

Quad Cities Station

Exercise Report - 2008-08-27

Final Report - Radiological Emergency

Preparedness (REP) Program

2008-11-14



FEMA





FEMA

Exercise Report

Quad Cities Station

Exercise Date: 2008-08-27

Report Date: 2008-11-14

U.S. DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

REP Program

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1. Executive Summary

On August 27, 2008, a Radiological Emergency Preparedness (REP) Partial Participation Plume Exposure Pathway Exercise was conducted for the 10-mile Emergency Planning Zone (EPZ) around the Quad Cities Nuclear Power Station by the U.S. Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA). The purpose of the exercise was to assess the level of State and local preparedness in responding to a radiological emergency. This exercise was held in accordance with DHS/FEMA's policies and guidance concerning the exercise of State and local Radiological Emergency Response Plans (RERPs) and procedures.

The most recent exercise at this site was conducted on May 17, 2006. The qualifying emergency preparedness exercise was conducted on May 20, 1981.

DHS/FEMA wishes to acknowledge the efforts of the many individuals who participated in this exercise. In the State of Illinois Emergency Management Agency, the Counties of Quad Cities and Whiteside and Exelon Corporation who participated along with the State Government.

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

This Report contains the evaluation of the biennial exercise and the evaluation of the following out-of-sequence interviews and activities: Illinois State Police (ISP) Dosimetry Control Officers Briefing and ISP Traffic and Access Control Point at the ISP District 7 Headquarters, and Medical Services of the Trinity Medical Center Hospital and the Trinity Medical Center Transportation Service. The State and local organizations, except where noted in this report, demonstrated knowledge of their emergency response plans and procedures and adequately implemented them.

There were no Deficiencies identified during this exercise for the State of Illinois, or for the Counties of Rock Island or Whiteside.

There were no new Areas Requiring Corrective Actions identified during this exercise

for the State of Illinois and the Counties of Rock Island or Whiteside.

There was one Areas Requiring Corrective Action from a previous exercise, Issue number 51-06-6.d.1-A-01 that was not corrected during the exercises for the State of Illinois. While some of the concerns listed in the Issue were satisfactorily addressed such as radiological monitoring and contamination control techniques, others were not satisfactorily performed. The items include the doffing of radiological clothing, not bagging and label of appropriate samples, no swabs collected or personal contamination samples collected, and the bagging and passing equipment over the REA boundary, were not satisfactory performed or were not demonstrated.

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's activities are conducted pursuant to 44 Code of Federal Regulations (CFR) Parts 350, 351 and 352. These regulations are a key element in the Radiological Emergency Preparedness (REP) Program that was established following the Three Mile Island Nuclear Station accident in March 1979.

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

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

Taking the lead in off-site emergency planning and in the review and evaluation of RERPs and procedures developed by State and local governments;

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

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

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

Formal submission of the RERPs for the Quad Cities to FEMA Region V by the State of Illinois and involved local jurisdictions occurred on December 15, 1982. Formal approval of these RERPs was granted by FEMA on March 2, 1984, under 44 CFR 350.

A REP Partial Participation Plume Exposure Pathway Exercise was conducted on August 27, 2008, and evaluated by DHS/FEMA to assess the capabilities of State and local offsite emergency preparedness organizations in implementing their RERPs and procedures to protect the public health and safety during a radiological emergency involving the Quad Cities Nuclear 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 Chairperson, and approved by the Regional Administrator.

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

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

Section III of this report, entitled "Exercise Overview", presents basic information and

data relevant to the exercise. This section of the report contains a description of the plume pathway EPZ, a listing of all participating jurisdictions and functional entities, which were evaluated, and a tabular presentation of the time of actual occurrence of key exercise events and activities.

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

3. Exercise Overview

Contained in this section are data and basic information relevant to the August 27, 2008, REP Partial Participation Plume Exposure Pathway Exercise to test the offsite emergency response capabilities in the area surrounding the Quad Cities. This section of the exercise report includes a description of the 10-mile Emergency Planning Zone and a listing of all participating jurisdictions and functional entities which were evaluated, and a tabular presentation of the time of actual occurrence of key exercise events and activities.

3.1. EPZ Description

The Quad Cities Nuclear Power Station is located in Rock Island County, Illinois. The Station is 20 miles northeast of the Quad Cities. It is on the eastern bank of the Mississippi River opposite the mouth of the Wapsipinicon River.

The topography of the site and its immediate environs is low and relatively flat, with a mean elevation of approximately 605 feet. The ground surface drops off abruptly at the bank of the river, forming a bluff about 30 feet high.

The 10-mile EPZ encompasses the following jurisdictions: Rock Island County, which includes the municipalities of Cordova and Port Byron, and Whiteside County, which includes the municipality of Albany.

The 2004 population of the 10-mile EPZ is 3,258 persons. The primary land use around the Quad Cities Nuclear Power Station is agricultural, with cash grain crops of corn and soybeans. The closest major industries are located in the Cordova Industrial Park northeast of the Station.

Major transportation facilities in the Quad Cities Nuclear Power Station 10-mile EPZ are limited to Interstate Highway 88, which passes nine and one-half (9 ½) miles southeast of the Station; the I&M Raillink and the Mississippi River.

The EPZ also includes several Counties within the State of Iowa within the Jurisdiction of FEMA Region VII.

