



After Action Report/ Improvement Plan

Braidwood Station

Radiological Emergency Preparedness Exercise

Exercise Date: March 7, 2018

May 10, 2018



FEMA

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

This page is intentionally blank

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

Table of Contents

	Page
Table of Contents.....	3
Executive Summary.....	5
Section 1: Exercise Overview	6
1.1 Exercise Details.....	6
1.2 Exercise Planning Team Leadership	6
1.3 Participating Organizations.....	7
Section 2: Exercise Design Summary.....	9
2.1 Exercise Purpose and Design	9
2.2 FEMA Exercise Objectives and Core Capabilities	10
Section 3: Analysis of Capabilities.....	13
3.1 Summary Results of Exercise Evaluation.....	13
3.2 Exercise Evaluation and Results	15
Table 3.1 - Summary of Exercise Evaluation – State of Illinois	16
Table 3.2 - Summary of Exercise Evaluation – Will County.....	17
Table 3.3 - Summary of Exercise Evaluation - Kankakee County.....	18
Table 3.4 - Summary of Exercise Evaluation - Grundy County	19
3.3 Jurisdictional Summary Results of Exercise Evaluation.....	20
3.3.1 State Of Illinois.....	20
3.3.1.1 Joliet Junior College – Congregate Care Center	20
3.3.1.2 Joliet Junior College – Evacuee Monitoring/Decontamination and Registration.....	20
3.3.1.3 Radiological Emergency Assessment Center	20
3.3.1.4 Silver Cross Hospital – Medical Services.....	21
3.3.1.5 Silver Cross Hospital – Medical Services.....	21
3.3.1.6 Will County EOC – Illinois State Liaison	21
3.3.1.7 Will County EOC – Illinois State Radiological Advisor.....	21
3.3.2 Risk Jurisdictions	22
3.3.2.1 Will County – EAS Station – WJOL/WSSR/WCCQ/WRXQ.....	22
3.3.2.2 Will County – Initial Warning Point	22
3.3.2.3 Will County – Emergency Operations Center	22
3.3.2.4 Will County – EOC – Sheriff’s Department – TACP.....	23
3.3.2.5 Will County – EOC – Sheriff’s Department – TACP DCO Brief	23
3.3.2.6 Wilmington School District 209U – EV-2.....	23
3.3.2.7 Kankakee County – EAS Station – WVLI/WIVR	24
3.3.2.8 Kankakee County – Initial Warning Point.....	24
3.3.2.9 Kankakee County – Emergency Operations Center.....	24
3.3.2.10 Kankakee County – Emergency Operations Center – TACP	25
3.3.2.11 Kankakee County – Emergency Operations Center – TACP DCO Brief	25
3.3.2.12 Gardner Elementary School – EV-2.....	25
Section 4: Conclusion	26

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

Appendix A: Exercise Timeline	27
Appendix B: Exercise Evaluators and Team Leaders.....	28
Appendix C: Extent-of-Play Agreement and Scenario Timelines.....	29

Executive Summary

On March 7, 2018, the Department of Homeland Security, Federal Emergency Management Agency (FEMA) Region V Radiological Emergency Preparedness Program staff evaluated a plume exposure pathway exercise in the emergency planning zone for the Braidwood Station. The evaluations of out of sequence activities conducted during the weeks of February 26 and March 5, 2018 are also included in this report.

The Braidwood Station is located on a 4,162 acre site in Reed Township in southwest Will County, two miles south of Braidwood, Illinois, and three miles west of the Kankakee River and is owned and operated by the Exelon Corporation. The Braidwood Station emergency planning zone is divided into 16 sub-areas. The 10-mile emergency planning zone encompasses parts of Will, Kankakee, and Grundy Counties with a population of approximately 39,719.

The purpose of the exercise was to assess the level of state and local preparedness in responding to an incident at Braidwood Station. This exercise was conducted in accordance with FEMA's policies and guidance concerning the exercise of State and local radiological emergency response plans and procedures. The previous federally-evaluated exercise at this site was conducted on April 6, 2016. The qualifying emergency preparedness exercise was conducted November 6, 1985.

Officials and representatives from the State of Illinois, the risk counties of Will, Kankakee, and Grundy, and Exelon Corporation participated in this exercise. State and local officials demonstrated knowledge of their emergency response plans and procedures and successfully implemented them. The FEMA evaluation team did not identify any Level 1 or Level 2 findings or plan issues.

