



FEMA

James K. Joseph, Director
Illinois Emergency Management Agency
2200 South Dirksen Parkway
Springfield, Illinois 62703

OCT 06 2016

Dear Mr. Joseph:

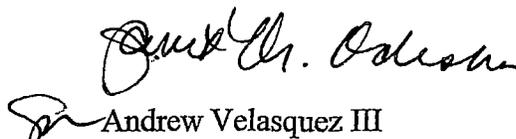
Enclosed is the Final After Action Report/Improvement Plan for the LaSalle County Station Radiological Emergency Preparedness Partial Participation Plume Exposure Pathway Exercise held on July 20, 2016. There were no Level 1 findings identified for the State of Illinois or LaSalle County. One Level 2 finding was identified and successfully re-demonstrated for the State of Illinois. There were no Level 2 findings for the County of LaSalle. There was one previous Area Requiring Corrective Action from a previous exercise that was resolved for LaSalle County.

One Plan Issue from a previous exercise was resolved for both the State of Illinois and LaSalle County during the revision of plans and procedures.

Based on the results of the exercise, the planning and preparedness for the State of Illinois and affected local jurisdictions provide reasonable assurance that appropriate measures can be taken to protect public health and safety. Therefore, Title 44 CFR Part 350 approval of the offsite radiological emergency response plans and preparedness for the State of Illinois remain in effect.

If you have any questions, please contact Sean O'Leary, Chair, Regional Assistance Committee, at (312) 408-5389.

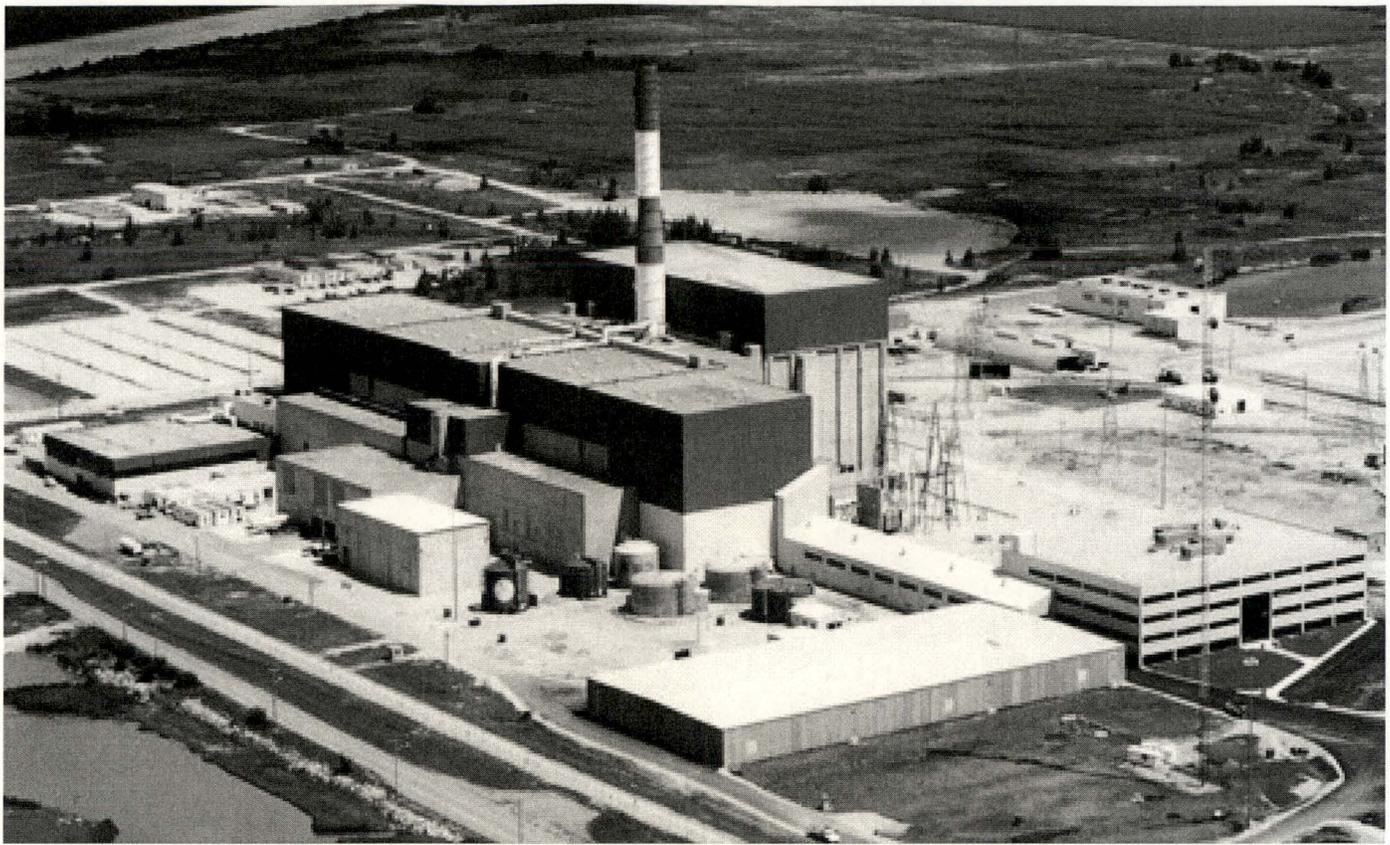
Sincerely,


Andrew Velasquez III
Regional Administrator

Enclosure (1)

cc: Illinois Emergency Management Agency
DHS/FEMA Headquarters
NRC Region III
NRC Headquarters Document Control Desk

IX49
NRR



LaSalle County Station

After Action Report/ Improvement Plan

Exercise Date – July 20, 2016

Radiological Emergency Preparedness (REP) Program



FEMA

Published September 26, 2016

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EXECUTIVE SUMMARY

On July 20, 2016, a Radiological Emergency Preparedness (REP) Partial-Participation Plume Exposure Pathway Exercise was evaluated by the U.S. Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA) for the 10-mile Emergency Planning Zone (EPZ) around the LaSalle County Station (LCS). The purpose of this exercise was to assess the capabilities of the 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 21, 2014. The qualifying emergency preparedness exercise was conducted on December 4, 1980.

The DHS/FEMA wishes to acknowledge the efforts of the many individuals who participated in this exercise. In the State of Illinois, the risk county of LaSalle and the support county of Grundy participated along with 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 Final After Action Report (AAR)/Improvement Plan (IP) contains the evaluation of the biennial exercise and the evaluation of the following out-of-sequence interviews and activities:

- Medical Services (MS-1) Hospital and Transportation evaluation at OSF Saint Elizabeth's Hospital
- Protective Actions for Schools (EV-2) for Marseilles Elementary School
- Ottawa Police Department TACP
- Ottawa Police Department DCO Briefing

Sections 3 and 4 of this report provide detailed information regarding any Level 1 or Level 2 Findings, Plan Issues and Schedule of Corrective Actions.

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SECTION 1: INTRODUCTION

1.1 Exercise Basis

On December 7, 1979, the President directed FEMA to assume the lead responsibility for all offsite nuclear planning and response. The DHS/FEMA's activities are conducted pursuant to Title 44 of the Code of Federal Regulations (CFR) Parts 350 "Review and Approval of State and Local Radiological Emergency Plans and Preparedness", 351 "Radiological Emergency Planning and Preparedness" and 352 "Commercial Nuclear Power Plants: Emergency Preparedness Planning" (Commonly referred to as 44 CFR 350 through 352). These regulations are a key element in the Radiological Emergency Preparedness (REP) Program that was established following the Three Mile Island Nuclear Station accident in March 1979.

FEMA Regulation 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 licensee.

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

- Taking the lead in offsite emergency planning and in the review and evaluation of Radiological Emergency Response Plans (RERP) 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 October 1, 2015, 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.

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Formal submission of the RERP for the LCS to FEMA Region V by the State of Illinois and involved local jurisdictions occurred on March 31, 1981. Formal approval of these RERP was granted by FEMA on June 4, 1982, under 44 CFR 350.

A REP Partial-Participation Plume Exposure Pathway Exercise was conducted on July 20, 2016, and evaluated by the 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 LCS. The purpose of this AAR/IP is to present the exercise results and findings based on the performance of the Offsite Response Organizations (OROs) during a simulated radiological emergency.

The findings presented in this AAR/IP 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 DHS/FEMA Headquarters.

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 Radiological Emergency Preparedness: Exercise Evaluation Methodology, as published in the FEMA Radiological Emergency Preparedness Manual, dated January 2016.

Section 1 of this report, entitled "Exercise Overview," presents information pertaining to the team that planned and coordinated the exercise. This section also provides a listing of all participating jurisdictions and functional entities that were evaluated.

Section 2 of this report, entitled "Exercise Design Summary," contains the purpose and design of the exercise, a description of the exercise objectives and presents basic information and data relevant to the exercise scenario.

Section 3 of this report, entitled "Analysis of Capabilities," 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 Level 1, Level 2, and Plan Issues if any, 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 Level 2 assessed during previous exercises and the status of the OROs' efforts to resolve them.

Section 4 of this report, entitled "Conclusion," presents the DHS/FEMA summary of overall exercise conduct and results as evaluated against the requirements of 44 CFR 350.

1.2 Emergency Planning Zone (EPZ) Description

The LaSalle County Station is located on a 3,060-acre site in Brookfield Township, four miles west of the LaSalle and Grundy Counties line. It is located in the northeastern portion of Illinois, approximately seven miles south-southeast of the community of Marseilles, four and one-half miles south of the Illinois River, which runs east-west through LaSalle County and six miles southwest of the community of Seneca. The 10-mile plume extends outward in all directions from the LaSalle County Station and impacts portions of LaSalle and Grundy Counties. This EPZ includes the municipalities of Grand Ridge, Marseilles, Ransom and Seneca in LaSalle County, and Kinsman and Verona in Grundy County.

The population distribution in this 10-mile EPZ is relatively low. Following is a list of the four largest communities in the EPZ and their respective year 2010 population figures: Kinsman (99), Marseilles (5,094), Seneca (2,371) and Verona (215). The year 2010 total population for these communities was 7,779 persons. The 10-mile EPZ is divided into 13 Sub-Areas. Following is a list of the Sub-Areas with their associated year 2010 permanent resident population: Sub-Area 1 (1,060), Sub-Area 2 (77), Sub-Area 3 (784), Sub-Area 4 (3,145) Sub-Area 5 (507), Sub-Area 6 (108), Sub-Area 7 (695), Sub-Area 8 (515), Sub-Area 9 (308), Sub-Area 10 (8,192), Sub-Area 11 (6,147), Sub-Area 13 (687) and Sub-Area 17 (288).