3.2. Exercise Participants

Agencies and organizations of the following jurisdictions participated in the Quad Cities Station exercise:

State Jurisdictions

- Illinois Department of Natural Resources Police
- Illinois Department of Transportation
- Illinois Emergency Management Agency
- Illinois Environmental Protection Agency
- Illinois State Police

Risk Jurisdictions

- Rock Island County Board
- Rock Island County Emergency Management Agency (EMA)
- Rock Island County Sheriff's Department
- Rock Island County Health Department
- Rock Island County Highway Department
- Rock Island County Coroner
- Rock Island County Human Resources
- Rock Island County Regional Superintendent of Schools
- Riverside School District #100
- City of Cordova
- City of Port Byron
- Whiteside County EMA
- Whiteside County Sheriff's Department
- Whiteside County Highway Department
- Whiteside County Health Department
- Whiteside County Coroner
- Whiteside County Public Information Officer
- Whiteside County Superintendent of Schools
- City of Albany

Support Jurisdictions

- American Red Cross
- Whiteside County Amateur Radio Emergency Service
- Rock Island EMA Volunteers

Private Jurisdictions

- Emergency Broadcast System Station - WSDR/WZZT/WSSQ

Emergency Broadcast System Station - WVIK
Exelon Nuclear
Trinity Medical Center
Trinity Medical Center Ambulance
Quad Cities Nuclear Power Station

3.3. Exercise Timeline

Table 1, on the following page, presents the times at which key events and activities occurred during the REP Partial Participation Plume Exposure Pathway Exercise conducted on August 27, 2008, for the Quad Cities Nuclear Power Station.

Table 1 - Exercise Timeline
DATE: 2008-08-27, SITE: Quad Cities Station, IL

Emergency Classification Level or Event	Time Utility Declared	IL - SIRC	IL - REAC	IL - UAC	IL - JIC	ROC-EOC---	WHI-EOC---
Unusual Event	NA	NA	NA	NA	NA	NA	NA
Alert	0815	0815	0828	0850	0837	0843	0842
Site Area Emergency	0938	0950	0953	1005	0948	1001	1006
General Emergency	1116	1129	1131	1135	1136	1142	1150
Simulated Rad. Release Started	1111	1129	1111	1135	1136	1142	1150
Simulated Rad. Release Terminated	NA	NA	NA	NA	NA	NA	NA
Facility Declared Operational		0945	0857	0900	0935	0910	0930
Declaration of State of Emergency		1200	NA	1147	1202	1205	1154
Exercise Terminated		1235	1232	1240	1250	1305	1256
Early Precautionary Actions:		1005/1017	0944	NA	1032	NA	NA
1st Protective Action Decision:		1020	NA	NA	NA	1020	1016
1st Siren Activation		NA	NA	NA	NA	1020	1020
1st EAS or EBS Message		NA	NA	NA	NA	1022	1023
2nd Protective Action Decision:		1139	NA	1135	1136	1145	1157
2nd Siren Activation		NA	NA	NA	NA	1200	1200
2nd EAS or EBS Message		NA	NA	NA	NA	1203	1203
3rd Protective Action Decision:							
3rd Siren Activation							
3rd EAS or EBS Message							
4th Protective Action Decision:							
4th Siren Activation							
4th EAS or EBS Message							
5th Protective Action Decision:							
5th Siren Activation							
5th EAS or EBS Message							
6th Protective Action Decision:							
6th Siren Activation							
6th EAS or EBS Message							
KI Administration Decision:		1113	1113	1135	1136	1145	1157

4. Exercise Evaluation and Results

Contained in this section are the results and findings of the evaluation of all jurisdictions and functional entities that participated in the August 27, 2008, REP Partial Participation Plume Exposure Pathway Exercise to test the off-site emergency response capabilities of State and local governments in the 10-mile EPZ surrounding the Quad Cities.

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 are indicated by the use of the following letters:

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

D - Deficiency assessed

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

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

Blank - Not scheduled for demonstration

Table 2 - Summary of Exercise Evaluation (2 pages)

[illegible]

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

<p>DATE: 2008-08-27</p> <p>SITE: Quad Cities Station, IL</p> <p>A: ARCA, D: Deficiency, M: Met, N: Not Demonstrated</p>		IL-JSP D#7 HQ--TACP-	IL--Trinity MC Trans-	IL--Trinity MC--MSIF-	ROC-IWP---	ROC-EOC---	ROC--Sheriffs-TACP-	ROC-EBS-WVIK---	WHI-IWP---	WHI-EOC---	WHI--Sheriffs-TACP-	WHI-EBS-
Emergency Operations Management												
Mobilization	1a1				M	M			M	M		
Facilities	1b1											
Direction and Control	1c1					M				M		
Communications Equipment	1d1	M	M	M	M	M	M	M	M	M	M	M
Equipment and Supplies to Support Operations	1e1	M		M		M	M			M	M	
Protective Action Decision Making												
EW Exposure Control Decisions	2a1											
PARs	2b1											
PADs	2b2					M				M		
PADs for Disabled/Functional Needs	2c1					M				M		
Ingestion PADs	2d1											
RRR Decisions	2e1											
Protective Action Implementation												
EW Exposure Control Implementation	3a1	M		M		M	M			M	M	
KI Public/Institutionalized	3b1	M				M	M			M	M	
PAD Implementation Disabled/Functional Needs	3c1					M				M		
PAD Implementation Schools	3c2					M						
TACP Establishment	3d1	M				M	M			M	M	
Impediments	3d2					M				M		
Implement Ingestion PADs	3e1											
Coordination of RRR Decisions	3e2											
Coordination of RRR Decisions	3f1											
Field Measurement and Analysis												
RESERVED	4a1											
Field Team Management	4a2											
Field Team Operations	4a3											
Field Team Sampling	4b1											
Laboratory Operations	4c1											
Emergency Notification and Public Info												
Initial Alert & Notification	5a1					M		M		M		M
RESERVED	5a2											
Backup Alert & Notification	5a3											
Exception Area Alerting	5a4											
Subsequent Information & Instructions	5b1					M		M		M		M
Support Operations/Facilities												
Reception Center Operations	6a1											
EW Monitoring & Decontamination	6b1											
Congregate Care	6c1											
Contaminated Injured Transport & Care	6d1		M	A								

4.2. Status of Jurisdictions Evaluated

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

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

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

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

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

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

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

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

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

4.2.1. Illinois Jurisdictions

4.2.1.1. State of Illinois - Initial Warning Point

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

4.2.1.2. State of Illinois - State of Illinois Response Center

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

4.2.1.3. State of Illinois - Radiological Emergency Assessment Center

- 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, 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