The Federal Emergency Management Agency wishes to acknowledge the efforts of the many individuals who participated in the exercise and made it a success. The professionalism and teamwork of the participants was evident throughout all phases of the exercise.

Section 1: Exercise Overview

1.1 Exercise Details

Exercise Name

Braidwood Station Plume Pathway Partial Participation Radiological Emergency Preparedness Program Evaluated Exercise

Type of Exercise

Plume

Exercise Date(s)

March 7, 2018

Locations

See the Extent-of-Play Agreement in Appendix C for a complete listing of locations.

Sponsors

Illinois Emergency Management Agency
2200 South Dirksen Parkway
Springfield, Illinois 62703

Braidwood Station
35100 Illinois 53
Braceville, Illinois 60407

Program

Department of Homeland Security/Federal Emergency Management Agency
Radiological Emergency Preparedness Program

Mission

Response

Scenario Type

Plume Partial Participation Radiological Emergency Program Exercise

1.2 Exercise Planning Team Leadership

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

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

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

Curtis Williams
Site Specialist
DHS/FEMA Region V
536 South Clark Street
Chicago, Illinois 60605
312-408-5558
curtis.williamsjr@fema.dhs.gov

William Conway
REP Program Manager
Illinois Emergency Management Agency
2200 South Dirksen Parkway
Springfield, Illinois, 62703
217-785-9986
william.conway@illinois.gov

1.3 Participating Organizations

Agencies and organizations of the following jurisdictions participated in the 2018 Braidwood Station exercise. Approximately 269 personnel participated in the exercise.

State Jurisdictions

State Agencies:
Illinois Emergency Management Agency

Risk Jurisdictions:

Will County Coroner
Will County Department of Transportation
Will County Executive
Will County Health Department
Will County Public Information Officer
Will County Sheriff's Department
Kankakee County Emergency Management Agency
Kankakee County Board Chairman
Kankakee County Health Department
Kankakee County Sheriff's Department

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

Kankakee County Highway Department
Kankakee County Coroner
Kankakee Public Information Officer
Kankakee Regional Superintendent of Schools
Kankakee Communications
Gardener Elementary
Grundy County Superintendent of Schools
Grundy County Emergency Management Agency

Support Jurisdictions:

Bruning Elementary
Forest Preserve District of Will County
Joliet Community College
Laraway Communications Center
New Lenox Fire Protection District
Northwest Homer Fire and Ambulance Protection District
Radio Station WJOL/WSSR/WCCQ/WRXQ
Southern Will County Cooperative for Special Education
St. Rose Catholic Parochial School
Will County Regional Office of Education
Wilmington CUSD 209
Wilmington High School
Wilmington Middle School

Private Organizations:

American Red Cross
The Salvation Army

Federal Jurisdictions:

Federal Emergency Management Agency
United States Nuclear Regulatory Commission

Section 2: Exercise Design Summary

2.1 Exercise Purpose and Design

The Federal Emergency Management Agency (FEMA) administers the Radiological Emergency Preparedness (REP) Program pursuant to the regulations found in Title 44 Code of Federal Regulation (CFR) parts 350, 351, and 352. Title 44 Code of Federal Regulation part 350 names sixteen planning standards that form the basis for radiological emergency response planning for state, tribal, and local governments impacted by the emergency planning zones established for each nuclear power plant site in the United States. Title 44 CFR Part 350 sets forth the mechanisms for the formal review and approval of state, tribal, and local government radiological emergency response plans and procedures by FEMA. One of the REP Program requirements established by these regulations is the biennial exercise of offsite response capabilities. During these exercises, FEMA evaluates state, tribal, and local governments plans, procedures, and actions to protect the health and safety of the public in the event of a radiological emergency at the nuclear plant.

The results of this exercise together with review of the radiological emergency response plans and procedures and verification of the periodic requirements set forth in *"Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980* (NUREG-0654/FEMA-REP-1, REV. 1) through the annual letter of certification and staff assistance visits enables FEMA to provide a statement with the transmission of this final after action report to the United States NRC that the affected State, tribal, and local plans and preparedness are (1) adequate to protect the health and safety of the public living in the vicinity of the nuclear power facility by providing reasonable assurance that appropriate protective measures can be taken offsite in the event of a radiological emergency; and (2) capable of being implemented.

