

CONDITION: West Point Volunteer Fire Department Workers were not briefed on why KI is needed, and they were not instructed to read the KI information sheet that was issued to them in their Dosimeter Packets. Use of the Thermoluminescent Dosimeters (TLDs) issued to the workers was not explained; workers were only told to wear the TLD on the front of the body facing forward. There was no mention of the need for obtaining authorization for exceeding exposure limits and receiving higher exposures.

POSSIBLE CAUSE: Although the briefing covered all of the topics in the Attachment 17 briefing guide, the presentation was very brief and mistakenly assumed that workers adequately understood the content of the briefing.

REFERENCE: NUREG-0654 K.3.a,3.b

EFFECT: Workers did not understand the need for or the consequences of taking KI. Workers did not understand what DRDs and TLDs were for nor the need for and potential consequences of higher dose authorization.

CORRECTIVE ACTION DEMONSTRATED: This issue was successfully re-demonstrated by the West Point Fire Department at the Beaver Local School Complex on June 25, 2008, following the initial demonstration.

At approximately 2115 hours, the exercise Controllers assembled the West Point Volunteer Fire Department personnel inside the Beaver Local School Complex and conducted a re-training session on dosimetry. The training was done informally, with opportunity for the persons being briefed to ask questions (which did not occur during the initial briefing). Following the retraining session the DCO performed another Emergency Worker briefing. This second briefing adequately covered the necessary information, including: why KI is needed; instructions to read the KI information sheet that was issued to them in their Dosimeter Packets; explanation of why TLDs are issued to the workers; and discussion of the need for obtaining authorization for exceeding pre-authorized exposure limits. Subsequent interview of the emergency workers who were briefed, including those assigned to emergency worker equipment and vehicle monitoring and decontamination, determined that they adequately understood the briefing.

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

4.2.2.18. Columbiana County - Monitoring & Decontamination of Emergency Worker - West Point Fire Department - Beaver Local School Complex

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

4.2.2.19. Columbiana County - Monitoring & Decontamination of Emergency Worker Vehicle & Equipment - West Point Fire Department - Beaver Local School Complex

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

ISSUE NO.: 03-08-6b1-A-02

ISSUE: Facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of emergency worker equipment including vehicles. (NUREG-0654, K.5.b)

CONDITION: Staff of the West Point Fire Department Vehicle Monitoring team did not adequately employ their CD V-700/RP survey instruments to effectively identify the location and magnitude of radioactive material contamination. Monitoring personnel did not move the pancake probes at a

consistent, sufficiently slow rate of speed to identify contamination. They also did not understand the instrumentation ranges/scales and had difficulty interpreting the readings. Two readings initially were incorrectly recorded.

POSSIBLE CAUSE: The West Point Fire Department Vehicle Monitoring team did not retain sufficient knowledge regarding procedures for conducting a contamination survey using the CD V-700 RP survey instrument.

REFERENCE: NUREG-0654/REP-1, Section II.K.5.b and II.O.4.c

EFFECT: An accurate characterization of vehicle contamination may not be achieved. Emergency vehicles may be released while still being contaminated.

RECOMMENDATION: Conduct training of personnel, including the operational checking of CD V-700 RP survey instruments and hands-on familiarization with instrument scales.

SCHEDULE OF CORRECTIVE ACTIONS: Columbiana County will provide a more thorough approach to general knowledge and use of the CDV 700 RP survey instruments and vehicle monitoring procedures during future training sessions with all Fire Departments.

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

APPENDIX 1

ACRONYMS AND ABBREVIATIONS

ARC	American Red Cross
ARCA	Area Requiring Corrective Action
ARES	Amateur Radio Emergency Services
CFM	Cubic Feet Per Minute
CFR	Code of Federal Regulations
CPM	Counts Per Minute
DHS	Department of Homeland Security
DOT	Department of Transportation
DRD	Direct-Reading Dosimeter
EAL	Emergency Action Level
EAS	Emergency Alert System
EBS	Emergency Broadcast System
EC	Exercise Controller
ECC	Emergency Control Center
ECL	Emergency Classification Level
ED	Executive Director
EEM	Exercise Evaluation Methodology
EMA	Emergency Management Agency/Emergency Management Administrator
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EPA	Environmental Protection Agency
EPZ	Emergency Planning Zone
ETA	Estimated Time of Arrival
ETE	Evacuation Time Estimates
EW	Emergency Worker
EWMDS	Emergency Worker Monitoring and Decontamination Station
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
Ft/min	feet per minute
Ft ³ /min	cubic feet per minute
FTC	Field Team Coordinator
GE	General Emergency
GM	Guidance Memorandum
JDF	Joint Dispatch Facility
JIC	Joint Information Center
KI	Potassium Iodide
mR	milliroentgen
mR/h	milliroentgen per hour
MS-1	Medical Services Drill
NOUE	Notification of Unusual Event
NRC	U.S. Nuclear Regulatory Commission

NUREG-0654	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
NWS	National Weather Service
OANG	Ohio Air National Guard
ODA	Ohio Department of Agriculture
ODH	Ohio Department of Health
ODNR	Ohio Department of Natural Resources
ODOT	Ohio Department of Transportation
OEMA	Ohio Emergency Management Agency
ONG	Ohio National Guard
ORO	Offsite Response Organization
OSHP	Ohio Department of Public Safety/State Highway Patrol
PAD	Protective Action Decision
PAG	Protective Action Guide
PAR	Protective Action Recommendation
PIO	Public Information Officer
R/h	Roentgen(s) per hour
RA	Radiological Analyst
RAC	Regional Assistance Committee
RACES	Radio Amateur Civil Emergency Services
REA	Radiation Emergency Area
RERP	Radiological Emergency Response Plan
RO	Radiological Officer
SAE	Site Area Emergency
SEOC	State Emergency Operations Center
TACP	Traffic and Access Control Point
TL	Team Leader
TLD	Thermoluminescent Dosimeter