4.2.1.4. State of Illinois - Unified Area Command

- a. MET: 1.c.1, 1.d.1, 1.e.1, 2.b.2, 3.d.1, 3.d.2, 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 of Illinois - Emergency Operations

Facility

- a. MET: 1.a.1, 1.c.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

4.2.1.6. State of Illinois - Joint Information Center

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

4.2.1.7. State of Illinois - Rock Island County

Emergency Operations Center - Illinois State

Radiological Advisor

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

4.2.1.8. State of Illinois - Rock Island County

Emergency Operations Center - Illinois State Liaison

- a. MET: 1.c.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

4.2.1.9. State of Illinois - Whiteside County

Emergency Operations Center - Illinois State

Radiological Advisor

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

4.2.1.10. State of Illinois - Whiteside County

Emergency Operations Center - Illinois State Liaison

- a. MET: 1.c.1, 1.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

4.2.1.11. State of Illinois - Illinois State Police District

7 Headquarters - Dosimetry Control Officer Briefing

- 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

4.2.1.12. State of Illinois - Illinois State Police District 7 Headquarters - Traffic and Access Control Post

- 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

4.2.1.13. State of Illinois - Trinity Medical Center - Medical Service - Transportation

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

4.2.1.14. State of Illinois - Trinity Medical Center - Medical Service - Facility

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

- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: 6.d.1.

ISSUE NO.: 51-06-6d1-A-01

ISSUE: Monitoring techniques and contamination control were not adequate.

REASON UNRESOLVED: This out-of-sequence drill was intended to address and demonstrate resolution of items contained in Issue Number: 51-06-6.d.A.01. While some of the concerns listed in the Issue were satisfactorily addressed such as radiological monitoring and contamination control techniques, others were not satisfactorily performed (doffing of radiological clothing, not bagging and label of appropriate samples) were not demonstrated or (bagging and passing equipment over the REA boundary).

SCHEDULE OF CORRECTIVE ACTIONS

The State of Illinois will review the procedures and training that addresses monitoring techniques and contamination control. In addition, supplemental training and mock drills will be held to ensure all monitoring and contamination control issues are addressed properly before the next drill.

4.2.2. Risk Jurisdictions

4.2.2.1. Rock Island County - Initial Warning 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. Rock Island County - Emergency Operations Center

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

ISSUE NO.: 51-06-3d1-A-02

ISSUE: Sub-areas 1 and 3 were the evacuated in Rock Island County. County Sheriff's Representatives identified TACPs and simulated sending personnel to points that were on the line dividing sub-area 1 from sub-area 3 (inside the evacuated areas) and not on the line dividing sub-area 3 from sub-area 6 (between the evacuated and non-evacuated sub-areas).

CORRECTIVE ACTION DEMONSTRATED: In the previous exercise there was an ARCA due to not fully positioning TACPs on the line between evacuated and non-evacuated sub-areas, possibly allowing traffic to enter an evacuated area (sub-area 3). To address this, a Controller inject was initiated at 1235 hours and given to the ISP and County Sheriff Department representatives simulating a second PAR for evacuation of sub-areas 5 and 6 in Rock Island County. A new TACP plan was developed which pulled personnel from TACP locations in sub-areas 1 and 3 and re-deployed them to pre-identified TACPs along the outer edge of sub-areas 5 and 6. This would be fully coordinated with Whiteside County so that their TACPs would also be fully staffed. This demonstration and interview corrected the previous ARCA.

- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.3. Rock Island County - Sheriffs Department - Traffic and Access Control Post

- 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

4.2.2.4. Rock Island County - Emergency Broadcast System Station - WVIK

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

4.2.2.5. Whiteside County - Initial Warning 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

4.2.2.6. Whiteside County - Emergency Operations Center

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

ISSUE NO.: 51-06-5a1-A-03

ISSUE: The ESDA Director immediately began his EBS message without

providing the required "Password". According to Radio Station procedures that were provided by the Whiteside County ESDA, the ESDA Director is directed to first verify the message by announcing the prearranged "Password" (exercise or real world) and then wait on the line until such time that the message content is verified by Radio Station Staff.

CORRECTIVE ACTION DEMONSTRATED: Whiteside County officials followed procedures by properly identifying the source and providing the correct authentication password to the EBS radio station staff. The radio station verified the authentication password prior to recording and simulating the broadcast of the EBS messages.

- f. PRIOR ISSUES - UNRESOLVED: None

4.2.2.7. Whiteside County - Sheriff Department - Traffic and Access Control Post

- 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

4.2.2.8. Whiteside County - Emergency Broadcast Station - WSDR/WZZT/WSSQ

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

APPENDIX 1

ACRONYMS AND ABBREVIATIONS

ACP	Access Control Point
ALARA	As Low As Reasonable Achievable
ALS	Advanced Life Support
ARC	American Red Cross
ARCA	Area Requiring Corrective Action
ARES	Amateur Radio Emergency Services
ATG	Office of the Illinois Attorney General
BLS	Basic Life Support
CAP	Civil Air Patrol
CCC	Congregate Care Center
CD-V	Civil Defense-Category V
CFR	Code of Federal Regulations
cpm	counts per minute
DCO	Dosimetry Control Officer
DHS	Department of Homeland Security
DRD	Direct-Reading Dosimeter
EAL	Emergency Action Level
EBS	Emergency Broadcast System
ECL	Emergency Classification Level
ED	Emergency Department
EM	Emergency Management
EMA	Emergency Management Agency
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EPZ	Emergency Planning Zone
EV-2	Protective Actions for School Children
EW	Emergency Worker
FEMA	Federal Emergency Management Agency
FTC	Field Team Center
GE	General Emergency
GIS	Geographical Information System
HP	Health Physics or Health Physicist
HS	High School
ICC	Illinois Commerce Commission
ICF	ICF Consulting
ICP	Illinois Conservation Police
IDA	Illinois Department of Agriculture
IDHS	Illinois Department of Human Services
IDMA	Illinois Department of Military Affairs
IDNR	Illinois Department of Natural Resources
IDOT-A	Illinois Department of Transportation-Division of Aeronautics
IDOT-H	Illinois Department of Transportation-Division of Highways