Formal submission of the radiological emergency response plans for the Braidwood Station to FEMA Region V by the State of Illinois and involved local jurisdictions occurred on November 6, 1985. Formal approval of the State of Illinois' radiological emergency response plans was granted on April 15, 1988, under 44 CFR 350.

2.2 FEMA Exercise Objectives and Core Capabilities

Core Capabilities-based planning allows for exercise planning teams to develop exercise objectives and observe exercise outcomes through a framework of specific action items. Using the Homeland Security Exercise and Evaluation Program methodology, the exercise objectives meet the Radiological Emergency Preparedness Program requirements and encompass the emergency preparedness evaluation areas. The critical tasks to be demonstrated were negotiated with the State of Illinois and the participating counties. The Core Capabilities demonstrated during this exercise were:

Operational Coordination: Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of Core Capabilities.

Situational Assessment: Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.

Public Information and Warning: Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard and, as appropriate, the actions being taken and the assistance being made available.

Environmental Response/Health and Safety: Conduct appropriate measures to ensure the protection of the health and safety of the public and workers, as well as the environment, from all-hazards in support of responder operations and the affected communities.

On-Scene Security, Protection, and Law Enforcement: Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for response personnel engaged in lifesaving and life-sustaining operations.

Critical Transportation: Provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people and animals, and the delivery of vital response personnel, equipment, and services into the affected areas.

Mass Care Services: Provide life-sustaining and human services to the affected population, to include hydration, feeding, sheltering, temporary housing, evacuee support, reunification, and distribution of emergency supplies.

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

Public Health, Healthcare, and Emergency Medical Services: Provide lifesaving medical treatment via Emergency Medical Services and related operations and avoid additional disease and injury by providing targeted public health, medical and behavioral health support, and products to all affected populations.

These Core Capabilities, when successfully demonstrated, meet the exercise objectives. The objectives for this exercise were as follows:

Objective 1:

Demonstrate the ability to provide direction and control and make protective action decisions through the state emergency operations centers, county emergency operations centers, and field activities by exercise play and discussion of plans and procedures.

Objective 2: Demonstrate the ability to provide protective action decisions affecting state and county emergency workers and public through exercise play and discussions of plans and procedures.

Objective 3: Demonstrate the ability to implement protective actions for state and county emergency workers and public through exercise demonstration.

Objective 4: Demonstrate the ability to activate the prompt alert and notification system utilizing the primary notification system and the emergency alert system through exercise play.

Objective 5: Demonstrate the effectiveness of plans, policies, and procedures in the joint information center and the joint information system for public and private sector emergency information communications.

Objective 6: Demonstrate the ability to monitor, decontaminate, register, and shelter evacuees.

Objective 7: Demonstrate the ability to provide dose projection and protective action decision making for the plume phase.

Objective 8: Demonstrate the ability to provide appropriate space, adequate resources, and trained personnel to provide transport, monitoring, decontamination, and medical services to contaminated injured individuals.

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

This page is intentionally blank

Section 3: Analysis of Capabilities

3.1 Summary Results of Exercise Evaluation

Homeland Security Exercise Evaluation Program evaluation methodology is an analytical process used to assess the demonstration of specific capabilities during an exercise. A capability provides a means to perform one or more critical tasks under specified conditions and to specific performance standards. Core capabilities form the foundation of the National Preparedness System. The core capability summaries below provide an overall combined assessment of state and local jurisdictions based upon their collective demonstrated performance as it relates to the specific core capability. Each jurisdiction's stand-alone capability summaries are listed in section 3.3 of this report.

Operational Coordination: Key leadership personnel established and maintained a unified and coordinated operational structure which provided effective and responsive direction and control. Critical stakeholders were appropriately integrated in the overall decision-making process, which enabled protective action recommendations to be evaluated in a sensible and timely manner. This process included input from both relevant critical stakeholders and support personnel and took into account the safety and well-being of the general public, property and business alike. From there, protective action decisions as a whole were made without undue delay.