APPENDIX 2

EXERCISE EVALUATORS AND TEAM LEADERS

The following is a list of the personnel who evaluated the Beaver Valley Power Station Partial Participation Plume Exposure Pathway Exercise on June 24, 2008. The letters "(TL)" indicates evaluator Team Leaders after their organization's names. The organization each evaluator represents is indicated by the following abbreviations:

DHS	Department of Homeland Security
FEMA	Federal Emergency Management Agency
ICF	Inner City Fund International

<u>TITLE</u>	<u>NAME</u>	<u>ORGANIZATION</u>
RAC Chairman	William King	DHS/FEMA
Exercise Director	Gary Naskrent	DHS/FEMA
Regional Site Specialist	Carolyn Sturghill	DHS/FEMA
Team Leader - State	Delwyn Kinsley	DHS/FEMA
Team Leader - County	Carl Bebrich	DHS/FEMA

1. **Partial Participation Exposure Pathway Plume Exercise - June 24, 2008**

DATE: 2008-06-24, SITE: Beaver Valley Power Station, OH

LOCATION	EVALUATOR	AGENCY
State - Initial Notification Point - Ohio Highway Patrol Dispatch Center	Tracey Green	ICF
State - Emergency Operations Center - Executive Room	Doug Himle	ICF
State - Emergency Operations Center - Assessment Room	Garianne Howard Dennis Wilford	ICF ICF
State - Joint Information Center - EOC	Tracey Green	ICF
State - Joint Information Center - Beaver Valley Power Station	Terry Blackmon	ICF
State - Emergency Operations Facility	Jon Christiansen	ICF
State - State Analyst - Columbiana County	Carl Bebrich	DHS/FEMA
Columbiana County - Initial Notification Point	David Jacobson	ICF
Columbiana County - Emergency Operations Center	David Jacobson Robert Rospenda Carolyn Sturghill Greg Vanden-Eykel	ICF ICF DHS/FEMA ICF
Columbiana County - Dosimetry Control Officer Briefing - Backup Route Alerting - East Liverpool Fire Department	Robert Noecker	ICF
Columbiana County - Backup Route Alerting - East Liverpool Fire Department	Harold Spedding	ICF
Columbiana County - Route Verification - East Liverpool Fire Department	Harold Spedding	ICF
Columbiana County - Dosimetry Control Officer Briefing - Negley Fire Department Reception Center	Greg Vanden-Eykel	ICF
Columbiana County - Monitoring and Decontamination of Evacuees - Negley Fire Department Reception Center	Richard Grundstrom	ICF
Columbiana County - Monitoring and Decontamination of Evacuee Vehicle - Negley Fire Department Reception Center	Jon Christiansen	ICF
Columbiana County - Registration of Evacuee - Negley Fire Department Reception Center	Richard Grundstrom	ICF
Columbiana County - KI Distribution for General Population - Negley Fire Department Reception Center	Richard Grundstrom	ICF
Columbiana County - Congregate Care Center - McKinley Elementary School	William Sulinckas	DHS/FEMA
Columbiana County Sheriff Department - Dosimetry Control Officer Briefing - Traffic & Access Control Point	Jon Christiansen	ICF
Columbiana County - Traffic and Access Control Point	Robert Noecker	ICF
Columbiana County - EV-2 School Interview - East Liverpool School District	William Sulinckas	DHS/FEMA
Columbiana County - Decision Making - Relocation, Re-entry & Return	David Jacobson	ICF
Columbiana County - Implementation - Relocation, Re-entry & Return	Robert Rospenda	ICF
Columbiana County - Dosimetry Control Officer Briefing - Emergency Worker Monitoring & Decontamination Center - West Point Fire Department - Beaver Local School Complex	Tracey Green	ICF
Columbiana County - Monitoring & Decontamination of Emergency Worker - West Point Fire Department - Beaver Local School Complex	Dennis Wilford	ICF
Columbiana County - Monitoring & Decontamination of Emergency Worker Vehicle & Equipment - West Point Fire Department - Beaver Local School Complex	Terry Blackmon	ICF
Team Leader		

APPENDIX 3

EXERCISE CRITERIA AND EXTENT-OF-PLAY AGREEMENT

This appendix lists the exercise criteria that were scheduled for demonstration in the Beaver Valley Power Station Partial Participation Plume Exposure Pathway Exercise on June 24, 2008, and the off-site extent-of-play agreement approved by DHS/FEMA on June 18, 2008.

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

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

A. Exercise Criteria and Extent-of-Play

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

**BEAVER VALLEY POWER STATION
PARTIAL PARTICIPATION EXERCISE**

EXTENT OF PLAY AGREEMENT

STATE OF OHIO

JUNE 24, 2008

EVALUATION AREA 1 – EMERGENCY OPERATIONS MANAGEMENT

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

Extent of Play

The State Emergency Operations Center (SEOC) and the Ohio Highway Patrol Dispatch Center will receive initial notification over the BVPS' Initial Notification Conference Line. Once the SEOC Assessment Room is activated all phone communications will be received there. The State will mobilize all the agencies that have responsibilities in the SEOC, primarily the Executive Room, Dose Assessment, state's Media Center; the county EOC; and the BVPS Joint Information Center (JIC), and Emergency Operations Facility (EOF). The state representatives assigned to the BVPS Emergency Operations Facility, Joint Information Center, and the county EOC will be pre-positioned.

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 coordinate decisions on behalf of the Governor's office from the SEOC Executive Room. The Ohio Department of Health is responsible for the determining the State PAR in the SEOC Assessment Room and will provide periodic briefings to the SEOC Executive 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 Columbiana County EOC, BVPS JIC, and EOF is by commercial and/or dedicated telephone. Backup communications (radio and/or cellular phones) will be demonstrated.

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

Extent of Play

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

EVALUATION AREA 2 – PROTECTIVE ACTION DECISION MAKING

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

Extent of Play

The State EOC Assessment Room staff will 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 EOC Executive group and subsequently to the Columbiana County EOC. The County will disseminate recommendations to their emergency workers. Field monitoring data will be provided to the State EOC Assessment Room via controller injects.

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 Columbiana County EOC via 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 in accordance with the ODH KI policy and will accompany the protective action recommendation.