Primary land use around the LaSalle County Station is agricultural, with crops of corn and soybean. The closest industries are located in the communities of Marseilles and Seneca. Recreational facilities outside the municipalities include a sixty-acre park with camping facilities on the southwest shore of the 2058-acre cooling lake for the LCS. The cooling lake, which occupies over two thirds of the 3060-acre station site, has recreational boating and fishing. Seneca area marinas have facilities for over 400 boats on the Illinois River, and are just over four miles north-northeast of the LCS. Five and one-half miles north-northwest of the LCS is the 510 acre Illini State Park with camping, boating, picnicking and fishing.

Major transportation facilities in the LCS EPZ are limited to Interstate 80, nine miles north of the station and the Illinois Waterway, four and one-half miles north of the LCS. Marseilles Lock and Dam, at river mile 244.5, is seven miles northwest. Five rail lines also run through the LCS EPZ and their location in the EPZ is described in relationship to the LCS. The Burlington Northern and Santa Fe Railway Company has two rail lines, a spur line into the station from Ransom and the other line six miles from the station running northeast to southwest; the CSX Transportation, Inc. line is five miles north, the Illinois Rail Net line is nine miles west and the Norfolk Southern line is ten miles to the south just outside of the EPZ.

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SECTION 2: EXERCISE OVERVIEW

2.1 Exercise Details

Exercise Name

LaSalle County Station

Type of Exercise

Plume Exposure Pathway

Exercise Date

July 20, 2016

Program

Department of Homeland Security/FEMA
Radiological Emergency Preparedness Program

Scenario Type

Radiological Emergency

2.2 Exercise Planning Team

Sean O'Leary
Regional Assistance Committee, Chairperson
Chief, Technical Hazards Branch
DHS/FEMA
536 South Clark Street
Chicago, Illinois, 60605
312-408-5389
sean.oleary@fema.dhs.gov

Stephen Tulley
Exercise Director DHS/FEMA
Supervisory REP Team Leader
536 South Clark Street
Chicago, Illinois, 60605
312-408-4425
stephen.tulley@fema.dhs.gov

Edward Golinski
Deputy Exercise Director
Supervisory REP Team Leader
DHS/FEMA Region V
536 South Clark Street

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LaSalle County Station

Chicago, Illinois, 60605
312-408-5353
edward.golinski@fema.dhs.gov

David Ortman
Site Specialist
Emergency Management Specialist
DHS/FEMA Region V
536 South Clark Street
Chicago, Illinois, 60605
312-408-5583
david.persaud@fema.dhs.gov

William Conway
REP Program Manager
Bureau of Nuclear Facility Safety
Illinois Emergency Management Agency
1035 Outer Park Drive (1st floor)
Springfield, Illinois, 62704
217-785-9886
william.conway@illinois.gov

Jerry DeYoung
Offsite Programs
Exelon Corporation
4300 Winfield Road
Warrenville, Illinois, 60555
630-657-4666
gerald.deyoung@exeloncorp.com

Mike Muth
Offsite Programs
Exelon Corporation
4300 Winfield Road
Warrenville, Illinois, 60555
630-657-4674
mike.muth@exeloncorp.com

Randy Mika
Corporate Drill and Exercise Coordinator
Exelon Corporation
4300 Winfield Road
Warrenville, Illinois, 60555
630-657-4662
randy.mike@exeloncorp.com

2.3 Participating Organizations

Agencies and organizations of the following jurisdictions participated in the LaSalle County Station exercise:

State Jurisdictions

- Illinois Emergency Management Agency (IEMA)
- Illinois Department of Agriculture (IAGR)
- Illinois Civil Service Commission (ICSC)
- Illinois Department of Natural Resources (IDNR)
- Illinois Office of the Governor (IGOV)
- Illinois Emergency Management Agency (IEMA) Department of Nuclear Safety
- Illinois Emergency Management Agency (IEMA) Radiological Officer
- Illinois National Guard
- Illinois Mutual Aid Box Alarm System (MABAS)
- State Emergency Operations Center

Risk Jurisdictions

- EMA Administrative Assistant
- EMA Director
- GIS Support
- LaSalle County Animal Response Team Liaison
- LaSalle County Board Chairman
- LaSalle County Department of Health Liaison
- LaSalle County Dosimetry Control Officer
- LaSalle County Highway Department
- LaSalle County Sheriff's Department Liaison
- LaSalle Public Information Center
- Radio Amateur Communication Emergency Services (RACES)
- Regional Office of Education (Schools)

Support Jurisdictions

- City of Ottawa Liaison
- City of Marseilles Liaison
- City of Seneca

Private Organizations

- American Red Cross
- Exelon Nuclear
- Order of Saint Elizabeth Hospital
- Volunteer Agencies Active in Disaster

Federal Jurisdictions

- Federal Emergency Management Agency
- United States Nuclear Regulatory Commission

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SECTION 3: EXERCISE DESIGN SUMMARY

3.1 Exercise Purpose and Design

The DHS/FEMA Region V Office evaluated the LCS REP Partial-Participation Plume Exposure Pathway Exercise conducted on July 20, 2016 to assess the capabilities of local emergency preparedness organizations in implementing their RERPs and procedures to protect the public health and safety during a radiological emergency involving the LCS. The purpose of this report is to present the results and findings on the performance of the Offsite Response Organizations (OROs) during a simulated radiological emergency.

3.2 Exercise Objectives, Capabilities and Activities

Exercise objectives and identified Capabilities/REP Criteria selected to be demonstrated are discussed in Appendix E "Exercise Plan." The Exercise Planning Team (EPT) selected objectives that focus on evaluating emergency response procedures, identifying areas for improvement, and fostering collaboration between the various OROs and stakeholders. This exercise focused on the following objectives:

- ORO demonstration of effective Emergency Operations Management;
- ORO demonstration of effective Protective Action Decision Making;
- ORO demonstration of effective Protective Action Implementation;
- ORO demonstration of effective Field Measurement and Analysis;
- ORO demonstration of effective Emergency Notification and Public Information;

3.3 ORO demonstration of effective Support Operations and Facilities. Scenario Summary Appendix F "Scenario Details," contains a summary of the Exercise Scenario, a simulated sequence of events that was used as the basis for invoking emergency response actions by OROs during the LCS REP Partial-Participation Plume Exposure Pathway Exercise on July 20, 2016.

Results of a technical review of the scenario, submitted on May 19, 2016, indicate that the scenario was adequate to support demonstration of DHS/FEMA requirements, as well as criteria selected by the Offsite Response Organizations provided in the State's May 10, 2016, and revised May 23, 2016, extent-of-play submissions.

During the exercise, in addition to information and data provided through the LCS onsite scenario, controllers from the State of Illinois provided "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 additional specific response actions by OROs.

SECTION 4: ANALYSIS OF CAPABILITIES

4.1 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 July 20, 2016, LaSalle County Station (LCS) Radiological Emergency Preparedness (REP) Partial-Participation Plume Exposure Pathway Exercise conducted to test the offsite emergency response capabilities of State and local governments in the 10-mile EPZ surrounding the LCS.

Each jurisdiction and functional entity was evaluated based on its demonstration of exercise criteria delineated in the FEMA REP Program Manual, dated January, 2016. Detailed information on the exercise criteria and the extent-of-play agreements used in this exercise are found in Appendix E "Exercise Plan" of this report. Presented below are definitions of the terms used in this report relative to the criteria demonstration status.

- M – Met: The status of a REP exercise Evaluation Area Criterion indicating that the participating ORO demonstrated all demonstration criteria for the Evaluation Area Criterion to the level required in the extent-of-play agreement with no Level 1 Findings, Level 2 Findings or Plan Issues assessed in the current exercise and no unresolved prior Level 2 Findings.
- 1 – Level 1 Finding: 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.
- 2 – Level 2 Finding – An observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health and safety.
- P – Plan Issue – An observed or identified inadequacy in the ORO's emergency plan or implementing procedures, rather than in the ORO's performance.
- N – Not Demonstrated – 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 and the corrective actions demonstrated, in this exercise. Future exercise documentation will refer to "Level 2 Findings – Resolved."
- 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 exercise. Future exercise documentation will refer to “Level 2 Findings – Unresolved.”

4.2 Summary Results of Exercise Evaluation

The matrix presented in Table 4.1 on the following pages presents the status of all exercise criteria from the FEMA REP Program Manual, dated January 2016, which were scheduled for demonstration during this exercise by all participating jurisdictions and functional entities. The criterion status box is blank if it was not scheduled for demonstration.

This subsection provides information on the evaluation of each participating jurisdiction and functional entity in a jurisdiction-based, issues-only format.

The DHS/FEMA has developed a standardized system for numbering exercise issues. 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 Level 1 Findings, Level 2 Findings, and Plan Issues 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 (34 for LaSalle County Station).
- 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 the FEMA REP Program Manual, dated January 2016.
- Issue Classification Identifier – (1 = Level 1 Finding, 2 = Level 2 Finding, P = Plan Issue)
- Exercise Identification Number – A separate two or three-digit indexing number assigned to each issue identified in the exercise.

Table 4-1 – Summary of Exercise Evaluation

		State - IWP	State - EOC	State - REAC	State - EOF	State - OSF St Eliz Med Cener	State - OSF St Eliz Med Trans	LCS - IWP	LCS - EOC	LCS - Radio Station	LCS - Sheriff TACP	LCS - Sheriff DCO Briefing	LCS - Ottawa Police TACP	LCS - Ottawa Police DCO	LCS - Marseilles ES EV2
DATE: July 20, 2016															
SITE: LaSalle County Station															
M: Met															
L1: Level 1 Finding															
L2: Level 2 Finding															
P: Plan Issue															
N: Not Demonstrated															
Emergency Operations Management															
Mobilization	1a1	M	M	M	M			M	M						
Facilities	1b1														
Direction and Control	1c1		M	M	M				M						
Communications Equipment	1d1	M	M	M		M	M	M	M	M	M	M	M	M	M
Equipment and Supplies to Support Operations	1e1		M	M		M	M		M		M	M	M	M	M
Protective Action Decision-Making															
EW Exposure Control Decisions	2a1														
PARs	2b1		M	M											
PADs	2b2		M	M					M						
PADs for Disabled/Functional Needs	2c1								M						
Ingestion PADs	2d1														
RRR Decisions	2e1														
Protective Action Implementation															
EW Exposure Control Implementation	3a1					M	M		M		M	M	M	M	M
KI Public/Institutionalized	3b1								M						
PAD Implementation Disabled/Functional Needs	3c1								M						
PAD Implementation Schools	3c2								M						M
TACP Establishment	3d1								M		M		M		
Impediments	3d2								M						
Implement Ingestion PADs	3e1														
Ingestion Pathway Decisions	3e2														
Implementation of RRR Decisions	3f1														
Field Measurement and Analysis															
RESERVED	4a1														
Field Team Management	4a2														
Field Team Operations	4a3														
Field Team Sampling	4b1														