Public Information and Warning: The jurisdictions as a whole demonstrated the ability to deliver coordinated, prompt, reliable and actionable information to the whole community through the use of clear, consistent and accessible means. Accurate initial information and follow on instructions were made with the formulation of news releases being reviewed from the Joint Information System and briefings conducted at the Joint Information Center. Alert and notification of the public and media was completed in a timely manner by simulated means of sounding of sirens, Emergency Alert System messaging, backup route alerting, waterway warning, news releases and press briefings. The simulated release of the aforementioned public information modes were consistent with protective action decisions and contained applicable and specific instructions relative to those decisions.

Environmental Response/Health and Safety: The state Mobile Lab and Radiological Response Group (RRG) provided appropriate staff and resources to support the response. They simulated the positioning and management of field monitoring teams and provided appropriate instructions for emergency worker exposure control.

The availability of guidance and resources to address hazardous materials was integral in support of the responder operations and the affected communities. The Emergency Operations Facility liaisons communicated well with the state emergency operations center to ensure that state and county responses and protective action recommendations were coordinated properly.

The State Radiological Response Group (RRG) in Will County demonstrated their ability to monitor and decontaminate evacuees and emergency workers. They demonstrated proficiency in

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

using monitoring equipment, exposure control equipment, and operating procedures. Neither the mobile lab nor the RRG were activated for this exercise

Situational Assessment: The Radiological Emergency Assessment Center (REAC) demonstrated proficiency in the use of dose assessment software to calculate dose projections independent of the Braidwood Station dose projections. The staff calculated hypothetical dose projections based on plant conditions and possible release scenarios. When field team monitoring data was provided (via inject), the staff used that data to modify the dose projection and support protective action recommendations. Decisions from the REAC were given to the Unified Area Command liaison in the State Emergency Operations Center (EOC) for dissemination to the affected counties.

The Illinois State Radiation Officer and State Operations Officer located in the county EOC participated in the state and county decision-making conference calls with the UAC liaison in the State EOC, providing timely and technically sound recommendations to decision makers at the county level. The field monitoring teams and the mobile laboratory were not activated for this exercise.

On-Scene Security and Protection: State and local law enforcement agencies demonstrated the capability to ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas, and also for all traditional and atypical response personnel engaged in lifesaving and life-sustaining operations. The implementation of traffic and access control points were correctly assessed and established in a timely manner.

Critical Transportation: School officials effectively demonstrated the ability to implement protective actions for affected local schools.

Mass Care: Congregate care center staff demonstrated the ability to provide life-sustaining services to affected populations with a focus on family reunification, feeding and sheltering. The American Red Cross, who manages all shelter operations under the REP Program, demonstrated that they had the resources to provide services and accommodations consistent with planning guidelines. They also demonstrated knowledge of the process that determined whether an evacuee had been monitored for contamination and determined to be clean before entering the congregate care facilities.

Public Health, Healthcare, and Medical Services: Qualified medical personnel successfully demonstrated the ability to provide for transport, treatment and decontamination of a contaminated injured individual. Emergency Medical Services and hospital personnel exhibited good knowledge of contamination control, radiological equipment use, decontamination techniques, and exposure limits. All personnel were aware of the need to place medical treatment of the patient before performing decontamination.

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

3.2 Exercise Evaluation and Results

This section contains the results and findings of the evaluation of all jurisdictions and functional entities that participated in the March 7, 2018 Plume Pathway exercise and out-of-sequence interviews and demonstrations in February and March 2018.

Each jurisdiction and functional entity was evaluated based on their demonstration of Core Capabilities and their equivalent Radiological Emergency Preparedness criteria as delineated in the Federal Emergency Management Agency Radiological Emergency Preparedness Program Manual dated January 2016. Exercise criteria are listed by number and the demonstration status of those criteria are indicated by the use of the following terms:

- M: Met (no unresolved level 1 or level 2 findings assessed and no unresolved findings from prior exercises)
- 1: Level 1 finding assessed
- 2: Level 2 finding assessed or an unresolved level 2 finding(s) from a prior exercise
- P: Plan issue
- N: Not demonstrated