Coordination will take place in the SEOC Executive Room with the States of Pennsylvania and West Virginia, and Columbiana County to ensure consideration of local needs. After the decision is made, the County will disseminate protective actions to the general public.

Ohio Protective Action Decisions are not necessarily the same as those for Pennsylvania or West Virginia.

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

The recommendation to take KI is issued by the Ohio Department of Health in the SEOC Assessment Room and accompanies the PAR. Upon approval in the Executive Room, it is then forwarded to Columbiana County for implementation.

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 June 2006 Beaver Valley exercise. It will be demonstrated again at the 2012 Perry 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 June 2006 Beaver Valley exercise. It will be demonstrated again at the 2012 Perry exercise.

EVALUATION AREA 3 – PROTECTIVE ACTION IMPLEMENTATION

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

Extent of Play

The State FMTs, Communications Van and Sample Screening Point will not be demonstrated in this exercise. The State demonstrated this criterion at the May 2007 Davis-Besse exercise. It will be demonstrated again at the October 2008 Perry exercise. Implementation will be demonstrated by county responders.

Implementation will be demonstrated for State personnel responding to the EOF.

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 FMTs, Communications Van and Sample Screening Point will not be demonstrated in this exercise. The State demonstrated this criterion at the May 2007 Davis-Besse exercise. It will be demonstrated again at the October 2008 Perry exercise. Implementation will be demonstrated by county responders.

Implementation will be demonstrated for State personnel responding to the EOF.

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 in coordination with the SEOC Executive group 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 June 2006 Beaver Valley exercise. It will be demonstrated again at the 2012 Perry 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 June 2006 Beaver Valley exercise. It will be demonstrated again at the 2012 Perry 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 June 2006 Beaver Valley exercise. It will be demonstrated again at the 2012 Perry exercise.

EVALUATION AREA 4 – FIELD MEASUREMENT AND ANALYSIS

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

Extent of Play

The State FMTs, Communications Van and Sample Screening Point will not be demonstrated in this exercise. The State demonstrated this criterion at the May 2007 Davis-Besse exercise. It will be demonstrated again at the October 2008 Perry exercise.

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

Extent of Play

The State FMTs, Communications Van and Sample Screening Point will not be demonstrated in this exercise. The State demonstrated this criterion at the May 2007 Davis-Besse exercise. It will be demonstrated again at the October 2008 Perry exercise.

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

Extent of Play

The State FMTs, Communications Van and Sample Screening Point will not be demonstrated in this exercise. The State demonstrated this criterion at the May 2007 Davis-Besse exercise. It will be demonstrated again at the October 2008 Perry exercise.

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

Extent of Play

The State demonstrated this criterion at the June 2006 Beaver Valley exercise. It will be demonstrated again at the 2012 Perry exercise.

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

Extent of Play

The ODH lab demonstrated this criterion during the October 2006 Perry exercise. It will be demonstrated again at the 2012 Perry 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 Columbiana County EOC, and coordinate with the States of Pennsylvania and West Virginia 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, Columbiana County will simulate the initiation of the sirens. EAS messages will be prepared by Columbiana County EMA who will simulate providing them to the EAS Station (WKBN). (See Columbiana 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 BVPS JIC 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 (State JIC) to communicate with the BVPS JIC.

A Public Inquiry telephone will be established and demonstrated in the State EOC (State JIC). Public Inquiry will address an average of 3 calls per hour once Site Area Emergency is declared for a duration of two 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.

**BEAVER VALLEY POWER STATION
PARTIAL PARTICIPATION EXERCISE**

EXTENT OF PLAY AGREEMENT

COLUMBIANA COUNTY

JUNE 24, 2008

1. **Beaver Valley Power Station**

The facility normally uses off-watch section personnel to participate in the exercise. The plant's simulated events, radiation readings, and emergency classifications will trigger offsite exercise actions.

2. **Offsite Response Functions:**

County:

Columbiana County Emergency Operations Center

- Accident Assessment
- Direction & Control
- Public Information
- Alert & Notification
- Communications

Field Play:

(See 5. Demonstration Windows)

3. **Controllers**

First Energy Nuclear Operating Company (FENOC) will provide controllers at the Columbiana County locations. Controllers will not take an active part in the proceedings, but will interact with staff members to the extent necessary to fulfill their observer responsibilities. Coaching of players by Controllers is not permitted except to provide training to participants awaiting a re-demonstration. Re-demonstration can only occur with FEMA approval.

4. **FEMA Evaluators**

Federal evaluators will be present at the Columbiana County EOC, and at field locations to evaluate player response to the actual and simulated events in the exercise scenario.

5. **Demonstration Windows**

The demonstration windows are those periods of time designated in the exercise during which specified demonstrations will be accomplished. The purpose of the window is to provide for more effective demonstrations as well as permitting the release of volunteers from the exercise play at a reasonable hour.

- Out of Sequence Demonstrations will be managed by the Lead Controller at each field location, and will be run independently of each other.
- All demonstrations will commence promptly and, barring any complications, not continue past the end of the windows.
- MS-1 Hospital Exercise: Conducted and evaluated at the Salem Hospital on October 31st, 2007.
- The County EOC Operations: 3:30 p.m. – 10:00 p.m. Tuesday June 24th, 2008.

- School demonstration: 10:00a.m. – Noon, Tuesday June 24th, 2008 at the East Liverpool Schools Administration Office.
- Reception Center: 7:00 p.m. - 9:00 p.m. Monday June 23rd, 2008 at the Negley Fire Department.
- Initial Notification: 3:30 p.m. – 5:00 p.m. Tuesday June 24th, 2008 at the County Sheriff's Office Dispatch Center.
- Congregate Care Center: 7:00 p.m. – 9:00 p.m. Monday June 23rd, 2008 at McKinley Elementary School in Lisbon.
- Emergency Worker Monitoring/Decontamination Center: 7:00 p.m. – 9:00 p.m. Wednesday June 25th, 2008 at Beaver Local School Complex.
- Traffic Control / Access Control: 9:00 a.m. – Noon, Tuesday June 24th 2008 starting at the Columbiana County Sheriff Dept Office.
- Backup Route Alerting: 7:00 p.m. – 9:00 p.m., Monday June 23rd, 2008 at East Liverpool Fire Station.
- Relocation, Re Entry, and Return: 9:00 a.m. – Noon, Wednesday June 25th, 2008 at Columbiana County EOC.