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		State - IWP	State - EOC	State - REAC	State - EOF	State - OSF St Eliz Med Cener	State - OSF St Eliz Med Trans	LCS - IWP	LCS - EOC	LCS - Radio Station	LCS - Sheriff TACP	LCS - Sheriff DCO Briefing	LCS - Ottawa Police TACP	LCS - Ottawa Police DCO	LCS - Marseilles ES EV2
DATE: July 20, 2016 SITE: LaSalle County Station M: Met L1: Level 1 Finding L2: Level 2 Finding P: Plan Issue N: Not Demonstrated															
Laboratory Operations	4c1														
Emergency Notification and Public Info															
Initial Alert & Notification	5a1		M						M	M					
RESERVED	5a2														
Backup Alert & Notification	5a3														
Exception Area Alerting	5a4														
Subsequent Information & Instructions	5b1		M	M					M						
Support Operations and Facilities															
Reception Center Operations	6a1														
EW Monitoring & Decontamination	6b1														
Congregate Care	6c1														
Contaminated Injured Transport & Care	6d1					L2	M								



4.3 Criteria Evaluation Summaries

4.2.1 Risk Jurisdiction – State of Illinois

4.2.1.1 Initial Warning Point

In summary, the status of DHS/FEMA criteria for this location is as follows:

- a. MET: 1.a.1, 1.d.1.
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES RESOLVED: None
- g. PRIOR ISSUES UNRESOLVED: None

4.3.1.2 Emergency Operations Center

In summary, the status of DHS/FEMA criteria for this location is as follows:

- a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.b.1, 2.b.2, 5.a.1, 5.b.1
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES RESOLVED: None
- g. PRIOR ISSUES UNRESOLVED: None

4.3.1.3 Radiological Emergency Assessment Center

In summary, the status of DHS/FEMA criteria for this location is as follows:

- a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.b.1, 2.b.2, 5.b.1
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES RESOLVED: None
- g. PRIOR ISSUES UNRESOLVED: None

4.3.1.4 Emergency Operations Facility

In summary, the status of DHS/FEMA criteria for this location is as follows:

- a. MET: 1.a.1, 1.c.1
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES RESOLVED: None
- g. PRIOR ISSUES UNRESOLVED: None

4.3.1.5 OSF Saint Elizabeth Hospital – Facility

In summary, the status of DHS/FEMA criteria for this location is as follows:

- a. MET: 1.d.1, 1.e.1, 3.a.1
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: 6.d.1 (successfully re-demonstrated)
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES RESOLVED: 3.a.1
- g. PRIOR ISSUES UNRESOLVED: None

LEVEL 2: 34-16-6d1-L2-01

CONDITION: At 1039 hours on July 18, 2016, during the MS-1 at Saint Elizabeth’s Hospital, the decontamination nurse placed the scissors on the bed next to the patient’s clean lower leg asking for a re-survey of the feet while simultaneously rolling the pant legs off of the patient. At 1040 hours, the controller gave an inject stating “the scissors are 200 CPM and what are the vital signs?” The REA staff asked for the vital signs and the controller gave blood pressure 100/68, heart rate 65 and respiratory rate 24. Immediately after the update, the decontamination nurse picked up the contaminated scissors and proceeded to cut the clothes off of the upper body of the patient. There was no attempt to change, decontaminate or have the scissors surveyed prior to re-use. At 1041 hours, the controller called a timeout and retrained the REA staff on contamination control processes and procedures. At 1043 hours, the controller resumed the exercise stating that the scissors were clean and to continue their survey of the patient.

CORRECTIVE ACTIONS: Retraining conducted and successfully re-demonstrated.

LOCATION: OSF Saint Elizabeth Hospital

ISSUE NO: 34-14-3a1-P-04

CRITERION: 3.a.1

CONDITION: The Saint Elizabeth Medical Center Hospital Decontamination Team Standard Operating Guidelines #11 indicated that the Director of Occupational Health and Safety was the Dosimetry Control Officer (DCO); however, another staff member of the medical facility filled that position even though the Director of Occupational Health and Safety was present. The Illinois Emergency Management Agency personnel stated that several other medical center staff were trained and available to fill that position.

CORRECTIVE ACTION: Saint Elizabeth Medical Center Hospital Decontamination Team Standard Operating Guidelines updated May 2016.

4.3.1.6 OSF Saint Elizabeth Hospital – Transportation

In summary, the status of DHS/FEMA criteria for this location is as follows:

- a. MET: 1.d.1, 1.e.1, 3.a.1, 6.d.1
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES RESOLVED: None
- g. PRIOR ISSUES UNRESOLVED: None

4.2.2 Risk Jurisdictions – LaSalle County

4.3.2.1 Initial Warning Point

In summary, the status of DHS/FEMA criteria for this location is as follows:

- a. MET: 1.a.1, 1.d.1
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES RESOLVED: None
- g. PRIOR ISSUES UNRESOLVED: None

4.3.2.2 Emergency Operations Center

In summary, the status of DHS/FEMA criteria for this location is as follows:

- 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. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES RESOLVED: 5.a.1
- g. PRIOR ISSUES UNRESOLVED: None

LOCATION: LaSalle County Prompt Notification

ISSUE NO: 34-14-5a1-A-02

CRITERION: 5.a.1

CONDITION: During the exercise, LaSalle County officials initiated two activations of the Prompt and Notification System (PNS) in which the EAS message was broadcast untimely in relation to siren activation.

In the first PNS activation, the message would have been broadcast by the first of the two plan-required EAS stations simultaneously with the alert signal (siren activation), and by the second of the two-required stations 12-14 minutes after the alert signal.

In the second PNS activation, the message would have been broadcast by the first of the two plan-required EAS stations five minutes before with the alert signal (siren activation), and by the second of the two-required stations simultaneously with the alert signal.

The PIO did not provide the Authentication Code to verify that the EAS messages were provided by the authorized source.

The EAS Message #1 released by LaSalle County at 0958 hours, and sent via facsimile to the JIC and the Grundy County, Marseilles and Seneca EOCs at 1020 hours, contained conflicting and confusing protective action information for the public. On Page 02 of 04, the public was instructed to "...not evacuate at this time. You may unnecessarily subject yourself to radiation by evacuating now." However, on Page 03 of 04, the message stated "There has been no release of radiation at this time." If there was no release in progress, then the public could not be subjected to radiation by evacuating.

CORRECTIVE ACTION: Successfully demonstrated during the July 20, 2016 LaSalle County Station REP Exercise.

4.3.2.3 Radio Station WCMY/WRKX

In summary, the status of DHS/FEMA criteria for this location is as follows:

- a. MET: 1.d.1, 5.a.1
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES RESOLVED: None
- g. PRIOR ISSUES UNRESOLVED: 1.d.1

LOCATION: LaSalle County Prompt Notification.

ISSUE NO: 34-14-1d1-P-01

CRITERION: 1.d.1

CONDITION: Only commercial telephone communication system exists between the LaSalle County Emergency Operations Center and WCMY/WRKX Emergency Broadcast System (EBS) stations. If telephone is not available, emergency information cannot be received and recorded by the EBS stations and broadcast to the public.

CORRECTIVE ACTION: Estimated completion date of December 31, 2016.

4.3.2.4 LaSalle County Sheriff – TACP

In summary, the status of DHS/FEMA criteria for this location is as follows:

- a. MET: 1.d.1, 1.e.1, 3.a.1, 3.d.1
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES RESOLVED: None
- g. PRIOR ISSUES UNRESOLVED: None

4.3.2.5 LaSalle County Sheriff – DCO Briefing

In summary, the status of DHS/FEMA criteria for this location is as follows:

- a. MET: 1.d.1, 1.e.1, 3.a.1
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES RESOLVED: None
- g. PRIOR ISSUES UNRESOLVED: None

4.3.2.6 Ottawa Police Department – TACP

In summary, the status of DHS/FEMA criteria for this location is as follows:

- a. MET: 1.d.1, 1.e.1, 3.a.1, 3.d.1
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES RESOLVED: 3.d.1
- g. PRIOR ISSUES UNRESOLVED: None

LOCATION: Ottawa Police Department TACP

ISSUE NO: 34-14-3d1-P-03

CRITERION: 3.d.1

CONDITION: The Ottawa Police Department's copy of the LaSalle County Traffic and Access Control Post (TACP) Guide indicates that Ottawa Police Department was responsible to staff three TACPs, O-8-2/P, O-8-3/P, and O-11-7/Q. The Illinois Plan for Radiological Accidents (IPRA) – LaSalle County – Volume III, 05/14, page III (3F), however, states that, "The Ottawa Police Department is not responsible for manning traffic and access control posts."

CORRECTIVE ACTION: Illinois Plan for Radiological Accidents Volume VIII LaSalle updated with current TACP assignments

4.3.2.7 Ottawa Police Department – DCO Briefing

In summary, the status of DHS/FEMA criteria for this location is as follows:

- a. MET: 1.d.1, 1.e.1, 3.a.1
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES RESOLVED: None
- g. PRIOR ISSUES UNRESOLVED: None

4.3.2.8 Marseilles ES EV2

In summary, the status of DHS/FEMA criteria for this location is as follows:

- a. MET: 1.d.1, 1.e.1, 3.a.1, 3.c.2
- b. LEVEL 1 FINDINGS: None
- c. LEVEL 2 FINDINGS: None
- d. PLAN ISSUES: None
- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES RESOLVED: None
- g. PRIOR ISSUES UNRESOLVED: None

SECTION 4: CONCLUSION

There were no Level 1 findings or Plan Issues identified for the State of Illinois or the County of LaSalle. There was one Level 2 finding identified and re-demonstrated for the State of Illinois. There were no Level 2 findings identified for the County of LaSalle. There was one Area Requiring Corrective Action from a previous exercise that was resolved during the exercise for the County of LaSalle.

One Plan Issue from 2014 was resolved for both the State of Illinois and the County of LaSalle during the revision of plans and procedures. One Plan Issue from 2014 was scheduled to be resolved December 31, 2016 for the County of LaSalle.

Based on the results of the exercise, the planning and preparedness for the State of Illinois and affected local jurisdictions provide reasonable assurance that appropriate measures can be taken to protect public health and safety. Therefore Title 44 CFR Part 350 approval of the offsite radiological emergency response plans and preparedness for the State of Illinois remains in effect.

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APPENDIX A: IMPROVEMENT PLAN

This section summarizes the findings from the of the evaluation of all jurisdictions and functional entities that participated in the July 20, 2016, Radiological Emergency Preparedness Full Participation Plume Exposure Pathway Exercise to test the offsite emergency response capabilities of State and local governments in the 10-mile EPZ surrounding the Beaver Valley Power Station, recommended corrective actions, and a schedule of corrective actions for the identified Primary Responsible Agency.