IDPH	Illinois Department of Public Health
IEMA	Illinois Emergency Management Agency
IEPA	Illinois Environmental Protection Agency
IPRA	Illinois Plan for Radiological Accidents
IREACH	Illinois Radio Emergency Aid Channel
ISP	Illinois State Police
IWP	Initial Warning Point
JIC	Joint Information Center
KI	Potassium Iodide
LEADS	Law Enforcement Agency Data System
LEIRS	Local Emergency Information Radio Station
M&D	Monitoring and Decontamination
MDT	Mobile Data Terminal
mR	milliRoentgen
mR/hr	milliRoentgen per Hour
MS-1	Medical Services Drill
NARS	Nuclear Accident Reporting System
NRC	Nuclear Regulatory Commission
NTRC	Northern Technical Response Center
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
ORO	Off-site Response Organization
OSLD	Optically Stimulated Luminescent Dosimeter
PAD	Protective Action Decision
PAG	Protective Action Guide
PAO	Public Affairs Official
PAR	Protective Action Recommendation
PIO	Public Information Officer
PNS	Prompt Notification System
QCNPS	Quad Cities Nuclear Power Station
R	Roentgen
R/hr	Roentgen per hour
RAC	Regional Assistance Committee
RACES	Radio Amateur Civil Emergency Services
RAFT	Radiological Assessment Field Team
RASCAL	Radiological Assessment System for Consequence Analysis
RCP	Reactor Coolant Pump
RCS	Reactor Coolant System
RDO	Radiological Defense Officer
REA	Radiological Emergency Area
REAC	Radiological Emergency Assessment Center
rem	Roentgen Equivalent Man
REP	Radiological Emergency Preparedness
RERP	Radiological Emergency Response Plan
RMS	Remote Monitoring System
RO	Radiological Officer
RTF	Radiological Task Force
SAE	Site Area Emergency

SEOC	State Emergency Operations Center
SGTS	Standby Gas Treatment System
SIRC	State Incident Response Center
SOP	Standard Operating Procedure
T/L	Team Leader
TACP	Traffic and Access Control Point
TLD	Thermoluminescent Dosimeter
TLV	Threshold Limit Value
TSC	Technical Support Center
UAC	Unified Area Command
UHF	Ultra High Frequency
VHF	Very High Frequency
WCEOC	Whiteside County Emergency Operations Center

APPENDIX 2

EXERCISE EVALUATORS AND TEAM LEADERS

DATE: 2008-08-27, SITE: Quad Cities Station, IL

LOCATION	EVALUATOR	AGENCY
State of Illinois - Initial Warning Point	Kara Scott	FEMA RV
State of Illinois - State of Illinois Response Center	Michael Meshenberg Kara Scott	ICFI FEMA RV
State of Illinois - Radiological Emergency Assessment Center	Richard Grundstrom Bernis Hannah	FEMA RIX ICFI
State of Illinois - Unified Area Command	Eugene Deener James Groves	DHS/FEMA ICF
State of Illinois - Emergency Operations Facility	Robert Black	ICFI
State of Illinois - Joint Information Center	Sandra Bailey	DHS/FEMA
State of Illinois - Rock Island County Emergency Operations Center - Illinois State Radiological Advisor	Marynette Herndon Delwyn Kinsley Bruce Swiren	ICFI FEMA RV ICFI
State of Illinois - Rock Island County Emergency Operations Center - Illinois State Liaison	Marynette Herndon Bruce Swiren	ICFI ICFI
State of Illinois - Whiteside County Emergency Operations Center - Illinois State Radiological Advisor	Carl Bebrich Richard Smith	FEMA RV ICF
State of Illinois - Whiteside County Emergency Operations Center - Illinois State Liaison	Carl Bebrich Richard Smith	FEMA RV ICF
State of Illinois - Illinois State Police District 7 Headquarters - Dosimetry Control Officer Briefing	Richard Wessman	ICF
State of Illinois - Illinois State Police District 7 Headquarters - Traffic and Access Control Post	Gary Bolender	ICFI
State of Illinois - Trinity Medical Center - Medical Service - Transportation	Todd Sniffin	ICF
State of Illinois - Trinity Medical Center - Medical Service - Facility	Robert Black	ICFI
Rock Island County - Initial Warning Point	Gregg Dawkins	ICF
Rock Island County - Emergency Operations Center	Marynette Herndon Delwyn Kinsley Bruce Swiren	ICFI FEMA RV ICFI
Rock Island County - Sheriffs Department - Traffic and Access Control Post	Gregg Dawkins	ICF
Rock Island County - Emergency Broadcast System Station - WVIK	Richard Wessman	ICF
Whiteside County - Initial Warning Point	Gary Bolender	ICFI
Whiteside County - Emergency Operations Center	Carl Bebrich Richard Smith	FEMA RV ICF
Whiteside County - Sheriff Department - Traffic and Access Control Post	Todd Sniffin	ICF
Whiteside County - Emergency Broadcast Station - WSDR/WZZT/WSSQ	Gary Bolender	ICFI
* Team Leader		

APPENDIX 3

EXERCISE CRITERIA AND EXTENT - OF - PLAY AGREEMENT

This appendix lists the exercise criteria, which were scheduled for demonstration in the Quad Cities REP Partial Participation Plume Exposure Pathway Exercise on August 27, 2008, and the off-site extent-of-play agreement approved by DHS/FEMA Region V on July 30, 2008.

The exercise criteria, contained in the FEMA "Radiological Emergency Preparedness Exercise Evaluation Methodology; Notice," as published in the Federal Register Notice/Vol 67, 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 offsite plans and procedures, an extent-of-play agreement is prepared by the State and approved by DHS/FEMA to provide evaluators with guidance on expected actual demonstration of the criteria.

A. Exercise Criteria

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

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.

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.

SUB-ELEMENT 1.d – Communications Equipment

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

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.

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.

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.

SUB-ELEMENT 2.b – Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency

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).