6. Termination

- The Lead Controller in the Columbiana County EOC will coordinate the Exercise Termination with the Ohio EOC, the BVPS EOF, and the EOCs in Beaver and Hancock County.
- Field Locations / Out of Sequence Demonstrations will be terminated by the Lead Controller at each location. The termination will be based on the completion of the objectives. The termination can happen sooner than the identified end time.

7. General Concepts

An emergency plan is drafted to address the generally expected conditions of an emergency. Not everything in the emergency plan may be applicable for a given scenario. The main purpose of an emergency plan is to assemble sufficient expertise and officials so as to properly react to the events as they occur. The responders should not be so tied to a plan that they cannot take actions that are more protective of the public. Therefore, if, by not following the plan, the responders protect the public equally as well as provided in the plan, it should be noted for possible modification of the plan, but not classified as a negative incident. Furthermore, if, by following the plan there is a failure to protect the public health and safety, it should be noted so that the plan can be modified and the appropriate negative assessment applied.

8. **Exercise / Plan modifications**

- Two Protective Action Recommendations will be received by the county/state.
- To the extent possible two Protective Action Decisions will be discussed by the affected counties and states.
- Individual Protective Action Decisions will be reached for the affected counties.
- To the extent possible EAS messages and siren soundings will be coordinated by the affected counties.

9. **Re-demonstrations**

During the exercise play from June 23rd thru 25th, 2008, Criteria can be re-demonstrated immediately for credit. Re-demonstrations will be negotiated between the players, observers, controllers, and evaluators. Refresher training can be provided by the players, observers, and/or controllers. It is permissible to extend the evaluation time to accommodate the re-demonstration. Activities corrected from a re-demonstration will be so noted.

EVALUATION AREA 1
Emergency Operations Management

Sub-element 1.a – Mobilization

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

- Demonstrate the capability to receive notification of an emergency situation from the licensee.
- Demonstrate the activation of facilities for immediate use by mobilized personnel when they arrive to begin emergency operations.
- Activation of facilities will be completed in accordance with the plan and/or procedures.
- Personnel will be pre-staged. This pre-staging will be for all locations, to include EOC, field locations and any out-of-sequence demonstrations. Activation of the position / facility will not begin until notification / inject.
- State players for the EOC will arrive at their positions after the Alert is declared.
- Twenty-four (24) Hour Staffing will be demonstrated by roster.

Sub-element 1.b – Facilities

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

EXTENT OF PLAY

The baseline for the county EOC and OROs was established during the 2006 exercise.

Sub-element 1.c - Direction and Control

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

Leadership personnel should demonstrate the ability to carry out essential functions of the response effort, for example: keeping the staff informed through periodic briefings and/or other means, coordinating with other appropriate response organizations, and ensuring completion of requirements and requests.

Sub-element 1.d – Communications Equipment

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

EXTENT OF PLAY

- Demonstrate a primary and at least one backup system is functional at the beginning of an exercise.
- Telephone and radio communications will be available for demonstration.
- Demonstrate the capability to manage the communication systems and ensure that all message traffic is handled without delays that might disrupt the conduct of emergency operations.
- Communications associated with medical support facilities were demonstrated during the October 31st, 2007 MS-1 Federally Evaluated Exercise.

Sub-element 1.e – Equipment and Supplies to Support Operations

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

EXTENT OF PLAY

- Sufficient quantities of direct-reading and permanent record dosimetry and dosimeter chargers are available for issuance to emergency workers. Dosimetry and KI have been pre-distributed to ORO's. Available supplies of KI will be within the expiration date indicated on blister packs.
- Monitoring kits and Dosimetry are exchanged annually; the documentation is included in the 2007 annual letter of certification.
- KI was pre-distributed to the general Public during clinics conducted by the County Health Department. KI for the General Public is also stockpiled at the County Health Department and transported to the Reception Center for distribution to the General Public as needed. Expiration date of the KI was extended to May 2009.
- CDV-138s are not used in Columbiana County.

EVALUATION AREA 2

Protective Action Decision-Making

Sub-element 2.a - Emergency Worker Exposure Control

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

EXTENT OF PLAY

- The capability to send emergency workers into the plume exposure pathway EPZ will be demonstrated.
- The capability to make decisions concerning the authorization of exposure levels in excess of pre-authorized levels will be procedurally discussed.
- KI is pre-distributed to emergency workers.
- The Ohio Department of Health recommends the taking of KI.
- Should the scenario dictate a revised exposure limit, the message will be limited to those emergency workers having a 5R limit initially
- The decision to take or to not take KI will be driven by the scenario.

Sub-element 2.b. - Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency

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 onsite and offsite environmental conditions.

EXTENT OF PLAY

N/A – Columbiana County does not demonstrate this criterion; it relies on the State of Ohio and on the Beaver Valley Power Station.

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

EXTENT OF PLAY

- A decision-making process involving consideration of appropriate factors and necessary coordination is used to make Protective Action Decisions for the general public (including the recommendation for the use of KI).
- The County will demonstrate the capability to communicate the contents of decisions to the affected jurisdictions.
- Two Protective Action Recommendations will be received by the county/state.
- To the extent possible two Protective Action Decisions will be discussed by the affected counties and states.
- Individual Protective Action Decisions will be reached for the affected counties.
- To the extent possible EAS messages and siren soundings will be coordinated by the affected counties.
- The number of PADs / PARs will be based on information from the State and BVPS. At least two PADs / PARs will be demonstrated
- The Ohio Department of Health (ODH) (through local health departments) makes KI available to the general public by pre-distribution and by distribution at Reception Centers.

- The County will demonstrate the capability to implement a Protective Action Decision for the general public for KI. This action is scenario driven.