Finding: 34-14-1d1-P-01 LaSalle County – EBS Station Criterion: 1.e.1

ISSUE: Only commercial telephone communication system exists between the LaSalle County Emergency Operations Center and WCMY/WRKX Emergency Broadcast System (EBS) stations. If telephone is not available, emergency information cannot be received and recorded by the EBS stations and broadcast to the public.	
RECOMMENDATION: Develop alternatives to commercial telephone for transmission of emergency information to the EBS stations.	
CORRECTIVE ACTION DESCRIPTION: Identify an alternative communication method and update plans and procedures to include it.	
CAPABILITY: Operational Communication	PRIMARY RESPONSIBLE AGENCY: IEMA
CAPABILITY ELEMENT:	START DATE: May 21, 2014
AGENCY POC: William Conway	ESTIMATED COMPLETION DATE: December 31, 2016

Finding: 34-14-3a1-P-02 Saint Elizabeth – Med Center Criterion: 3.a.1

ISSUE: : The Saint Elizabeth Medical Center Hospital Decontamination Team Standard Operating Guidelines #11 indicated that the Director of Occupational Health and Safety was the Dosimetry Control Officer (DCO); however, another staff member of the medical facility filled that position even though the Director of Occupational Health and Safety was present. The Illinois Emergency Management Agency personnel stated that several other medical center staff were trained and available to fill that position.	
RECOMMENDATION: Cross-check all references to DCO staffing in all plans and procedures.	
CORRECTIVE ACTION DESCRIPTION: Saint Elizabeth Medical Center Hospital Decontamination Team Standard Operating Guidelines updated May 2016	
CAPABILITY: Health and Safety	PRIMARY RESPONSIBLE AGENCY: IEMA
CAPABILITY ELEMENT:	START DATE: May 21, 2014
AGENCY POC: William Conway	COMPLETION DATE: May 2016

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Finding: 34-14-5a1-A-02 LaSalle County – Prompt Notification Criterion: 5.a.1

ISSUE: During the exercise, LaSalle County officials initiated two activations of the Prompt and Notification System (PNS) in which the EAS message was broadcast untimely in relation to siren activation.

In the first PNS activation, the message would have been broadcast by the first of the two plan-required EAS stations simultaneously with the alert signal (siren activation), and by the second of the two-required stations 12-14 minutes after the alert signal.

In the second PNS activation, the message would have been broadcast by the first of the two plan-required EAS stations five minutes before with the alert signal (siren activation), and by the second of the two-required stations simultaneously with the alert signal.

The PIO did not provide the Authentication Code to verify that the EAS messages were provided by the authorized source.

The EAS Message #1, released by LaSalle County at 0958 hours, and sent via facsimile to the JIC and the Grundy County, Marseilles and Seneca EOCs at 1020 hours, contained conflicting and confusing protective action information for the public. On Page 02 of 04, the public was instructed to "...not evacuate at this time. You may unnecessarily subject yourself to radiation by evacuating now." However, on Page 03 of 04, the message stated "There has been no release of radiation at this time." If there was no release in progress, then the public could not be subjected to radiation by evacuating.

RECOMMENDATION: In preparation for the re-demonstration, the LaSalle County PIO, EOC Manager (EMA Coordinator), County Board Chairman and others, should review and revise, as appropriate, LaSalle County plans, procedures and checklists for executing timely activation of the PNS. The review should focus on ensuring that EAS messages are accurate and timely, and broadcast after the alert signal is given. This sequence allows the public to receive the alert signal and tune in to their local EAS stations to hear the initial airing of the message.

The LaSalle County PIO, EOC Manager (EMA Coordinator), County Board and other county officials, as appropriate, should receive training regarding their plans, procedures and checklists, including any revisions resulting from the review.

CORRECTIVE ACTION DESCRIPTION: successfully demonstrated during the July 20, 2016 LaSalle County Station REP Exercise.

CAPABILITY: Operational Communication	PRIMARY RESPONSIBLE AGENCY: IEMA
CAPABILITY ELEMENT:	START DATE: May 21, 2014
AGENCY POC: William Conway	COMPLETION DATE: July 20, 2016

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Finding: 34-14-3d1-P-03 Ottawa Police Department TACP Criterion: 3.d.1

ISSUE: The Ottawa Police Department's copy of the LaSalle County Traffic and Access Control Post (TACP) Guide indicates that Ottawa Police Department was responsible to staff three TACPs, O-8-2/P, O-8-3/P, and O-11- 7/Q. The Illinois Plan for Radiological Accidents (IPRA) – LaSalle County – Volume III, 05/14, page III (3F), however, states that, "The Ottawa Police Department is not responsible for manning traffic and access control posts."

RECOMMENDATION: Cross-check all references to TACP staffing by Ottawa Police Department in all plans and procedures.

CORRECTIVE ACTION DESCRIPTION: Illinois Plan for Radiological Accidents Volume VIII LaSalle updated with current TACP assignments.

CAPABILITY: Critical Transportation	PRIMARY RESPONSIBLE AGENCY: IEMA
CAPABILITY ELEMENT:	START DATE: May 21, 2014
AGENCY POC: William Conway	COMPLETION DATE: July 2016

Finding: 34-16-6d1-L2-01 Saint Elizabeth Hospital - Decontamination Criterion: 6.d.1

ISSUE: At 1039 hours on July 18, 2016, during the MS-1 at Saint Elizabeth's Hospital, the decontamination nurse placed the scissors on the bed next to the patient's clean lower leg asking for a re-survey of the feet while simultaneously rolling the pant legs off of the patient. At 1040 hours, the controller gave an inject stating "the scissors are 200 CPM and what are the vital signs?" The REA staff asked for the vital signs and the controller gave blood pressure 100/68, heart rate 65 and respiratory rate 24. Immediately after the update, the decontamination nurse picked up the contaminated scissors and proceeded to cut the clothes off of the upper body of the patient. There was no attempt to change, decontaminate or have the scissors surveyed prior to re-use. At 1041 hours, the controller called a timeout and retrained the REA staff on contamination control processes and procedures. At 1043 hours, the controller resumed the exercise stating that the scissors were clean and to continue their survey of the patient.

CORRECTIVE ACTION DESCRIPTION: Retraining conducted and successfully re-demonstrated

CAPABILITY: Health and Safety	PRIMARY RESPONSIBLE AGENCY: IEMA
CAPABILITY ELEMENT:	START DATE: July 20, 2016
AGENCY POC: William Conway	COMPLETION DATE: July 2016

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APPENDIX B: EXERCISE TIMELINE

Table B-1, below, presents the times at which key events and activities occurred during the LaSalle County Station Radiological Emergency Preparedness Plume Exposure Pathway Exercise conducted on July 20, 2016

Emergency Classification Level or Event	Time Utility Declared			
		REAC	SEOC	LaSalle County
Unusual Event (end of verification call for ECLs) ¹	NA	NA	NA	NA
Alert	0824	0838	0842	0900
Site Area Emergency	0925	0937	0950	0955
General Emergency	1011	1020	1023	1033
Release of Radioactive Material Started ²	0925	NA	NA	NA
Release of Radioactive Material Terminated ³	NA	NA	NA	NA
Facility Declared Operational ⁴		0945	0925	1010
Declaration of State/Local Emergency ⁵		NA	1045	1000
Exercise Termination		1126	1146	1155
Early Precautionary Action Decision: ⁶ <The State issued an order to evacuate state parks and hunting areas.>		NA	0940	NA
Early Precautionary Action Decision: ⁶ <The State (County) issued a Livestock Advisory: All livestock are to be sheltered and placed on stored feed and water within the 10-mile EPZ.>		1000	1014	1024
Early Precautionary Action Decision: ⁶ <The state issued Air, water and rail traffic within 5/10 miles of LCS restricted.>		NA	1000	NA
Early Precautionary Action Decision: ⁶ <Evacuate Schools and/or Special Populations.>		NA	NA	1057
General Information Message: ⁷ <Public advised of incident at LaSalle County Station>		NA	NA	NA
Siren Activation: ⁸		NA	NA	NA
EAS Message: ⁹		NA	NA	NA
Protective Action Recommendation ¹⁰ Evacuation of Sub-Areas: 1 and 3		1026	1026	1033
Protective Action Decision: ¹¹ 1 and 3		NA	NA	1036
Siren Activation: ⁸		NA	NA	1045

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EAS Message: ⁹	NA	NA	1047
KI Administration Emergency Workers and Immobile Populations Decision (SEOC/REAC)/Implementation (UAC/Counties) (No KI required as release limits below levels)	1015	NA	NA

APPENDIX C: EXERCISE EVALUATION TEAM

The following is a list of the personnel that managed the evaluation process and evaluated the LaSalle County Station Radiological Emergency Preparedness Plume Exposure Pathway Exercise on July 20, 2016. The organization each of the personnel represents is indicated by the following abbreviations

DHS/FEMA - U.S. Department of Homeland Security/Federal Emergency Management Agency
ICFI - ICF International, Inc.

Exercise Management

MANAGEMENT TITLE	NAME	ORGANIZATION
Regional Assistance Committee, Chair	Sean O'Leary	DHS/FEMA
Exercise Director	Stephen Tulley	DHS/FEMA
Assistant Exercise Director	Edward Golinski	DHS/FEMA
Illinois Site Specialist	David Ortman	DHS/FEMA
Team Leader – State of Ohio	Clint Crackel	DHS/FEMA
Team Leader – LaSalle County	David Persaud	DHS/FEMA

Exercise Evaluators

LOCATION	TEAM LEADER	AGENCY
State Initial Warning Point	Carl Bebrich	DHS/FEMA
State Emergency Operations Center	Doc Burriss Carl Bebrich	ICFI DHS/FEMA
State Radiological Emergency Assessment Center	Ken Wierman	ICFI
Emergency Operations Facility	Chris Bellone	DHS/FEMA
OSF Saint Elizabeth Medical Center	Chris Bellone	DHS/FEMA
OSF Saint Elizabeth Medical Center Transportation	James King	DHS/FEMA
LaSalle County Initial Warning Point	Cheryl Weave	ICFI
LaSalle County Emergency Operations Center	Todd Genskie Clark Duffy Darren Bates	DHS/FEMA ICFI DHS/FEMA
Radio Station WCMY/WRKX	Michael Meshenberg	ICFI
LaSalle County Sheriff TACP	Roger Jobe	ICFI
LaSalle County Sheriff TACP DCO Briefing	Alvin Blake	DHS/FEMA
Ottawa Police Department TACP	Roger Jobe	ICFI
LaSalle County Sheriff TACP DCO Briefing	Alvin Blake	DHS/FEMA
Marseilles ES EV2	Cheryl Weaver	ICFI

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APPENDIX D: ACRONYMS AND ABBREVIATIONS