SUB-ELEMENT 2.c – Protective Action Decisions for the Protection of Special Populations

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

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.

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.

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.

SUB-ELEMENT 3.c. – Implementation of Protective Actions for Special Populations

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

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.

SUB-ELEMENT 3.d. – Implementation of Traffic and Access Control

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

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 notification of the public are completed in a timely manner following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include as a minimum the elements required by current FEMA REP Guidance.

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.

EVALUATION AREA 6: SUPPORT OPERATION/FACILITIES

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 individuals₂₉

**STATE OF ILLINOIS EXTENT OF PLAY AGREEMENT
FOR THE
QUAD CITIES STATION EXERCISE
August 27, 2008**

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

EVALUATION AREA 1 - EMERGENCY OPERATIONS MANAGEMENT

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

The State Emergency Operations Center (SEOC), which houses the IEMA Communications Center (Initial Warning Point), the State of Illinois Response Center (SIRC) and the Radiological Emergency Assessment Center (REAC), will be activated. The IEMA Emergency Response Telecommunicator will implement procedures for notification of IEMA staff as defined in IEMA SOPs. The SIRC will be partially activated with IEMA personnel. REAC will be fully activated. Rosters will be provided to demonstrate 24-hour staffing of the SIRC and REAC. The evaluator will not be allowed to remove the rosters.

The Unified Area Command (UAC) will be activated at the Whiteside County Airport with State district and regional personnel. The Radiological Assessment Field Team (RAFT) Command Center and mobile lab will be staffed at the IDOT Yard near Lyndon for training purposes. IEMA personnel will be prepositioned in the local area and dispatched to the Rock Island County EOC, Whiteside County EOC, UAC, Emergency Operations Facility (EOF), Technical Support Center (TSC) and the Joint Information Center (JIC). FEMA will not evaluate the TSC.

The prepositioned State staff will begin exercise play no earlier than the Alert.

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

This criterion will not be demonstrated during this exercise.

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

The ability to direct and control emergency response activities will be demonstrated at the SIRC, REAC, the UAC and the JIC. Coordination will be demonstrated between the SIRC, the REAC, the UAC, the JIC, the EOF and the County EOCs.

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.

IEMA will use a variety of communication systems [Nuclear Accident Reporting System (NARS), telefax, commercial telephone, cellular phone, radio] to communicate with other organizations and locations.

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

The State of Illinois will demonstrate the use of equipment, maps and displays to support emergency operations. DCO logs will be available from an IEMA Radiological Advisors in the County EOCs.

A DCO briefing/traffic and access control (TAC) interview will be conducted by Illinois State Police on August 26 (tentative) at the District 7 Headquarters in East Moline. During this event, the availability of dosimetry will be demonstrated. No more than 10% of ISP District 7 dosimetry kits will be inspected during the interview to confirm serial numbers.

EVALUATION AREA 2 - PROTECTIVE ACTION DECISION MAKING

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

The ability to make the decision to recommend the use of KI to emergency workers will be demonstrated in REAC. A message will be injected in the Rock Island County EOC to drive the decision to authorize exposure in excess of administrative limits.

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.

The REAC will evaluate the licensee information and complete independent dose projections based on that information and simulated field monitoring data. REAC will make an evaluation of the data and make a protective action recommendation (PAR) to the SIRC.

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).

The coordination to determine PARs based upon available shelters, evacuation time estimates and other relevant factors will be demonstrated between the SIRC and REAC. The State PAR will be transmitted to the EPZ counties via NARS.

The capability to determine which centers should be activated for monitoring, decontamination, registration reception and congregate care will be demonstrated at UAC, with input from the SIRC and REAC.

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

The coordination to determine PARs based upon available shelters, evacuation time estimates and other relevant factors will be demonstrated between the SIRC and REAC. The State PAR will be transmitted to the EPZ counties via NARS.

The ability to make the decision to recommend the use of KI to institutionalized persons will be demonstrated in REAC.

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

This criterion will not be demonstrated during this exercise.

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

This criterion will not be demonstrated during this exercise.

EVALUATION AREA 3 - PROTECTIVE ACTION IMPLEMENTATION

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

This will be demonstrated during the DCO briefing/TAC interview on August 26 (tentative), at the ISP District 7 Headquarters.

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.

This will be demonstrated during the DCO briefing/TAC interview on August 26 (tentative), at the ISP District 7 Headquarters.

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

This criterion does not apply to the State of Illinois.

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

This criterion does not apply to the State of Illinois.

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

This will be demonstrated by the State through coordination between the UAC and the County EOCs, in accordance with the Quad Cities Station EPZ Traffic and Access Control procedures. The staffing of the State posts will be simulated during the exercise. A TAC interview will be conducted on August 26 (tentative) at ISP District 7 Headquarters.

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

This will be demonstrated through discussions at the UAC between the ISP and Illinois Department of Transportation. A message will be injected to the ISP representative in the Rock Island County EOC that will drive this demonstration. State personnel will deal with the impediment by discussing the need for equipment, and its estimated time of arrival, etc. Actual contacts with resource providers will be made and logged.

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

This criterion will not be demonstrated during this exercise.

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

This criterion will not be demonstrated during this exercise.

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

This criterion will not be demonstrated during this exercise.

EVALUATION AREA 4 - FIELD 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.

This criterion will not be demonstrated during this exercise.

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

This criterion will not be demonstrated during this exercise.

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

This criterion will not be demonstrated during this exercise.

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

This criterion will not be demonstrated during this exercise.

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

This criterion will not be demonstrated during this exercise.

EVALUATION AREA 5 - EMERGENCY NOTIFICATION AND PUBLIC INFORMATION

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

The State's role in demonstrating this criterion is limited to transmitting the State's PAR to the counties and monitoring the instructional messages provided to the public by the counties. This monitoring will be accomplished by IEMA representatives in the County EOCs.

Criterion 5.a.2: [RESERVED]

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

This criterion does not apply to the State of Illinois.