Sub-element 2.c - Protective Action Decisions Consideration for the Protection of Special Populations

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

EXTENT OF PLAY

- Managing Special Populations will be demonstrated during the EOC exercise. This play will be driven by controller injects.
- Local special needs will be procedurally explained by the Route Verification Team.
- The County KI Policy for special populations will be procedurally explained at the County EOC.

Sub-element 2.d. –Radiological Assessment and Decision-Making for the Ingestion Exposure Pathway

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

EXTENT OF PLAY

N/A – Columbiana County relies on the State of Ohio.

Sub-element 2.e. – Radiological Assessment and Decision-Making Concerning Relocation, Re-entry, and Return

Criterion 2.e.1 Timely relocation, re-entry, and return decisions are made and coordinated as appropriate based on assessment of radiological conditions.

EXTENT OF PLAY

- The Post Accident Operations Committee will demonstrate decision-making during a Table-Top Exercise in the Columbiana County EOC on Wednesday, June 25th, 2008, 9 a.m. – Noon.
- PAOC will demonstrate the formulation of a Restricted Zone that includes an identifiable Buffer Zone.

- PAOC will demonstrate the capability to formulate a plan to relocate those individuals within newly defined Restricted Zone who have not been evacuated.
- PAOC will demonstrate the capability to formulate a plan for re-entry into the Restricted Zone to provide vital services.
- PAOC will demonstrate the ability to formulate a plan for returning evacuees to the area outside the Restricted Zone.
- Radiological assessment is a State function. Data will be provided to the County by Controller input.
- Evacuated and restricted areas will be pre-determined and identified for the PAOC, by controller input.
- Tabletop will be driven by an independent scenario.

EVALUATION AREA 3
Protective Action Implementation

Sub-element 3.a – Implementation of Emergency Worker Exposure Control

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

EXTENT OF PLAY

- In Columbiana County exposure control equipment is pre-distributed to: Reception Center (Negley FD), EWDC (West Point FD), Access Control (Columbiana County Sheriff Office), Route Verification (East Liverpool FD), Bus Drivers (East Liverpool Schools), etc.
- Radiation exposure control equipment will be assigned to workers who may be exposed to radioactive material. Job briefings will be conducted at required locations and participants will be available for evaluator interview on their knowledge of radiation exposure control.
- Emergency workers will explain the procedures to be followed when turn-back values are reached.
- By interview, the Supervisor/Exposure Coordinator will demonstrate the actions described in the procedures to determine whether to replace the worker, authorize the worker to incur additional exposures or to take other actions. Emergency workers may use any available

resources (e.g., written procedures and/or co-workers) in providing responses.

- The Supervisor/Exposure Coordinator should log accumulated exposures during the exercise as indicated in the procedures.
- The County Radiological Officer will coordinate with Supervisor/Exposure Coordinators to monitor exposure of county emergency workers.
- Should the scenario dictate a revised exposure limit, the action will be limited to those emergency workers having a 5R limit initially.
- Advisories from the EOC to field personnel may be simulated via a Controller inject.

Sub-element 3.b – Implementation of KI Decision

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

- In Columbiana County KI, procedures and associated forms are pre-distributed. The following field locations will demonstrate the use of KI: Access Control (Columbiana County Sheriff Dept), Route Verification (East Liverpool FD), Bus Drivers (East Liverpool Schools), etc.
- Offsite Response Organizations within the exposure pathway will demonstrate the capability to disseminate appropriate instructions on the use of KI by those advised to take it.
- Emergency workers will demonstrate the basic knowledge of procedures for the use of KI.
- By interview, the Supervisor/Exposure Coordinator will describe the procedure to maintain a list of emergency workers who have ingested KI, including documentation of the date(s) and time(s) they were instructed to ingest KI, the actual ingestion of KI is not necessary.
- The Ohio Department of Health makes the recommendation to take KI.

Sub-element 3.c – Implementation of Protective Actions for Special Populations

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

EXTENT OF PLAY

- The County methodology of handling special populations will be explained procedurally at the County EOC. A list of special needs individuals, hospitals, nursing homes will be available.
- Local special needs will be procedurally demonstrated by the Route Verification Team at the East Liverpool Fire station in a time window of 7:00 p.m. - 9:00 p.m. Monday June 23rd, 2008
- By EOC interview the capability to provide for the needs of special populations in accordance with the county plans and procedures will be discussed.
- Contact with Special Facilities & Reception Centers will be simulated. Contact with 5 transportation providers will be actual. All actual and simulated contacts should be logged. This demonstration will be conducted by interview in the EOC.

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

EXTENT OF PLAY

The School Services Officer in the county EOC will be demonstrated on Tuesday June 24th, 2008 from 4 p.m. – 10 p.m. Since the school demonstration will be out of sequence with the EOC most of the demonstration will be conducted by interview, and communications with school district superintendents will be simulated.

In accordance with the RERP the County School Service Officer will:

- Provide notification to local school districts.
- Advise school district superintendents on plant status and recommended response actions.
- Coordinate of protective actions for schools.
- Coordinate the distribution of busses for the evacuation of schools.
- Coordinate with bus providers to provide for transportation for transportation dependent and the mobility impaired.

The East Liverpool School District (EV-1) will demonstrate this criterion by interview in the Superintendents' office between the hours of 10:00 a.m. - Noon on Tuesday June 24th 2008.

- The Superintendent, Principal, Bus Driver Supervisor and Bus driver will be available for interview.

- Officials of the E Liverpool School District will demonstrate the decision-making process regarding protective actions for the students.
- Officials of the E Liverpool School District will describe the procedures that would be followed to implement canceling of the school day, dismissing early, or sheltering.
- If relocation is the implemented protective action, all activities to coordinate and complete the evacuation of students to the host school will be accomplished through an interview.
- Officials of the school system will demonstrate the capability to develop and provide timely information to the general public and the media on the status of protective actions for schools.
- The distribution, documentation, and taking KI will be procedurally demonstrated.
- Transportation of school children will be simulated. No route will be demonstrated.
- All activities will be driven by controller injects.

Sub-element 3.d. – Implementation of Traffic and Access Control

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

EXTENT OF PLAY

Members of the CCEOC will demonstrate the capability to identify appropriate traffic and access control points, consistent with protective actions.