Acronym	Meaning
AAR	After Action Report
ALS	Advanced Life Support
ARC	American Red Cross
CC	Contamination Control
CCC	Congregate Care Center
CCS	Contamination Control Supervisor
CEDE	Combined Effective Dose Equivalent
CEO	County Elected Official
CERT	Community Emergency Response Team
CIT	Critical Incident Team
CPIO	County Public Information Officer
LCS	LaSalle County Station
CST	Civil Support Team
DCL	Dosimetry Control Log
DCO	Dosimetry Control Officer
DRD	Direct Reading Dosimeter
EAS	Emergency Alert System
ECL	Emergency Classification Level
ED	Emergency Department
EMA	Emergency Management Agency
EMAC	Emergency Management Agency Coordinator
EMC	Emergency Management Coordinator
EMD	Emergency Management Director
EMS	Emergency Medical Service
EMT	Emergency Medical Technician
EOC	Emergency Operation Center
EOF	Emergency Operations Facility
EPZ	Emergency Planning Zone
ERT	Emergency Response Telecommunicator
EW	Emergency Worker
FEMA	Federal Emergency Management Agency
GE	General Emergency

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GIS	Geographical Information System
GM	Geiger- Mueller
HAB	Hostile Action Based
HP	Health Physics
IAP	Incident Action Plan
IC	Incident Commander
ICP	Incident Command Post
IEMA	Illinois Emergency Management Agency
ILEAS	Illinois Law Enforcement Alarm System
IP	Improvement Plan
ISP	Illinois State Police
IWIN	Illinois Wireless Information Network
IWP	Initial Warning Point
JIC	Joint Information Center
LD	Luminescent Dosimeter
LEADS	Law Enforcement Agency Data System
LCS	LaSalle County Station
LEC	Law Enforcement Center
LSC	Liquid Scintillation Counter
MRT	Medical Radiation Technician
NARS	Nuclear Accident Reporting System
NIMS	National Incident Management System
NRC	Nuclear Regulatory Commission
ORO	Offsite Response Organizations
OSL	Optically Stimulated Luminescence
PAD	Protective Action Decision
PAR	Protective Action Recommendations
PC	Piatt County
PDP	Personal Dosimetry Packet
PIO	Public Information Officer
PPE	Personal Protective Equipment
PRD	Permanent Record Dosimeter
PSAP	Public Safety Answering Point
RA	Radiological Advisor
RAC	Regional Assistance Committee
RAFT	Radiological Assessment Field Team
RC	Reception Center
RCS	Reactor Coolant System

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RCW	Registration Case Worker
RD	Radio Dispatch
RDO	Radiological Duty Officer
REA	Radiation Emergency Area
REAC	Radiological Emergency Assistance Center
REP	Radiological Emergency Preparedness
RFT	Radiological Field Team
RRC	Radiological Response Chief
RSM	Registration Station Manager
RT	Radiation Technologist
RTF	Radiological Task Force
SA	Staging Area
SAE	Site Area Emergency
SAM	Staging Area Manager
SEOC	State Emergency Operations Center
SOP	Standard Operating Procedure
TEDE	Total Effective Dose Equivalent
UAC	Unified Area Command
UE	Unusual Event
URI	Unified RASCAL Interface

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APPENDIX E: EXTENT-OF-PLAY

This appendix lists the exercise criteria which were scheduled for demonstration in the LaSalle County Station Radiological Emergency Preparedness Partial-Participation Plume Exposure Pathway Exercise on July 20, 2016, and the offsite Extent-of-Play agreement accepted by DHS/FEMA Region V on June 20, 2016. The exercise criteria, contained in the FEMA Radiological Emergency Preparedness (REP) Program Manual (January 2016), represent a functional translation of the planning standards and evaluation criteria of NUREG-0654/FEMA-REP-1, Rev1, "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 accepted by DHS/FEMA to provide Evaluators with guidance on expected actual demonstration of the criteria.

Exercise Criteria

Listed on the following pages are the specific radiological emergency preparedness criteria that were scheduled for demonstration during this exercise.

**STATE OF ILLINOIS EXTENT OF PLAY AGREEMENT
FOR THE
LASALLE STATION EXERCISE
July 20, 2016**

Criteria that can be re-demonstrated immediately for credit, at the discretion of the evaluator, include the following: 3.a.1, 3.b.1, 3.d.1, 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, 3.d.2, 5.a.1 and 5.b.1.

NOTE: If the exercise scenario, or related exercise play, does not prompt specific criteria-related actions, individual criteria may be addressed through a functional interview or alternative scenario-driven task demonstration. When utilized, this process will be done in a manner not to disrupt or interfere with normal exercise play.

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), 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 SEOC will be partially activated. REAC will be fully activated. Rosters will be provided to demonstrate 24-hour staffing of the SEOC and REAC. The evaluator will not be allowed to remove the rosters.

The Unified Area Command (UAC) will **not** be activated; however a SIMCELL will be operated at the SEOC to simulate actions of State district and regional personnel. Radiological Assessment Field Team (RAFT) will be activated for training purposes, but will not be evaluated. IEMA personnel will be prepositioned in the local area and dispatched to the County EOCs, UAC (Simcell), EOF, Technical Support Center (TSC) and the JIC. The State JIC will participate for training purposes and to support exercise play but will not be evaluated. State Liaisons will be provided to each county EOC for exercise support and training but will not be evaluated. FEMA will not evaluate the TSC.

An actual phone call will be made to the FEMA duty officer advising them of the situation at LaSalle Station. Follow up calls to FEMA will be simulated.

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.

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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 SEOC, REAC, the UAC (Simcell) and the JIC. Coordination will be demonstrated between the SEOC, the REAC, the UAC (Simcell), 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. Dosimetry Control Officer (DCO) logs will be available in the LaSalle 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.

The ability to make the decision to recommend the use of KI to emergency workers will not be demonstrated in REAC. This criterion was successfully demonstrated by the State in the last two years.

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 to the SEOC.

The coordination to determine protective action recommendations (PARs) based upon available shelters, evacuation time estimates and other relevant factors will be demonstrated between the SEOC and REAC.

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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 protective action recommendations (PARs) based upon available shelters, evacuation time estimates and other relevant factors will be demonstrated between the SEOC and REAC. The State PAR will be transmitted to LaSalle County EOC and Grundy County EOC via NARS.

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

Criterion 2.c.1: Protective action decisions are made, as appropriate, for groups of people with disabilities and those with access/functional needs.

This criterion has been successfully demonstrated within the last two years and, as such, will not be demonstrated during this exercise.

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 post-plume phase 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, KI, 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. Appropriate record-keeping of the administration of KI for emergency workers is maintained.

This criterion will not be demonstrated during this exercise.

Criterion 3.b.1: KI and appropriate instructions are available in case a decision to recommend use of KI is made. Appropriate record keeping of the administration of KI for institutionalized individuals is maintained.

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This criterion has been successfully demonstrated within the last two years and, as such, will not be demonstrated during this exercise.

Criterion 3.c.1: Protective action decisions are implemented for people with disabilities and those with access/functional needs other than schools 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 criterion has been successfully demonstrated in the last two years, and as such, will not be demonstrated during this exercise.

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

This criterion has been successfully demonstrated in the last two years, and as such, will not be demonstrated during this exercise.

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 during the post-emergency phase 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: [RESERVED]

Criterion 4.a.2: Field teams (two or more) are managed to obtain sufficient information to help

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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 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 REP guidance.

The State's role in demonstrating this criterion is limited to transmitting the State's protective action recommendation (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 LaSalle County EOC, and (if applicable) the Grundy County EOC.

Criterion 5.a.2: [RESERVED]

Criterion 5.a.3: Backup alert and notification of the public is completed within a reasonable time 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.a.4: 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.

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 SEOC, REAC, UAC (Simcell), the LaSalle County EOC, Grundy County EOC. 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 SEOC 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 facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees.

Joliet Junior College (2012), Illinois Valley Community College (2014), and Pontiac Township High School (2016) have all been evaluated in the last eight years. No reception centers will be evaluated for this exercise.

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

This criterion will not be demonstrated during this exercise.

Criterion 6.c.1: Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with 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.

Joliet Junior College (2012), Illinois Valley Community College (2014), and Pontiac Township High School (2016) have all been evaluated in the last eight years. No congregate care centers will be evaluated for this 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 an out of sequence drill conducted at OSF Saint Elizabeth Medical Center in Ottawa on July 19th at 9:00 am.

**LASALLE COUNTY EXTENT OF PLAY AGREEMENT
FOR THE
LASALLE COUNTY STATION EXERCISE
July 20, 2016**

Criteria that can be re-demonstrated immediately for credit, at the discretion of the evaluator, include the following: 3.a.1, 3.b.1, 3.d.1, 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, 3.d.2, 5.a.1 and 5.b.1.

NOTE: If the exercise scenario, or related exercise play, does not prompt specific criteria-related actions, individual criteria may be addressed through a functional interview or alternative scenario-driven task demonstration. When utilized, this process will be done in a manner not to disrupt or interfere with normal exercise play.

EVALUATION AREA 1 - EMERGENCY OPERATIONS MANAGEMENT

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

LaSalle County intends to fully activate the Emergency Operations Center (EOC) in Ottawa, Illinois. The County will implement notification procedures as defined in IPRA-LaSalle. Representatives from the EPZ municipalities, 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 a 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 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.

Decision making will be demonstrated in the LaSalle County EOC. Coordination of decisions and emergency activities will be demonstrated between LaSalle County, SEOC, UAC and the JIC, and between the County and municipalities within the EPZ. Coordination between LaSalle County and Grundy 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.

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LaSalle County will use NARS, commercial telephone, radio and telefax to communicate with departments, organizations 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.

LaSalle 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 LaSalle County EOC. The availability of dosimetry and KI will be demonstrated at the County EOC, during the traffic and access control demonstration and the school interview.

The DCO Briefing for the LaSalle County deputy demonstrating traffic and access control will be conducted at the LaSalle County EOC during the exercise. The DCO Briefing for the Ottawa Police Officer will be conducted out of sequence on July 18th at 2:00 pm.

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 LaSalle 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 LaSalle 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 to LaSalle County officials in the County EOC. The LaSalle 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 groups of people with disabilities and those with access/functional needs.

The State of Illinois will make protective action recommendations to LaSalle County officials in the County EOC. The LaSalle County officials will make the final decision regarding what protective actions will be recommended for groups of people with disabilities and those with access/functional needs.

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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 LaSalle County.

Criterion 2.e.1: Timely post-plume phase 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, KI, 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. Appropriate record-keeping of the administration of KI for emergency workers is maintained.

LaSalle 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 LaSalle County EOC. This criterion will also be demonstrated during the school interviews and at a TAC/DCO demonstration at Ottawa Police Department on July 18th at 2:00 pm (tentative).