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

This will be demonstrated at the JIC in coordination with the SIRC, REAC, UAC and the County EOCs. IEMA personnel will be present at the JIC to coordinate with the Exelon staff. Media

briefings will be conducted at the JIC. A livestock advisory will be issued to the media from the JIC or the SIRC when appropriate.

A rumor control phone bank for public inquiries will not be operated by the State during the exercise.

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.

Both of the facilities designated as reception and congregate care centers in IPRA-Quad Cities have been evaluated since 2004. For this reason, an interview and inspections will not be conducted during the week of the Quad Cities exercise.

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.

Both of the facilities designated as reception and congregate care centers in IPRA-Quad Cities have been evaluated since 2004. For this reason, an interview and inspections will not be conducted during the week of the Quad Cities exercise.

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.

Both of the facilities designated as reception and congregate care centers in IPRA-Quad Cities have been evaluated since 2004. For this reason, an interview and inspections will not be conducted during the week of the Quad Cities exercise.

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

This criterion will be demonstrated during a drill at Trinity Medical Center – West in Rock Island on August 26, at 1 p.m. (confirmed).

**ROCK ISLAND COUNTY EXTENT OF PLAY AGREEMENT
FOR THE
QUAD CITIES STATION EXERCISE
August 27, 2008**

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

EVALUATION AREA 1 - EMERGENCY OPERATIONS MANAGEMENT

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

Rock Island County intends to fully activate the Emergency Operations Center (EOC) in Milan, Illinois. The County will implement notification procedures as defined in IPRA-Quad Cities. Representatives from IEMA, ISP and Exelon will staff the County EOC but will not be pre-positioned in the EOC. A roster will be provided to demonstrate 24-hour staffing of the EOC. Evaluators will not be allowed to remove the roster from the EOC.

An evaluator will be positioned at the County Sheriff's Communications Center (initial warning point) at the start of the exercise.

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

This criterion will not be demonstrated in the Rock Island County EOC.

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.

Decision making will be demonstrated at the Rock Island County EOC. Coordination of decisions and emergency activities will be demonstrated between Rock Island County, the SIRC, the UAC, the JIC, and between the County and municipalities within the EPZ. Coordination between Rock Island County and Whiteside County will be demonstrated.

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.

Rock Island County will use NARS, commercial telephone, radio and telefax to communicate with departments and agencies at other locations.

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

Rock Island County will demonstrate the ability to support operations through the use of maps, status boards and other displays as appropriate. DCO logs will be available from the IEMA Radiological Advisor in the County EOC. The availability of dosimetry and KI will be demonstrated at the County EOC and during the traffic and access control (TAC) demonstration. The DCO briefing for the deputy demonstrating traffic and access control will be conducted at the Rock Island County EOC.

EVALUATION AREA 2 - PROTECTIVE ACTION DECISION MAKING

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

This criterion does not apply to Rock Island County.

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.

This criterion does not apply to Rock Island County.

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).

The State of Illinois will make protective action recommendations (PARs) to Rock Island County officials in the County EOC. The Rock Island County officials will make the final decision regarding what protective actions will be recommended to the public.

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

The State of Illinois will make PARs to Rock Island County officials in the County EOC. The Rock Island County officials will make the final decision regarding what protective actions will be recommended to the special population groups.

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

This criterion does not apply to Rock Island County.

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

This criterion will not be demonstrated during this exercise.

EVALUATION AREA 3 - PROTECTIVE ACTION IMPLEMENTATION

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

Rock Island County will demonstrate this criterion by coordination with the IEMA Radiological Advisor and timely dissemination and exchange of information within the County Dosimetry Control Officer network. Exercise messages will be injected which will ensure the opportunity to demonstrate this criterion in the County EOC.

This criterion will also be demonstrated during the TAC demonstration. The DCO briefing for the Sheriff's deputy demonstrating traffic and access control will be conducted at the Rock Island County EOC.

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.

When notified by the State of Illinois to distribute and administer KI, Rock Island County officials will discuss the issuance of KI to emergency workers and immobile populations, as a voluntary measure, and will notify the municipalities of the State's recommendation.

This criterion will also be demonstrated during the TAC demonstration. The DCO briefing for the Sheriff's deputy demonstrating traffic and access control will be conducted at the Rock Island County EOC.

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

This will be demonstrated by Rock Island County through the simulated implementation of the appropriate procedures. The appropriate officials will coordinate transportation and receiving facilities for special populations. One of each type of special facility will be contacted during the exercise. One of each type of transportation provider (ambulance/bus) will be contacted during the exercise. The public will not be involved in the demonstration.

The Mobility Impaired List will be available for inspection in the County EOC during the exercise. The evaluator will not be allowed to remove the list from the EOC.

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

Rock Island County officials will demonstrate this capability through the simulated implementation of the appropriate procedures in the County EOC. The EPZ schools and transportation providers will be contacted during the exercise.

A successful interview with Riverdale School District staff was conducted in 2006. Therefore, an interview will not be conducted this year.

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

Coordination between Rock Island County agencies designated to provide traffic and access control will be exhibited in the County EOC. A Sheriff's deputy will be available during the exercise to demonstrate the staffing of one post. The post for the demonstration will be selected by Rock Island County during the exercise based on exercise play. The deputy will drive to the selected post location for the demonstration. The staffing of the remaining posts will be simulated.

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

The Rock Island County EOC staff will demonstrate the capability to identify and take appropriate actions concerning impediments to evacuation. A message will be injected by the Controller that will drive this demonstration. County personnel will deal with the impediment by identifying the equipment needed, discussing its estimated time of arrival, etc. Actual contacts with resource providers will be made and logged.

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

This criterion does not apply to Rock Island County.

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

This criterion does not apply to Rock Island County.

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

This criterion will not be demonstrated during this exercise.

EVALUATION AREA 4 - FIELD MEASUREMENT AND ANALYSIS

This evaluation area does not apply to Rock Island County.

EVALUATION AREA 5 - EMERGENCY NOTIFICATION AND PUBLIC INFORMATION

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

Rock Island County will demonstrate the capability to provide both an alert signal and an initial instructional message to populated areas throughout the 10-mile plume pathway EPZ in a timely manner after their decision to activate the alert and notification system to implement PARs.