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

Table 3.1 - Summary of Exercise Evaluation – State of Illinois

DATE: March 7, 2018 SITE: Braidwood Station M: Met L1: Level 1 Finding L2: Level 2 Finding P: Plan Issue		REAC	State – EV MON/DECON Reg JIC	State – CCC JIC	State – Silver Cross Hospital	State – Silver Cross Trans	State – IL Rad Advisor Will	State – IEMA Advisor Will	State – IL RAD Advisor Kankakee	State – IEMA Advisor Kankakee
Emergency Operations Management										
Mobilization	1a1	M								
Facilities	1b1									
Direction and Control	1c1	M						M		M
Communications Equipment	1d1									
Equipment and Supplies to Support Operations	1e1				M	M				
Protective Action Decision-Making										
EW Exposure Control Decisions	2a1									
PARs	2b1	M								
PADs	2b2	M					M		M	
PADs for Disabled/Functional Needs	2c1	M					M		M	
Ingestion PADs	2d1									
RRR Decisions	2e1									
Protective Action Implementation										
EW Exposure Control Implementation	3a1				M	M	M		M	
KI Public/Institutionalized	3b1									
PAD Implementation Disabled/Functional Needs	3c1									
PAD Implementation Schools	3c2									
TACP Establishment	3d1									
Impediments	3d2						M		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									
Laboratory Operations	4c1									
Emergency Notification and Public Info										
Initial Alert & Notification	5a1						M	M	M	M
RESERVED	5a2									
Backup Alert & Notification	5a3									
Exception Area Alerting	5a4									
Subsequent Information & Instructions	5b1	M						M		M
Support Operations and Facilities										
Reception Center Operations	6a1		M							
EW Monitoring & Decontamination	6b1									
Congregate Care	6c1			M						
Contaminated Injured	6d1				M	M				

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

Table 3.2 - Summary of Exercise Evaluation – Will County

DATE: March 7, 2018 SITE: Braidwood Station M: Met L1: Level 1 Finding L2: Level 2 Finding P: Plan Issue		Will – IWP	Will – EOC	Will TACP EOC	Will- DCO Briefing TACP EOC	Will - EAS Station WJOL/WSSR/WCCQ/ WRXQ	Will- Wilmington CUSD 209U EV2
Emergency Operations Management							
Mobilization	1a1	M	M				
Facilities	1b1						
Direction and Control	1c1		M				
Communications Equipment	1d1	M	M	M	M	M	M
Equipment and Supplies to Support Operations	1e1		M	M	M		M
Protective Action Decision-Making							
EW Exposure Control Decisions	2a1						
PARs	2b1						
PADs	2b2		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
KI Public/Institutionalized	3b1		M				
PAD Implementation Disabled/Functional Needs	3c1		M				
PAD Implementation Schools	3c2		M				M
TACP Establishment	3d1		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						
Laboratory Operations	4c1						
Emergency Notification and Public Info							
Initial Alert & Notification	5a1		M			M	
RESERVED	5a2						
Backup Alert & Notification	5a3		M				
Exception Area Alerting	5a4						
Subsequent Information & Instructions	5b1		M				
Support Operations and Facilities							
Reception Center Operations	6a1						
EW Monitoring & Decontamination	6b1						
Congregate Care	6c1						
Contaminated Injured	6d1						

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

Table 3.3 - Summary of Exercise Evaluation - Kankakee County

DATE: March 7, 2018 SITE: Braidwood Station M: Met L1: Level 1 Finding L2: Level 2 Finding P: Plan Issue		Kankakee – IWP	Kankakee – EOC	Kankakee- EOC TACP	Kankakee TACP - EOC DCO Briefing	Kankakee EAS Station WVLI
Emergency Operations Management						
Mobilization	1a1	M	M			
Facilities	1b1					
Direction and Control	1c1		M			
Communications Equipment	1d1	M	M	M	M	M
Equipment and Supplies to Support Operations	1e1		M	M	M	
Protective Action Decision-Making						
EW Exposure Control Decisions	2a1					
PARs	2b1					
PADs	2b2		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	
KI Public/Institutionalized	3b1		M			
PAD Implementation Disabled/Functional Needs	3c1		M			
PAD Implementation Schools	3c2		M			
TACP Establishment	3d1		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					
Laboratory Operations	4c1					
Emergency Notification and Public Info						
Initial Alert & Notification	5a1		M			M
RESERVED	5a2					
Backup Alert & Notification	5a3		M			
Exception Area Alerting	5a4					
Subsequent Information & Instructions	5b1		M			
Support Operations and Facilities						
Reception Center Operations	6a1					
EW Monitoring & Decontamination	6b1					
Congregate Care	6c1					
Contaminated Injured	6d1					