- The capability to provide instructions to TCP/ACP providers will be demonstrated through an interview with the Law Enforcement Officer in the CCEOC.

For this field demonstration of Traffic/Access Control (TCP/ACP) a deputy, controller & evaluator will actually travel to the TCP/ACP location.

- The TCP/ACP will be located on Calcutta – Smith Ferry Road near the St Clair / Liverpool township line.

- The TCP/ACP function will be demonstrated by interview at the TCP/ACP location. This demonstration will be conducted out-of-sequence and in the time window of 9 a.m. – Noon Tuesday June 24th, 2008.
- Exposure control will be demonstrated by a sheriff's supervisor at the Sheriff's Office.

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

EXTENT OF PLAY

The CCEOC will demonstrate the capability, as required by the scenario, to identify and take appropriate actions concerning impediments to evacuation. Actual dispatch of resources to deal with impediments will be simulated.

- The Highway Services Officer will discuss the appropriate actions to be taken to the removal of impediments to the evacuation. Equipment will not actually be dispatched.
- The Law Enforcement Officer will discuss the appropriate actions to reroute the evacuation traffic around the impediment. Officers will not actually be dispatched.
- The Executive group will formulate a news release. This News release will suggest alternate evacuation routes around the impediment.
- This news release will be processed as a Special News Bulletin.

Sub-element 3.e.1 – Implementation of Ingestion Pathway Decisions

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 – This sub-element is a state function and will not be evaluated during this exercise.

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

EXTENT OF PLAY

N/A – This sub-element is a state function and will not be evaluated during this exercise.

Sub-element 3.f – Implementation of Relocation, Re-entry, & Return Decisions

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 Post Accident Operations Committee will demonstrate implementation during a Table-Top Exercise in the CCEOC on Wednesday, June 25th, 2008, 9 a.m. – Noon.
- PAOC will demonstrate the ability to establish a Restricted Zone that includes an identifiable Buffer Zone.
- PAOC will discuss the process used to relocate those individuals located within the newly defined Restricted Zone who have not been evacuated.
- PAOC will demonstrate the capability to control re-entry into the Restricted Zone to provide vital services.
- PAOC will demonstrate the capability to implement policies concerning evacuees returning to the area outside of the Restricted Zone.

EVALUATION AREA 4

Field Measurement and Analysis

Sub-element 4.a – Plume Phase Field Measurements and Analyses

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 – This sub-element is a state function and will not be evaluated during this exercise.

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

EXTENT OF PLAY

N/A – This sub-element is a state function and will not be evaluated during this exercise.

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

EXTENT OF PLAY

N/A – This sub-element is a state function and will not be evaluated during this exercise.

Sub-element 4.b – Post Plume Phase Field Measurements and Sampling

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

EXTENT OF PLAY

N/A – This sub-element is a state function and will not be evaluated during this exercise.

Sub-element 4.c - Laboratory Operations

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

EXTENT OF PLAY

N/A – This sub-element is a state function and will not be evaluated during this exercise.

EVALUATION AREA 5

Emergency Notification and Public Information

Sub-element 5.a – Activation of the Prompt Alert and Notification System

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

EXTENT OF PLAY

- The County will demonstrate the capability to sequentially provide an alert signal followed by an initial instructional message to populated areas (permanent resident and transient) throughout the 10-mile plume pathway EPZ. Following the decision to activate the alert and notification system, in accordance with the County plan and/or procedures, completion of system activation should be accomplished in a timely manner (will not be subject to specific time requirements). The initial message will include the elements required by current FEMA REP guidance.
- Siren activation will be simulated.
- Procedures to broadcast the message should be fully demonstrated as they would in an actual emergency up to the point of actual transmission. The actual broadcast of the message(s) or test messages will not be demonstrated. The alert signal activation will be simulated. However, the procedures will be demonstrated up to the point of actual activation.
- For this Exercise purpose, the EAS Radio Station will not be activated.

The capability of the primary notification system to broadcast an instructional message on a 24-hour basis should be verified during an interview with the CCEMA Director or designee.

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

- Columbiana County has three (3) townships in which Route Verification is conducted. The East Liverpool City Fire Department will be demonstrating this function Monday June 23rd, between 7:00 p. m. – 9:00 p. m.
- Following the first Protective Action Decision the Route Verification Team will be notified of a failed siren. One (1) Route Verification Team will conduct Backup Route Alerting. The team will run one (1) assigned route, but will use no lights or sirens. All alert and notification activities along the route will be simulated. Actual testing

of the mobile public address system will be conducted at the Fire Station.

- Following the second Protective Action Decision the team will be notified to conduct Route Verification and will procedurally demonstrate the capability to alert and notify special populations and demonstrate the capability to provide for the needs of special populations in accordance with the ORO's plans and procedures. The route will not be run.

Sub-element 5.b – Emergency Information and Instructions for the Public and the Media

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 County will ensure that emergency information and instructions are consistent with protective action decisions made by appropriate officials. The emergency information will contain all necessary and applicable instructions to assist the public in carrying out protective action decisions provided to them. The County will also be prepared to disclose and explain the Emergency Classification Level (ECL) of the incident.
- Public Inquiry will address an average of 3 calls per hour once Site Area Emergency is declared. (Max of 2 hours)
- Trends in rumors will be identified and responded to as needed.
- Subsequent emergency information and instructions will be provided to the public and the media through the Joint Information Center. Columbiana County will not have a representative at the JIC.
- One news briefing will be conducted at the EOC.

EVALUATION AREA 6
Support Operation/Facilities

Sub-element 6.a – Monitoring and Decontamination of Evacuees and Emergency Workers and Registration of Evacuees

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:

Columbiana County has Two (2) **Reception Centers** identified in the County REP. Monitoring and Decontamination of evacuees/auto is provided at the Reception Center.