This capability will be demonstrated through the simulated activation of the Quad Cities Station EPZ Prompt Notification System as defined in IPRA-Quad Cities. The Prompt Notification System (outdoor warning sirens) will not be activated during the exercise.

The ability to provide instructions to the public will be demonstrated through the simulated activation of the local radio station. The local radio station will be contacted for the first, and possibly the second, alert and notification sequence. An evaluator and controller will be positioned at the radio station during the exercise to monitor the messages. If the initial message does not contain a protective action recommendation, the evaluator and controller will stay at the radio station for the second message.

Coordination between Rock Island County and Whiteside County will be demonstrated.

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.

This criterion does not apply to Rock Island County.

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

Rock Island County will demonstrate this criterion by using pre-scripted messages as indicated in IPRA-Quad Cities. Contact with the radio station will be simulated for each alert and notification sequence following the sequence issuing the initial PAR.

The ability to provide information to the media will be demonstrated by Rock Island County through a briefing held at the Rock Island County media briefing location. If real media are not present for the briefing, the controller and observers will serve as mock media. Evaluators will not serve as mock media.

The ability to deal with rumors will be demonstrated by Rock Island County through coordination between the County EOC and the JIC. The Rock Island County EOC controller will inject exercise messages which will ensure the opportunity to demonstrate this criterion. County officials will investigate and address "rumors." If appropriate, the "rumors" will be coordinated between State and County officials in the County EOC and the JIC.

County emergency broadcast messages and news releases, if issued, will be faxed to the JIC.

EVALUATION AREA 6 - SUPPORT OPERATION/FACILITIES

This evaluation area does not apply to Rock Island County.

**WHITESIDE COUNTY EXTENT OF PLAY AGREEMENT
FOR THE
QUAD CITIES STATION EXERCISE
August 27, 2008**

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

EVALUATION AREA 1 - EMERGENCY OPERATIONS MANAGEMENT

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

Whiteside County intends to fully activate the Emergency Operations Center (EOC) in Morrison, Illinois. The County will implement notification procedures as defined in IPRA-Quad Cities. Representatives from IEMA, ISP and Exelon will staff the County EOC but will not be pre-positioned in the EOC. A roster will be provided to demonstrate 24-hour staffing of the EOC. Evaluators will not be allowed to remove the roster from the EOC.

An evaluator will be positioned at the County Sheriff's Communications Center (initial warning point) at the start of the exercise.

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

This criterion will not be demonstrated in the Whiteside County EOC.

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.

Decision making will be demonstrated at the Whiteside County EOC. Coordination of decisions and emergency activities will be demonstrated between Whiteside County, the SIRC, the UAC, the JIC, and between the County and Albany. Coordination between Whiteside County and Rock Island County will be demonstrated.

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.

Whiteside County will use NARS, commercial telephone, radio and telefax to communicate with departments and agencies at other locations.

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

Whiteside County will demonstrate the ability to support operations through the use of maps, status boards and other displays as appropriate. DCO logs will be available from the IEMA Radiological Advisor in the County EOC. The availability of dosimetry and KI will be demonstrated at the County EOC and during the traffic and access control (TAC) demonstration. The DCO briefing for the deputy demonstrating traffic and access control will be conducted at the Whiteside County EOC.

EVALUATION AREA 2 - PROTECTIVE ACTION DECISION MAKING

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

This criterion does not apply to Whiteside County.

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.

This criterion does not apply to Whiteside County.

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).

The State of Illinois will make protective action recommendations (PARs) to Whiteside County officials in the County EOC. The Whiteside County officials will make the final decision regarding what protective actions will be recommended to the public.

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

The State of Illinois will make PARs to Whiteside County officials in the County EOC. The Whiteside County officials will make the final decision regarding what protective actions will be recommended to the special population groups.

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

This criterion does not apply to Whiteside County.

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

This criterion will not demonstrated during this exercise.

EVALUATION AREA 3 - PROTECTIVE ACTION IMPLEMENTATION

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

Whiteside County will demonstrate this criterion by coordination with the IEMA Radiological Advisor and timely dissemination and exchange of information within the County Dosimetry Control Officer network. Exercise messages will be injected which will ensure the opportunity to demonstrate this criterion in the County EOC.

This criterion will also be demonstrated during the (TAC) demonstration. The DCO briefing for the Sheriff's deputy demonstrating traffic and access control will be conducted at the Whiteside County EOC.

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.

When notified by the State of Illinois to distribute and administer KI, Whiteside County officials will discuss the issuance of KI to emergency workers and immobile populations, as a voluntary measure, and will notify Albany officials of the State's recommendation.

This criterion will also be demonstrated during the TAC demonstration. The DCO briefing for the Sheriff's deputy demonstrating traffic and access control will be conducted at the Whiteside County EOC.

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

This will be demonstrated by Whiteside County through the simulated implementation of the appropriate procedures. The appropriate officials will coordinate transportation and receiving facilities for special populations. One of each type of special facility will be contacted during the exercise. One of each type of transportation provider (ambulance/bus) will be contacted during the exercise. The public will not be involved in the demonstration.

The Mobility Impaired List will be available for inspection in the County EOC during the exercise. The evaluator will not be allowed to remove the list from the EOC.

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

This criterion will be demonstrated in the Whiteside County EOC.

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

Coordination between Whiteside County agencies designated to provide traffic and access control will be exhibited in the County EOC. A Sheriff's deputy will be available during the exercise to demonstrate the staffing of one post. The post for the demonstration will be selected by Whiteside County during the exercise based on exercise play. The deputy will drive to the selected post location for the demonstration. The staffing of the remaining posts will be simulated.

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

The Whiteside County EOC staff will demonstrate the capability to identify and take appropriate actions concerning impediments to evacuation. A message will be injected by the Controller that will drive this demonstration. County personnel will deal with the impediment by identifying the equipment needed, discussing its estimated time of arrival, etc. Actual contacts with resource providers will be made and logged.