This criterion will also be demonstrated during the school interview at the Marseilles Elementary Unit School District #150 on July 18th at 11:00 am (tentative). The DCO briefing for the Sheriff's deputy demonstrating traffic and access control will be conducted at the LaSalle County EOC.

Criterion 3.b.1: KI and appropriate instructions are available in case a decision to recommend use of KI is made. Appropriate record keeping of the administration of KI for institutionalized individuals is maintained.

When notified by the State of Illinois to distribute and administer KI, LaSalle County officials will discuss the issuance of KI 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 school interview. The State of Illinois does not recommend the use of KI by the general public and, as such, that portion of the criterion will not be demonstrated.

Criterion 3.c.1: Protective action decisions are implemented for people with disabilities and those with access/functional needs other than schools within areas subject to protective actions.

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This will be demonstrated by LaSalle County through the simulated implementation of the appropriate procedures. The appropriate officials will coordinate transportation and receiving facilities for people with disabilities and those with access/functional needs other than schools within areas subject to protective actions. One of each type of special facility, as categorized in the special facilities list, 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/Cards will be available for inspection in the County EOC during the exercise. The evaluator will not be allowed to remove the list/cards from the EOC.

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

LaSalle 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 school interview (EV-2) will be conducted during an interview at the Marseilles Elementary Unit School District #150 on July 18th at 11:00 am (tentative). The District Superintendent, a Teacher, the transportation coordinator (DCO), a bus driver and the maintenance supervisor will be present at each of the interview.

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

Coordination between LaSalle County agencies designated to provide traffic and access control will be exhibited during the exercise in the County EOC by the LaSalle County Sheriff's Department and at a separate TAC/DCO demonstration by the Ottawa Police Department on July 18th at 2:00 pm.

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 LaSalle County during the exercise based on exercise play. The deputy will not be asked to drive to the selected post location for the demonstration; the selected post will be simulated. The staffing of the remaining posts will be simulated.

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

The LaSalle 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. The impediment information will also be coordinated into public messaging (i.e., via media briefing, notifying the JIC, etc.) to communicate alternative routes to potential evacuees.

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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 LaSalle 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 LaSalle County.

Criterion 3.f.1: Decisions regarding controlled re-entry of emergency workers and relocation and return of the public during the post-emergency phase 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 LaSalle 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 REP guidance.

LaSalle 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 protective action recommendations (PAR).

This capability will be demonstrated through the simulated activation of the LaSalle Station EPZ Prompt Notification System as defined in IPRA-LaSalle. 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 (WCMY/WRKX) will be contacted during the first, and possibly the second, alert and notification sequence. An evaluator and a controller will be positioned at the radio station during the exercise to monitor the initial alert and notification sequence message. An evaluator and controller will be positioned at the radio station during the exercise to monitor for a message containing a PAR.

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The IEMA Controller will terminate the demonstration if the demonstration interferes with the radio station's daily operations.

Coordination between LaSalle County and Grundy County will be demonstrated.

Criterion 5.a.2: [RESERVED]

Criterion 5.a.3: Backup alert and notification of the public is completed within a reasonable time following the detection by the ORO of a failure of the primary alert and notification system.

This criteria will not be demonstrated in this exercise by LaSalle County.

Criterion 5.a.4: 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.

This criteria does not apply to LaSalle County.

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

LaSalle County will demonstrate this criterion by using pre-scripted messages as indicated in IPRA-LaSalle or ad hoc messages will be developed. Contact with the radio station (WCMY/WRKX) 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 LaSalle County through a briefing held at the LaSalle County media briefing location. If real media are not present for the briefings, 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 LaSalle County through coordination between the County EOC and the JIC. The LaSalle 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 LaSalle County.

**GRUNDY COUNTY EXTENT OF PLAY AGREEMENT
FOR THE
LASALLE NUCLEAR POWER STATION EXERCISE
July 20, 2016**

Criteria that can be re-demonstrated immediately for credit, at the discretion of the evaluator, include the following: 3.a.1, 3.b.1, 3.d.1, 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, 3.d.2, 5.a.1 and 5.b.1.

NOTE: If the exercise scenario, or related exercise play, does not prompt specific criteria-related actions, individual criteria may be addressed through a functional interview or alternative scenario-driven task demonstration. When utilized, this process will be done in a manner not to disrupt or interfere with normal exercise play.

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.

This criterion will not be evaluated; however, Grundy County will participate for training purposes and to the level necessary to support the exercise play of the State, LaSalle County and utility.

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.

This criterion will not be evaluated; however, Grundy County will participate for training purposes and to the level necessary to support the exercise play of the State, LaSalle County and utility.

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.

This criterion will not be evaluated; however, Grundy County will participate for training purposes and to the level necessary to support the exercise play of the State, LaSalle County and utility.

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

This criterion will not be evaluated; however, Grundy County will participate for training purposes and to the level necessary to support the exercise play of the State, LaSalle County and utility.

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.

This criterion does not apply to Grundy 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 Grundy 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).

This criterion will not be evaluated; however, Grundy County will participate for training purposes and to the level necessary to support the exercise play of the State, LaSalle County and utility.

Criterion 2.c.1: Protective action decisions are made, as appropriate, for groups of people with disabilities and those with access/functional needs.

This criterion will not be evaluated; however, Grundy County will participate for training purposes and to the level necessary to support the exercise play of the State, LaSalle County and utility.

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 Grundy County.

Criterion 2.e.1: Timely post-plume phase 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, KI, 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. Appropriate record-keeping of the administration of KI for emergency workers is maintained.

This criterion will not be evaluated; however, Grundy County will participate for training purposes and to the level necessary to support the exercise play of the State, LaSalle County and utility.

Criterion 3.b.1: KI and appropriate instructions are available in case a decision to recommend use of KI is made. Appropriate record keeping of the administration of KI for institutionalized individuals and the general public is maintained.

This criterion will not be evaluated; however, Grundy County will participate for training purposes and to the level necessary to support the exercise play of the State, LaSalle County and utility.

Criterion 3.c.1: Protective action decisions are implemented for people with disabilities and those with access/functional needs other than schools within areas subject to protective actions.

This criterion will not be evaluated; however, Grundy County will participate for training purposes and to the level necessary to support the exercise play of the State, LaSalle County and utility.

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

Grundy County does not have any schools within the LaSalle EPZ. No interview will be conducted in Grundy County.

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

This criterion will not be evaluated; however, Grundy County will participate for training purposes and to the level necessary to support the exercise play of the State, LaSalle County and utility.

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

This criterion will not be evaluated; however, Grundy County will participate for training purposes and to the level necessary to support the exercise play of the State, LaSalle County and utility.

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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 Grundy 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 Grundy County.

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

This criterion was last demonstrated in 2011 in conjunction with the Dresden exercise and will not be demonstrated during this exercise.

EVALUATION AREA 4 - FIELD MEASUREMENT AND ANALYSIS

This evaluation area does not apply to Grundy 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 REP guidance.

This criterion will not be evaluated; however, Grundy County will participate for training purposes and to the level necessary to support the exercise play of the State, LaSalle County and utility.

Criterion 5.a.2: [RESERVED]

Criterion 5.a.3: Backup alert and notification of the public is completed within a reasonable time following the detection by the ORO of a failure of the primary alert and notification system.

This criterion will not be demonstrated by Grundy County.

Criterion 5.a.4: 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.

This criterion does not apply to Grundy County.

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

This criterion will not be evaluated; however, Grundy County will participate for training purposes and to the level necessary to support the exercise play of the State, LaSalle County and utility.

EVALUATION AREA 6 - SUPPORT OPERATION/FACILITIES

This evaluation area does not apply to Grundy County.

**LASALLE EXTENT OF PLAY AGREEMENT
OUT-OF-SEQUENCE Medical Drill MS-1
FOR THE
LASALLE NUCLEAR POWER STATION EXERCISE
July 19, 2016
Start time 9:00 a.m.**

Location: OSF Saint Elizabeth Hospital
1100 East Norris
Ottawa, Illinois 61350

Transportation Provider: Ottawa Fire Department

Participant Roster:

Victim: Provided by OSF Saint Elizabeth
Lead Controller: IEMA
Ambulance Controller: Joni Estabrook
Hospital Controller: Tolly Knezevich
Hospital Controller/Float: Tarver Haven
Ambulance MRT: TBD

Criteria that can be re-demonstrated immediately for credit at the discretion of the evaluator, include the following: For Transportation: 1.d.1, 3.a.1 and 6.d.1; for the Hospital 1.d.1, 1.e.1, 3.a.1 and 6.d.1. Criteria may be re-demonstrated, as agreed by the Lead Controller and FEMA.

EVALUATION AREA 1 – EMERGENCY OPERATIONS MANAGEMENT

Criterion 1.d.1: At least two communication systems are available, at least one operated properly, and communication links are established and maintained with appropriate locations.

The Ambulance will use 2-way radios to communicate with OSF Saint Elizabeth. Other communication systems that may be used include commercial telephone or cell phones.

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

OSF Saint Elizabeth will adequately demonstrate the ability to support operations, with adequate resources. OSF Saint Elizabeth will also issue dosimetry and perform a dosimetry control briefing to staff prior to drill start.

EVALUATION AREA 3 – PROTECTIVE ACTION IMPLEMENTATION

Criterion 3.a.1: The ORO's issue appropriate dosimetry, and procedures, and manage radiological exposure to emergency workers in accordance with the plan/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.

EVALAUTION AREA 6.d – TRANSPORTATION AND TREATMENT OF CONTAMINATED INJURED INVIDUALS

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.

Introduction:

An offsite medical drill will be conducted to demonstrate the State of Illinois' concept of operations of handling contaminated injured individuals. The drill is structured to address MS-1 Hospital and Transportation Criteria.

Extent of Play:

The LaSalle Nuclear Power Station has declared a general emergency. The emergency alert sirens have sounded, the public has been directed to evacuate affected areas and to report to reception centers set up in the local area. The scenario is based on a local resident who has reported to the reception center from a rural area and spent an extended time in the LaSalle EPZ. The drill will begin at the pickup of the patient by the ambulance. Any reception center activities will be demonstrated at the reception center demonstration.

Hospital and Transportation:

The hospital will demonstrate procedures for limiting exposure to hospital staff, decontaminating a patient, and restricting access to the area where the patient is being treated and monitored.

Ottawa Fire will demonstrate the capability to transport a contaminated, injured individual to OSF Saint Elizabeth. The ambulance crew will pick up a contaminated injured patient near the hospital at a simulated reception center. IEMA MRT staff will accompany the ambulance staff during the transportation portion of the drill.