- The demonstration will be conducted by Negley Fire/EMS at the Negley Fire Station from 7 p.m. - 9 p.m., Monday June 23rd 2008. A total of six potentially contaminated individuals will pass through a portal monitor. At least one (1) individual will be contaminated, the indication of who is contaminated will be provided by controller inject.
- Decontamination will be walked through and explained procedurally, but decontamination, if necessary, will be simulated.
- The decision to refer individuals who cannot be decontaminated to medical facilities will be procedurally explained via evaluator interview
- Only one shower area will be setup. A floor plan will be available for inspection.
- One evacuee vehicle will be monitored. Decisions on the need for decontamination will be made based on controller injected radiation levels, as specified in the County REP Plan.
- Initial registration of evacuees will take place at this time.
- Contamination control and record-keeping procedures will be demonstrated.
- For evacuees arriving at the Reception Center implementation of the KI decision will be demonstrated by a Health Department representative.

Columbiana County has Two (2) **Emergency Worker Decontamination Centers**.

- The Emergency Worker Decontamination Center at the Beaver Local School Complex will be demonstrated by West Point Fire Dept. The demonstration is in a time window of (7 p.m. - 9 p.m.) on Wednesday, June 25th 2008.

- The controller notifying the response organizations of the ALERT classification will begin the scenario. Subsequent escalations in ECLs will be driven by controller injects.
- Two Emergency Workers will be monitored for contamination, one will be contaminated.
- Decisions on the need for decontamination will be made based on Controller injected radiation levels, as specified in the County REP Plan.
- Contamination control and record-keeping procedures will be demonstrated.
- Decontamination efforts will be procedurally explained, but actual decontamination will be simulated.
- The decision to refer individuals who cannot be decontaminated to medical facilities will be procedurally explained via evaluator interview.

Sub-element 6.b – Monitoring and Decontamination of Emergency Worker Equipment

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

Columbiana County has Two (2) **Emergency Worker Decontamination Centers.**

- The Emergency Worker Decontamination Center at the Beaver Local School Complex will be demonstrated by West Point Fire Dept. The demonstration is in a time window of (7 p.m. - 9 p.m.) on Wednesday, June 25th 2008.
- The controller notifying the response organizations of the ALERT classification will begin the scenario. Subsequent escalations in ECLs will be driven by controller injects.
- The area to be used for monitoring and decontamination will be set up, as it would be in an actual emergency.
- One vehicle will be monitored and decisions regarding the need for decontamination will be made as radiation levels are presented via controller injects.

- Contamination control and record-keeping procedures will be demonstrated.
- Decontamination efforts will be procedurally explained, but actual decontamination will be simulated.
- Provisions for vehicles that cannot be decontaminated will be addressed during the interview.

Sub-element 6.c - Temporary Care of Evacuees

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

EXTENT OF PLAY

- Columbiana County has three (3) Care Centers identified in the County REP. Sheltering is provided at Care Centers. One (1) Care Center will setup in the 2008 exercise.
- The set-up demonstration will be conducted at the McKinley Elementary School in Lisbon. This Care Center will be demonstrated 7 p.m. - 9 p.m., Monday June 23rd, 2008.
- Red Cross will explain set-up and operations, of the Care Center
- A walk-through of the center will be conducted to determine, through observation and inquiries, that the services and accommodations are consistent with American Red Cross (ARC) 3031.
- The Red Cross will demonstrate registration of evacuees.
- Care Center staff will demonstrate the capability to ensure that evacuees have been monitored for contamination / decontaminated as appropriate. This capability will be determined through an interview process.
- If operations at the center are demonstrated, material that would be difficult or expensive to transport (e.g., cots, blankets, sundries, and large-scale food supplies) need not be physically available at the facility (facilities).

- If supplies and equipment are not transported to the Care Center the Red Cross will provide documentation for the availability of said supplies and equipment.

Sub-element 6.d - Transportation and Treatment of Contaminated Injured Individuals

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

County demonstration of this objective was met at the Salem Community Hospital exercise on October 31st 2007 MS-1 Exercise.

APPENDIX 4

EXERCISE SCENARIO//TIMELINE

This appendix contains a summary of the simulated sequence of events -- Exercise Scenario -- which was used as the basis for invoking emergency response actions by Offsite Response Organizations in the Beaver Valley Power Station Partial Participation Plume Exposure Pathway Exercise on June 24, 2008.

This exercise scenario was submitted by the State of Ohio and FirstEnergy Corporation, and approved by DHS/FEMA on June 18, 2008.

During the exercise, controllers from the State of Ohio gave "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:

The following is a summary of the postulated events for the June 24, 2008, Beaver Valley Power Station Evaluated Exercise. These events did not occur.

2008 Evaluated Exercise
SCENARIO TIMELINE

REAL TIME	EVENT	State Actions	County Actions
1430	Initial Conditions: Unit 1 at 100%, Unit 2 3% Rx Power. Just completed a refueling outage and is preparing for turbine roll.		
1530	Emergency Preparedness Exercise begins.		
1610	A Tornado Watch is issued for Hancock County, WV and Beaver County, PA to be in effect until 1645.		
1615	Tornado touches down in the Bruce Mansfield switchyard		
1631	An ALERT is declared based on EPP-I-1a Tab 1, "Fuel Clad Barrier" item 1.1.5 Letdown Monitor Indication		

2008 Evaluated Exercise
SCENARIO TIMELINE

REAL TIME	EVENT	State Actions	County Actions
1631	Notifications are commenced to plant personnel, the offsite agencies and the NRC	State of Ohio activates their Assessment Room in the State EOC to monitor plant events. Selected emergency responders are alerted and placed on stand-by. State personnel (pre-positioned) may be dispatched to the EOF and JIC	Columbiana County will begin the call down process to notify key staff Establish communications with Beaver and Hancock Counties
1641	An <u>ALERT</u> should be declared by now. The Controller should use the contingency card provided if this action has not been completed.		
1700	National Weather Service Forecast for the next 24 hours is stable with no weather fronts moving through the Tri-State Area. Winds will be out of the East at approximately 3 mph.		Columbiana County may activate Sky Warn
1750	The Reactor Fails to trip Automatically and can not be tripped from the Control Room. (ATWS)		
1806	A Site Area Emergency is declared based on EPP-I-1a Tab 2.3 "Failure of Rx Protection System"		