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

This criterion does not apply to Whiteside County.

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

This criterion does not apply to Whiteside County.

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

This criterion will not be demonstrated during this exercise.

EVALUATION AREA 4 - FIELD MEASUREMENT AND ANALYSIS

This evaluation area does not apply to Whiteside County.

EVALUATION AREA 5 - EMERGENCY NOTIFICATION AND PUBLIC INFORMATION

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

Whiteside County will demonstrate the capability to provide both an alert signal and an initial instructional message to populated areas throughout the 10-mile plume pathway EPZ in a timely manner after their decision to activate the alert and notification system to implement PARs.

This capability will be demonstrated through the simulated activation of the Quad Cities Station EPZ Prompt Notification System as defined in IPRA-Quad Cities. The Prompt Notification System (outdoor warning sirens) will not be activated during the exercise.

The ability to provide instructions to the public will be demonstrated through the simulated activation of the local radio station (WSDR/WZZT/WSSQ). The local radio station will be contacted during the first, and possibly the second, alert and notification sequence. An evaluator and controller will be positioned at the radio station during the exercise to monitor the messages. If the initial message does not contain a protective action recommendation, the evaluator and controller will stay at the radio station for the second message.

Coordination between Whiteside County and Rock Island County will be demonstrated.

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.

This criterion does not apply to Whiteside County.

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

Whiteside County will demonstrate this criterion by using pre-scripted messages as indicated in IPRA-Quad Cities. Contact with the radio station will be simulated for each alert and notification sequence following the sequence issuing the initial PAR.

The ability to provide information to the media will be demonstrated by Whiteside County through a briefing held at the Whiteside County media briefing location. If real media are not present for the briefing, the controller and observers will serve as mock media. Evaluators will not serve as mock media.

The ability to deal with rumors will be demonstrated by Whiteside County through coordination between the County EOC and the JIC. The Whiteside County EOC controller will inject exercise messages which will ensure the opportunity to demonstrate this criterion. County officials will investigate and address "rumors." If appropriate, the "rumors" will be coordinated between State and County officials in the County EOC and the JIC.

County emergency broadcast messages and news releases, if issued, will be faxed to the JIC.

EVALUATION AREA 6 - SUPPORT OPERATION/FACILITIES

This evaluation area does not apply to Whiteside County.

APPENDIX 4

EXERCISE SCENARIO

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 Quad Cities REP Partial Participation Plume Exposure Pathway exercise on August 27, 2008.

This exercise scenario was submitted by the State of Illinois and Exelon Nuclear and approved by DHS/FEMA Region V on July 30, 2008.

During the exercise, controllers from the State of Illinois 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.

EXERCISE TIME LINE

Scenario	
Winds are out of the South at 180 degrees. No precipitation. Light winds – 4 mph.	
Unit 1 Initial Conditions	Unit 2 Initial Conditions
Unit 1 at approximately 912 MWe power: ▪ HPCI- Day 2 of 4 pump bearing replacement	Unit 2 is in cold shutdown- Day 10 of forced outage. • U-2 Generator repairs in progress. • RPV head is tensioned and Drywell is closed out. ▪ U2 Circ Water Snubber / Pipe-Support hot work preparations are in progress in the U1/2 Cribhouse.
07:50	Start Scenario – Crew Assumes Shift
08:05 (ALERT T ₀)	Report of Explosion / Fire in Crib House. <ul style="list-style-type: none"> • “A” Service Water Pump trips on overcurrent. • Report of oxygen bottle falling / release of gas / explosion. • Visual report of damage to Crib House door / small fire visible inside building. • ALERT – HA6 – “Fire or Explosion affecting the operability of safety systems required to establish or maintain safe shutdown.” (HA6)
08:30	U-1 Feed Reg valve Fire detection alarming <ul style="list-style-type: none"> • IMD requested to investigate
09:30 (ALERT+90)	Reactor Feedwater Regulator Valve failure / U1 Reactor SCRAM U1 Feedwater Vibrations <ul style="list-style-type: none"> • Feedwater Reg Station vibrations occur with RPV level oscillations. • Reactor SCRAM • Loss of all high-pressure feedwater sources to feed RPV • Group I isolation on low RPV level (-60”).
09:35 (ALERT+90) (SAE T ₀)	Loss Of Coolant Accident in the U1 Drywell SITE AREA EMERGENCY – FS1 <ul style="list-style-type: none"> • Potential Loss of Fuel Clad – RPV level <-142” (FC2) or Loss of Fuel Clad – RPV level <-191” (FC2). • Loss of RCS – RPV level <-142” (RC2) or Loss of RCS – Drywell press > 2.5 due to RCS leakage (RC3) or DW Rad >100 R/hr with RCS leakage (RC5). • DW spray loop inhibited due lack of permissive • ECCS used to restore/maintain level. Successful Drywell Isolation - No Release
09:50	Failure of MOV 1-1001-23B <ul style="list-style-type: none"> • Breaker failure for MOV 1-1001-23B (Inboard “B” train Containment Spray Train). • Breaker for MOV 1-1001-23B is damaged (8 to 10 hours for repair).
09:55	Drywell Radiation rises <ul style="list-style-type: none"> • Drywell Radiation reaches > 665 R/Hr (FC5)
11:10 (SAE+95) (GE T ₀)	Containment Penetration failure in the Reactor Building (RWCU area) GENERAL EMERGENCY – FG1 <ul style="list-style-type: none"> • Loss of Fuel Clad – Drywell Radiation > 665 R/Hr (FC5) • Loss of RCS – Drywell press > 2.5 due to RCS leakage (RC3) or DW Rad >100 R/hr with RCS leakage (RC5). • Loss of Containment – Rapid drop in DW pressure (CT3), Rx Bld Max Safe operating lvls (CT6) • MAX PARS (Wind Direction from 180°) • RELEASE IN PROGRESS via SBGT (release path “J”).
11:30 (GE+20)	Stack Effluent Monitor Readings rise (PAGS > 5 miles) Concurrent (RG1)
12:15 (GE+65)	Exercise Termination