Ottawa Fire will call in the information regarding the patient to hospital so they can prepare the receipt of a contaminated injured patient. OSF Saint Elizabeth will implement their plan for receipt, isolation and treatment of an injured contaminated patient. Medical personnel will utilize universal precautions and good housekeeping practices to minimize the spread of contamination, and will focus on treating the patient's medical condition. Simple decontamination efforts will be demonstrated after the patient has been medically stabilized. The hospital will demonstrate procedures for limiting exposure to hospital staff, decontaminating a patient, and restricting access to the area where the patient is being treated and monitored. Hospital personnel will demonstrate their knowledge of who to call beyond IEMA for assistance in Radiological Accidents, e.g., REAC/TS.

One IEMA MRT will be participating in this drill. One IEMA MRT is to facilitate monitoring the parent of the patient, ambulance staff and ambulance itself so it can be put back into service

as soon as possible. The ambulance MRT will be available to assist hospital staff in the REA if needed.

The drill will conclude with hospital nuclear medicine staff supervising the removal of protective clothing and surveying of the emergency room and hospital personnel. IEMA will also advise on the proper procedure for release or disposal of contaminated material.

Objectives:

1. Demonstrate the ability of EMS personnel to transport a contaminated injured patient.
2. Demonstrate the ability of hospital personnel to treat a contaminated injured patient.
3. Demonstrate the ability of personnel to exercise proper radiological controls and issuance of dosimetry.
4. Demonstrate the proper techniques of personnel decontamination.
5. Demonstrate proper communication between medical personnel and IEMA staff.
6. Demonstrate proper use of radiation detectors.

IEMA Players and Controllers

Injured Victim

IEMA Ambulance MRT

IEMA Ambulance Controller

IEMA Hospital Controller

IEMA Controller/Float

Lead Controller IEMA

LaSalle Nuclear Power Station has declared a general emergency. The emergency alert sirens have sounded, the public has been directed to evacuate affected areas and to report to reception centers set up in the local area. The scenario is based on a local resident who had stayed in the EPZ when the release occurred.

This drill will originate near the hospital at a simulated reception center.

1. An ambulance and EMS staff will be used to demonstrate loading, transporting and unloading the victim. EMS personnel will pick up the patient at a staged location close to the hospital. The patient will be pre-staged for the ambulance arrival. IEMA staff will be present for the transportation portion of the drill.
2. The ambulance crew will communicate with the receiving hospital regarding the medical status of the patient and any additional precautions taken to prevent spread of contamination.
3. IEMA MRT and hospital nuclear medicine staff will be providing radiological exposure control and monitoring of EMS and hospital personnel.

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4. Decontamination is determinant on ambulance protocols and injury that the patient presents.
5. Hospital nuclear medicine personnel will be responsible for any patient and staff radiological monitoring and contamination control activities until an IEMA MRT arrives on scene.
6. The IEMA MRT will supervise the ingress and egress of radiological control areas. Monitoring will be performed prior to personnel leaving the potentially contaminated patient treatment area. Protective clothing used by hospital personnel will be similar to that used for a chemical or biological agent in accordance with hospital protocol. Multiple methods of decontamination, including dry, damp or wet, may be utilized for the removal of contamination.
7. The medical facility will demonstrate or describe their procedures for the medical treatment and necessary decontamination of a contaminated injured individual. Multiple methods of decontamination, including dry, damp or wet, may be utilized for the removal of contamination. IEMA/hospital nuclear medicine personnel will survey the hospital REA and medical personnel to maintain contamination control. These methods will include taking swipes of floors and surfaces so that the hospital and ambulance can be cleared for normal operations.
8. The hospital may need to contact REAC/TS to determine appropriate samples needed to assess internal contamination. Any samples collected will be sent to REAC/TS for analyzing, IEMA does not process biological samples.
9. Emergency medical personnel will be able to maintain their exposure below the limits specified in 10 CFR Part 20 because for the exercise, the dose rate from the patient is below 2 mr/hr.
10. After the Hospital is notified, hospital personnel will prepare the area to receive the patient in accordance with their procedures and provide security as necessary. IEMA as a general practice would, if necessary, post radiation signs in accordance with the requirements as set forth in 10 CFR Part 20. Hospital security will control the area in accordance with the same policies and procedures used to provide isolation in the treatment of a chemical or biological agent.
11. Regardless of specific written hospital procedures for addressing radiation contamination, the supervision and advice provided by IEMA personnel should be the governing guidance for determining whether the patient's contamination situation is appropriately addressed.
12. The contaminated injured patient will be accompanied by a parent that needs to be monitored. The pediatric decon will be an objective to be performed and evaluated by the hospital, per hospital request.

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The drill terminates when the controller verifies that the criteria under Evaluation Area 6, Sub-element 6.d.1 and Evaluation Area 3, Sub-element 3.a.1, have been satisfied.

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APPENDIX F: SCENARIO TIMELINES

This Appendix presents the Off-Site Scenario Timelines for the State of Ohio and Columbiana County that drove the Beaver Valley Power Station Radiological Emergency Preparedness, Full Participation, Plume Exposure Pathway Exercise conducted on June 14, 2016. The timelines include both On-Site events and comments and expected Off-Site response actions.

OFFSITE EXERCISE TIMELINE

July 20, 2016

<u>Approx. Time</u>	<u>Event/Anticipated Response</u>
0750	Initial conditions/weather forecast message to players.
0755	An Alert is declared at LaSalle Station.
0810	<p>Exelon notifies the IEMA Telecommunicator of the ALERT via NARS. IEMA Telecommunicator verifies the NARS message. An IEMA Duty Officer contacts the LaSalle Station Shift Engineer.</p> <p>IEMA Telecommunicator notifies IEMA personnel of the ALERT per SOP.</p> <p>IEMA may activate the State of Illinois Response Center (SEOC) and Radiological Emergency Assessment Center (REAC), if appropriate.</p> <p>IEMA may dispatch liaisons to the County EOCs, Unified Area Command (UAC), Radiological Assessment Field Team (RAFT) Staging Area, Joint Information Center (JIC), Technical Support Center (TSC) and Emergency Operations Facility (EOF), if appropriate.</p> <p>IEMA notifies Governor's Office of the ALERT.</p> <p>IEMA Telecommunicator notifies appropriate State agencies of the ALERT. IEMA notifies FEMA of the ALERT.</p>
0825	<p>IEMA Telecommunicator notifies EPZ counties of the ALERT via NARS. County telecommunicators complete and verify the NARS message.</p> <p>County telecommunicators notify county officials and municipalities of the ALERT per SOP.</p> <p>Municipal telecommunicators complete and verify the NARS message. Municipal telecommunicators notify officials of the ALERT per SOP. The counties and municipalities may activate the EOCs, if appropriate.</p>
0910	A SITE AREA EMERGENCY is declared at LaSalle Station.
0925	<p>Exelon notifies the IEMA Telecommunicator of the SITE AREA EMERGENCY via NARS.</p> <p>IEMA Telecommunicator verifies the NARS message. REAC contacts the LaSalle Station Shift Engineer. SEOC is activated if not previously activated.</p>

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SEOC notifies the Governor's Office and requests that a representative report to the State EOC. (Simulated)

State dispatches liaisons to the County EOCs, UAC, RAFT, JIC, TSC and EOF, if not previously dispatched.

SEOC notifies FEMA of conditions. (Simulated)

IEMA notifies State agencies

- Illinois State Police

- IDOT/Division of Highways

- IDOT/Division of Aeronautics

- IDNR

- Illinois National Guard

- ICC

- American Red Cross

- IDPH

- IEPA

- IDOC

- IDHS

- IDOA

- Office of the State Fire Marshal

- others as appropriate

REAC contacts Federal agencies. (Simulated)

REAC provides an update to the SEOC and County EOC Liaisons.

REAC provides an update to the JIC.

0940

IEMA notifies EPZ counties of the SITE AREA EMERGENCY via NARS. County telecommunicators complete and verify the NARS message.

County telecommunicators notify County officials and municipalities of the SITE AREA EMERGENCY per SOP.

Counties implement public notification procedures, if appropriate. (Simulated)

Municipal telecommunicators complete and verify the NARS message.

Municipal telecommunicators notify officials per SOP.

County and municipal EOCs are activated if not previously activated.

Dosimetry is issued to emergency personnel, EOC staff and exposure records are completed.

1005

A GENERAL EMERGENCY is declared at LaSalle Station.

1020

Exelon notifies the IEMA Telecommunicator of the GENERAL EMERGENCY via NARS. Protective actions are recommended.

IEMA Telecommunicator verifies the NARS message.

The SEOC and REAC evaluate the protective action recommendation.

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A recommendation is made to the Governor. The Governor recommends that protective actions be implemented.
SEOC staff is advised of the situation.
SEOC advises UAC, the County EOC liaisons and JIC staff of the situation.
SEOC notifies FEMA of conditions. (Simulated)
REAC provides an update to the SEOC and County EOC liaisons.
REAC provides an update to the JIC.

1035 SEOC notifies EPZ counties of the GENERAL EMERGENCY and the recommended protective actions via NARS.
County telecommunicators complete and verify the NARS message.
County telecommunicators notify county officials and municipalities per SOP.

Counties implement public notification procedures and traffic and access control per SOPs, as applicable.

Municipal telecommunicators complete and verify the NARS message.
Municipal telecommunicators notify EOC staff.

1200 Terminate exercise play.

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ONSITE EXERCISE TIMELINE

- Scenario Time Line
- Exercise vs. Clock Time
- Narrative Summary
- Summary of Expected EALs and PARS
- Meteorology
- Release Information

Unit 1 Initial Conditions		Unit 2 Initial Conditions
<ul style="list-style-type: none"> ▪ Unit 1 at 1157 MWe ▪ 124 days online – Online Risk GREEN ▪ Equipment OOS – 1A WR Pump ▪ Protected Pathway – U1 HWC, 1A/B FC Pumps ▪ Major evolutions – <ul style="list-style-type: none"> - Div II workweek - LOS-VC-M1 Att 1A is in progress <ul style="list-style-type: none"> o EO is in field on step 1.1.3 		<ul style="list-style-type: none"> ▪ Unit 2 at 1158 MWe ▪ 481 days online – Online Risk GREEN ▪ Equipment OOS – None ▪ Protected Pathway – U2 HWC, 2A/B FC Pumps ▪ Major evolutions scheduled – <ul style="list-style-type: none"> - RCIC workweek - LOS-RI-Q5 is scheduled to start at 1000 <ul style="list-style-type: none"> o SRO/NSO/EO have been briefed prior to shift, and preparatory has not been performed
T=0	0755	Start Scenario Wind direction – from 080 degrees, 6.4 mph, Stability Class D
T+15	0810	ALERT, MA5 – Hazardous event affecting a SAFETY SYSTEM required for the current operating mode <ul style="list-style-type: none"> ▪ Seismic event of magnitude .08g is experienced near the site (less than OBE levels) <ul style="list-style-type: none"> - EO checks 0PA11J in the AEER - Spurious FZ fire alarm in 673' SE RHR Room - U1 Div II Water Leg Pump trips due to damage to the motor from the ground motion causing pressure to lower in the B & C RHR system ▪ (0810) SM should declare ALERT (MA5) due to a seismic event resulting in degraded performance in at least one train of a safety system required by Tech Specs for the current operating mode (T=0 for MA5) ▪ Activate ERO ▪ TSC & EOF Staffed
T+55 to T+65	0850 to 0900	Equipment Malfunctions <ul style="list-style-type: none"> ▪ Command & Control should be transferred to the EOF ▪ Teams formed walking down earthquake related damage ▪ Keep Fill Rig will get hooked up ▪ Water Leg Pump damage from falling debris due to earthquake <ul style="list-style-type: none"> - Oil bubbler is broken with oil puddling on the ground - Motor termination box is damaged with the cabling disconnected from the pump ▪ (0850) 1B CRD Pump trips due to shaft guard damage from falling debris due to earthquake ▪ (0900) Small Recirc Line leak develops (~4 gpm)