2008 Evaluated Exercise
SCENARIO TIMELINE

REAL TIME	EVENT	State Actions	County Actions
1806	TSC notifications to the Offsite Agencies are begun.		
1806	The Emergency Operations Facility (EOF) begins to activate. TSC personnel begin offsite notifications. activation of the Joint public Information Center (JPIC),	<p>State begins activation of the State EOC (simulated).</p> <p>State issues news statements once JIC is operational.</p> <p>State recommends livestock and poultry be brought inside and placed on stored feed and protected water.</p> <p>State restricts air and rail traffic.</p> <p>State may request federal assistance.</p> <p>State develops PAR indicating public within 10 mile EPZ monitor EAS stations.</p> <p>Governor may declare state of emergency if warranted.</p>	<p>Notify all EOC staff and agencies</p> <p>Declare State of Emergency,</p> <p>Coordinate with Columbus and adjacent states and counties for ANS activation</p> <p>Activate appropriate public notification of emergency status and provide public periodic updates. (SNB's, EAS, sirens, route verification, etc.) as needed</p> <p>Prepared to activate EWDC , Reception Centers, TCP/ACP should situation Escalates</p> <p>Notify "special facilities" of the protective action recommendation</p>

2008 Evaluated Exercise
SCENARIO TIMELINE

REAL TIME	EVENT	State Actions	County Actions
1816	<p>A <u>SITE AREA EMERGENCY</u> should be declared by now. The Controller should use the contingency card provided if this action has not been completed, however, if discussions are underway which the Controller feels will lead to the declaration of the emergency classification, this CIS may be held for any additional time period.</p>		
1905	<p>A Design Basis Loss of Coolant Accident occurs due to a double ended shear of a portion of the reactor coolant system.</p>		
1920	<p>A General Emergency is declared based on EPP-I-1a Tab 1, "Fuel Clad Barrier" item 1.1.5 Letdown Monitor Indication (LOSS) - EPP-I-1a Tab 2, "RCS Barrier" item 1.2.3 RCS Leak Rate (LOSS) - EPP-I-1a Tab 3, "CNMT Barrier" item 1.3.2 Containment Pressure / Hydrogen Concentration (Potential)</p> <p><i>A Plant Based Protective Action Recommendation is issued as "Evacuate 0-2 miles 360° and a 5 mile down wind wedge Sectors K, L, M, N & P. Shelter the remainder of the 10 mile EPZ. Administer KI in accordance with the state plan."</i></p>		

2008 Evaluated Exercise
SCENARIO TIMELINE

REAL TIME	EVENT	State Actions	County Actions
1920	<p>At this time, based on ½-EPP-IP-4.1 “Offsite Protective Actions”, an offsite Protective Action Recommendation (PAR) is provided to offsite agencies in the EOF and via the Gold Executive Conference (GEC) call. TSC offsite notifications are also conducted.</p>	<p>State develops news statements based on state activities.</p> <p>State develops PAR based on plant conditions utilizing default of evacuation for 2 miles 360 degrees and 5 miles downwind impacting Columbiana county (Subarea 1). KI will be recommended for emergency workers, institutionalized and public in the same Subarea.</p>	<p>Coordinate with Columbus and adjacent states and counties with PAD.</p> <p>Activate appropriate public notification of emergency status and provide public periodic updates. (SNB's, EAS, sirens, route verification, etc.) as needed</p> <p>Activate EWDC, Reception Centers, TCP/ACP</p> <p>Notify agency and organization personnel of protective action recommendations</p> <p>If evacuation is recommended: Relocate mobility impaired to hospitals or care centers, depending on need. Provide transportation for special populations, non-auto-owning population, and health care facilities.</p> <p>Monitor local emergency worker's exposure limits</p> <p>Provide public info. and conduct press briefings</p>

2008 Evaluated Exercise
SCENARIO TIMELINE

REAL TIME	EVENT	State Actions	County Actions
1930	<p>A <u>GENERAL EMERGENCY</u> should be declared by now. The Controller should use the contingency card provided if this action has not been completed</p>		
2012	<p>SLCRS alarm received by the Control Room (Simulator)</p>		
2026	<p>Upgraded Protective Action Recommendation is made based on EPP-IP-4.1 Attachment A.</p> <p>A radioactive material release based Protective Action Recommendation is issued as "Evacuate 0-5 miles 360° and shelter the remainder of the 10 mile EPZ. Administer KI in accordance with the state plan."</p>		

2008 Evaluated Exercise
SCENARIO TIMELINE

REAL TIME	EVENT	State Actions	County Actions
2026	<p>At this time, based on ½-EPP-IP-4.1 "Offsite Protective Actions", an updated offsite Protective Action Recommendation (PAR) is provided to offsite agencies in the EOF and via the Gold Executive Conference (GEC) call. TSC offsite notifications are also conducted.</p>	<p>State considers upgraded utility PAR and determines need to upgrade state PAR based on dose assessment. State also considers dose limits for emergency workers based on dose assessment.</p> <p>State continues to develop press releases regarding state activities.</p> <p>State receives field data (controller inject).</p>	<p>Coordinate with Columbus and adjacent states and counties with PAD</p> <p>Activate appropriate public notification of emergency status and provide public periodic updates. (SNB's, EAS, sirens, route verification, etc.) as needed</p> <p>Monitor EWDC, Reception Centers, TCP/ACP activities</p> <p>Notify agency and organization personnel of protective action recommendations</p> <p>If evacuation is recommended: Relocate mobility impaired to hospitals or care centers, depending on need. Provide transportation for special populations, non-auto-owning population, and health care facilities.</p> <p>Monitor local emergency worker's exposure limits</p> <p>Provide public info. and conduct press briefings</p>

2008 Evaluated Exercise
SCENARIO TIMELINE

REAL TIME	EVENT	State Actions	County Actions
2036	An <u>UPGRADED PROTECTIVE ACTION RECOMMENDATION</u> should be made by now. The Controller should use the contingency card provided if this action has not been completed		
~2140	Release is terminated by lowering Containment pressure below atmospheric pressure.		