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T+75	0910	<p>SITE AREA EMERGENCY, FS1 (RC.4 and CT.6) – Loss or Potential Loss of ANY two barriers</p> <ul style="list-style-type: none">▪ Steam leak develops in the RCIC Room upstream the 1E51-F045 valve resulting in a Group 8 isolation signal<ul style="list-style-type: none">- 1E51-F063 (inboard RCIC valve) blows a fuse when the isolation signal attempts to close- 1E51-F008 (outboard RCIC valve) sustained damage previously during the earthquake and will only achieve mid position- FZ fire alarm comes in for RCIC Room▪ Effluent Release monitors remain unchanged▪ (0910) SED should declare SITE AREA EMERGENCY (FS1) due to an unisolable RCIC line break with an unisolable direct downstream pathway to the environment after an isolation signal (T=0 for FS1)▪ Assembly & Accountability conducted
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EXERCISE TIME vs CLOCK TIME

This exercise will be initiated on July 20, 2016 at approximately 0755 hours. Clock time will be used in the distribution of exercise messages except as directed by the Lead Scenario Controller.

Exercise Time	Clock Time	Exercise Time	Clock Time
0	0755	150	1025
15	0810	165	1040
30	0825	180	1055
45	0840	195	1110
60	0855	210	1125
75	0910	225	1140
90	0925	Anticipated Term	1200
105	0940		
120	0955		
135	1010		

NARRATIVE SUMMARY

Initial Conditions – 0755 hours

The crew will take the shift with both units operating at 100% power. There is a surveillance (LOS- VC-M1 Att 1A) in progress to test the Control Room Ventilation system for operability. Additionally, a surveillance (LOS-RI-Q5) is scheduled to start at 1000 to test the RCIC Pump for operability.

ALERT - 0810

A magnitude 3.5 earthquake will strike with an epicenter 20km East of Morris, IL. The magnitude of ground motion is less than the OBE (Operating Basis Earthquake) and SSE (Safe Shutdown Earthquake) levels

The ground motion will cause damage to multiple pieces of equipment;

1. The conduit at the motor housing of Unit 1 Div II Water Leg Pump to shake loose causing a trip of the pump and loss of pressure on the B & C RHR system.
2. The oil bubbler on the Unit 1 Div II Water Leg Pump will sustain damage allowing the oil to drain from the bubbler onto the floor.
3. 1B CRD Pump shaft guard will become bent due to a small piece of concrete falling from the ceiling. The guard will maintain contact on the pump shaft which will cause the pump to trip later in the scenario.
4. 1E51-F008 (outboard RCIC Steam Isolation valve) will develop a slight bend on the shaft. This will be unseen by the operating crew until the valve is attempted to be manipulated later in the scenario.

The Shift Manager will declare an ALERT (MA5) due to a seismic event with damage in at least one train of a safety system required by Tech Specs for the current operating mode. The ERO will be activated via PA and Everbridge notifications. Command and Control will be turned over to the EOF and TSC once the facilities are activated.

Equipment Failures – 0900 hours

The damage mentioned in the "ALERT" portion above will be tracked and evaluated by the ERO in addition to performing plant walkdowns to evaluate further seismic damage. A keep fill rig will be hooked up to the RHR system to restore pressure and return the system to operability.

At 0850 the 1B CRD Pump will trip due to overcurrent from the shaft guard rubbing on the shaft. Additionally, at 0900 a small Recirc Line leak will develop in the Drywell of approximately 4 gpm. The indication for this size of leak will only be visible from the trending of sump fill rates.

SITE AREA EMERGENCY – 0910 hours

At 0910 a leak will develop upstream the 1E51-F045 (RCIC steam line) in the RCIC room of the Reactor Building resulting in a Group 8 isolation signal. This was a slow developing effect of the seismic activity where the steam piping was degraded from the ground motion and then finally broke through the pipe wall at 0910. High temperature and radiation

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alarms will come in for the Reactor Building. When the isolation signal comes in it will attempt to close the 1E51-F063 (inboard RCIC Steam Isolation valve) and the 1E51-F008 (outboard RCIC Steam Isolation valve).

Isolation of the steam leak into the room will fail due to;

- 1E51-F063 breaker will blow a fuse when the isolation signal comes in which will fail the valve in the as-is position.
- 1E51-F008 valve will only achieve mid position based on a bent stem that was caused by the seismic activity.

The high temperature in the RCIC Room will cause the operators to scram Unit 1 in accordance with the LGAs. The scram will result in an ATWS at ~30% reactor power due to hydraulic lock. The ATWS combined with the mechanical shock during the earthquake will result in fuel damage that will cause the Drywell Radiation level to be rising. Actions to reset ARI and re-perform the scram from the Control Room will be successful.

The SRM D will fail to insert due to a blown fuse which will be prioritized as a low level equipment issue by the ERO. Also, the SBT system will start and run successfully. Actions to shutdown the U2 SBT system will be simulated complete.

The Station Emergency Director will declare a SITE AREA EMERGENCY (FS1) due to the Loss of RCS (RC.4.1) and Loss of Containment (CT.6.1). This is from the unisolable RCIC line break and unisolable direct downstream pathway to the environment after a primary containment isolation signal.

An assembly will be initiated by the ERO to account for all personnel on site and evacuate non-essential personnel to an offsite facility (either Mazon, Dresden or Braidwood).

Radioactive Release in Progress – 0940 hours

The radioactive steam being released into the RCIC Room will propagate throughout the Reactor Building and eventually drawn into the SBT system. At 0940 the effluent release monitor will rise to $3.5E+04 \mu\text{Ci/s}$ marking the start of the Release in Progress. The release rate will climb until 1030 where it peaks at $5.0E+06 \mu\text{Ci/s}$ and will slowly decay after 1030. Field Monitoring Teams will be dispatched to track the plume.

GENERAL EMERGENCY – 1005 hours

The fuel damage that was started by the seismic activity and then propagated by the ATWS will cause Drywell Radiation level to continue to rise throughout the scenario. At 1005 it will cross the threshold for Loss of Fuel Clad (190 R/hr) and will peak at 205 R/hr.

The Station Emergency Director will declare a GENERAL EMERGENCY (FG1) due to the aforementioned Loss of RCS (RC.4.1) and Loss of Containment (CT.6.1) and the new Loss of Fuel Clad (FC.5). The Corporate Emergency Director will develop PARs to evacuate Sub-areas 1, 3 and notify the State of Illinois.

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Damage Mitigation – after 1030 hours

If the TSC/OSC has sent a team to replace the fuse that was blown on the 1E51-F063 breaker then replacement will be successful. After replacing the fuse the valve can be closed which will isolate the release path. The effluent release rate will be lowering from this point on, but still elevated as the time to evacuate the Reactor Building of the radioactive steam will take more time than remains in the scenario.

Exercise Termination - ~1200 hours

The exercise will be terminated after all lead facility evaluators agree that the selected objectives have been evaluated.

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EXPECTED EALs AND PARs

Time	EAL #	Description
0810	MA5	The occurrence of ANY of the following hazardous events: 1. Seismic event (earthquake) AND either of the following: a. Event damage has caused indications of degraded performance in at least one train of a SAFETY SYSTEM required by Technical Specification for the current operating period. OR b. The event has caused VISIBLE DAMAGE to a SAFETY SYSTEM component or structure required by Technical Specification for the current operating mode.
0910	FS1	<i>Loss or potential loss of ANY two barriers</i>
		<table border="1"> <tr> <td><u>RC.4.1</u> UNISOLABLE Main Stream Line (MSL), Isolation Condenser, HOCI, Feedwater, or RWCU line break.</td> <td><u>CT.6.1</u> UNISOLABLE direct downstream pathway to the environment exists after primary containment isolation signal.</td> </tr> </table>
<u>RC.4.1</u> UNISOLABLE Main Stream Line (MSL), Isolation Condenser, HOCI, Feedwater, or RWCU line break.	<u>CT.6.1</u> UNISOLABLE direct downstream pathway to the environment exists after primary containment isolation signal.	
1005	FG1	<i>Loss of any two barriers AND loss or potential loss of third barrier</i>
		<table border="1"> <tr> <td><u>FC.5</u> Drywell radiation monitoring reading > 1.9E +2R/hr (>190R/hr)</td> <td>RC.4.1 and CT.6.1</td> </tr> </table>
<u>FC.5</u> Drywell radiation monitoring reading > 1.9E +2R/hr (>190R/hr)	RC.4.1 and CT.6.1	
1200		Anticipated Termination

Expected PARs: *Wind from 080 for entirety of scenario*

Time	Event	Release	Affected Counties
0810	Alert – MA5	None	N/A
0910	Site Area Emergency – FS1	None	N/A
0940	Release in Progress begins	Occurring	N/A
1005	General Emergency – FG1	Occurring	LaSalle, Subareas 1,3
1200	Anticipated Termination		

METEOROLOGY

Wind from 080°
Wind Speed 6.4 mph
Stability Class D
Air Temperature 82 F
Precipitation None

RELEASE INFORMATION

Release Path is an elevated monitored release from a RCIC steam line break in the Reactor Building

URI Release Path 'G': <RCS><Rx Bldg><SBGT><SBGT Vent><Env>

Process Reduction factor is 4.00E-04

Core Damage is 2% based on DW Radiation

Release Duration is 1:45 (Good / Daytime conditions)

The table below is from the peak Dose Assessment in Section 8

Distance	Exposure Rate (mR/hr)	TEDE (mRem)	CDE (mRem)
S.B	1.34 E+01	1.75 E+01	1.98 E+01
2 miles	3.84 E+00	5.18 E+00	4.49 E+00
5 miles	2.80 E+00	3.54 E+00	2.19 E+00
10 miles	1.47 E+00	1.72 E+00	1.27 E+00