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

Table 3.4 - Summary of Exercise Evaluation - Grundy County

DATE: March 7, 2018 SITE: Braidwood Station M: Met L1: Level 1 Finding L2: Level 2 Finding P: Plan Issue		Grundy – Gardner Elementary EV2
Emergency Operations Management		
Mobilization	1a1	
Facilities	1b1	
Direction and Control	1c1	
Communications Equipment	1d1	M
Equipment and Supplies to Support Operations	1e1	M
Protective Action Decision-Making		
EW Exposure Control Decisions	2a1	
PARs	2b1	
PADs	2b2	
PADs for Disabled/Functional Needs	2c1	
Ingestion PADs	2d1	
RRR Decisions	2e1	
Protective Action Implementation		
EW Exposure Control Implementation	3a1	M
KI Public/Institutionalized	3b1	
PAD Implementation Disabled/Functional Needs	3c1	
PAD Implementation Schools	3c2	M
TACP Establishment	3d1	
Impediments	3d2	
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	
Laboratory Operations	4c1	
Emergency Notification and Public Info		
Initial Alert & Notification	5a1	
RESERVED	5a2	
Backup Alert & Notification	5a3	
Exception Area Alerting	5a4	
Subsequent Information & Instructions	5b1	
Support Operations and Facilities		
Reception Center Operations	6a1	
EW Monitoring & Decontamination	6b1	
Congregate Care	6c1	
Contaminated Injured	6d1	

3.3 Jurisdictional Summary Results of Exercise Evaluation

3.3.1 State Of Illinois

3.3.1.1 Joliet Junior College – Congregate Care Center

Core Capability: Mass Care Capability Summary:

For this capability, the following Radiological Emergency Preparedness criteria were MET:
6.c.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.1.2 Joliet Junior College – Evacuee Monitoring/Decontamination and Registration

Core Capability: Environmental Response/Health and Safety Capability Summary:

For this capability, the following Radiological Emergency Preparedness criteria were MET:
6.a.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.1.3 Radiological Emergency Assessment Center

Core Capability: Operational Coordination Capability Summary:

For this capability, the following Radiological Emergency Preparedness criteria were MET:
1.a.1, 1.c.1, 2.b.1, 2.b.2, 2.c.1, and 5.b.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.1.4 Silver Cross Hospital – Medical Services

Core Capability: Public Health and Medical Services Capability Summary:

For this capability, the following Radiological Emergency Preparedness criteria were MET: 1.e.1, 3.a.1, and 6.d.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.1.5 Silver Cross Hospital – Medical Services

Core Capability: Public Health and Medical Services Capability Summary:

For this capability, the following Radiological Emergency Preparedness criteria were MET: 1.e.1, 3.a.1, and 6.d.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.1.6 Will County EOC – Illinois State Liaison

Core Capability: Operational Coordination Capability Summary:

For this capability, the following Radiological Emergency Preparedness criteria were MET: 1.c.1 and 5.a.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.1.7 Will County EOC – Illinois State Radiological Advisor

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

Core Capability: Environmental Response/Health and Safety Capability Summary:

For this capability, the following Radiological Emergency Preparedness criteria were MET:
2.b.2, 2.c.1, 3.a.1, and 3.d.2

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.2 Risk Jurisdictions

3.3.2.1 Will County – EAS Station – WJOL/WSSR/WCCQ/WRXQ

Core Capability: Public Information and Warning Capability Summary:

For this capability, the following Radiological Emergency Preparedness criteria were MET:
1.d.1 and 5.a.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.2.2 Will County – Initial Warning Point

Core Capability: Operational Coordination Capability Summary:

For this capability, the following Radiological Emergency Preparedness criteria were MET:
1.a.1 and 1.d.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.2.3 Will County – Emergency Operations Center

Core Capability: Operational Coordination Capability Summary:

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

For this capability, the following Radiological Emergency Preparedness criterion was 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.a.3, and 5.b.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.2.4 Will County – EOC – Sheriff’s Department – TACP

Core Capability: On-Scene Security, Protection and Law Enforcement Capability Summary:

For this capability, the following Radiological Emergency Preparedness criterion was MET: 1.d.1, 1.e.1, 3.a.1, and 3.d.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.2.5 Will County – EOC – Sheriff’s Department – TACP DCO Brief

Core Capability: Environmental Response/Health and Safety Capability Summary:

For this capability, the following Radiological Emergency Preparedness criterion was MET: 1.d.1, 1.e.1, and 3.a.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.2.6 Wilmington School District 209U – EV-2

Core Capability: Operational Coordination and Critical Transportation Capability Summary:

For this capability, the following Radiological Emergency Preparedness criterion was MET: 1.d.1, 1.e.1, 3.a.1, and 3.c.2

- a. Level 1 Finding: None

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.2.7 Kankakee County – EAS Station – WVLI/WIVR

Core Capability: Public Information and Warning Capability Summary:

For this capability, the following Radiological Emergency Preparedness criteria were MET: 1.d.1 and 5.a.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.2.8 Kankakee County – Initial Warning Point

Core Capability: Operational Coordination Capability Summary:

For this capability, the following Radiological Emergency Preparedness criteria were MET: 1.a.1 and 1.d.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.2.9 Kankakee County – Emergency Operations Center

Core Capability: Operational Coordination Capability Summary:

For this capability, the following Radiological Emergency Preparedness criteria were 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.a.3, and 5.b.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

- e. Prior Level 2 Findings - Unresolved: None

3.3.2.10 Kankakee County – Emergency Operations Center – TACP

Core Capability: On-Scene Security, Protection and Law Enforcement Capability Summary:

For this capability, the following Radiological Emergency Preparedness criterion was MET: 1.d.1, 1.e.1, 3.a.1, and 3.d.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.2.11 Kankakee County – Emergency Operations Center – TACP DCO Brief

Core Capability: Environmental Response/Health and Safety Capability Summary:

For this capability, the following Radiological Emergency Preparedness criteria were MET: 1.d.1, 1.e.1, and 3.a.1

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

3.3.2.12 Gardner Elementary School – EV-2

Core Capability: Operational Coordination and Critical Transportation Capability Summary:

For this capability, the following Radiological Emergency Preparedness criteria were MET: 1.d.1, 1.e.1, 3.a.1, and 3.c.2

- a. Level 1 Finding: None
- b. Level 2 Finding: None
- c. Not Demonstrated: None
- d. Prior Level 2 Findings – Resolved: None
- e. Prior Level 2 Findings - Unresolved: None

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

Section 4: Conclusion

There were no Level 1 or Level 2 findings or plan issues identified for the state of Illinois or Will, Grundy, and Kankakee Counties.

Based on the results of the exercise, the planning and preparedness for the State of Illinois and affected local jurisdictions provided 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.

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

Appendix A: Exercise Timeline

All times listed are Central Standard Time

Emergency Classification Level or Event	Time Utility Declared	REAC	SEOC	Will County	Kankakee County	JIC (SEOC) Info Received	JIC (SEOC) Info Issued to Public
Unusual Event (end of verification call for ECLs)	NA	NA	NA	NA	NA	NA	NA
Alert	0818	0844	NA	0857	0853	NA	NA
Site Area Emergency	0931	0941	NA	0954	0950	NA	NA
General Emergency	1036	1048	NA	1058	1058	NA	NA
Release of Radioactive Material Started	NA	NA	NA	NA	NA	NA	NA
Release of Radioactive Material Terminated	0818	0844	NA	0857	0853	NA	NA
Facility Declared Operational		0912	NA	0913	0938	NA	NA
Declaration of State/Local Emergency		NA	NA	1142	N/A	NA	NA
Exercise Termination		1210	NA	1244	1225	NA	NA
Early Precautionary Action Decision: <i><The State issued an order to evacuate state parks.></i>		N/A	NA	NA	NA	NA	NA
Early Precautionary Action Decision: <i><The State issued a Livestock Advisory: All livestock are to be sheltered and placed on stored feed and water within the 10-mile EPZ.></i>		1016	NA	1026	1016	NA	NA
Early Precautionary Action Decision: <i><The state issued Air, water and rail traffic within 5/10 miles of Braidwood Station restricted.></i>		NA	NA	NA	NA	NA	NA
Early Precautionary Action Decision: <i><Evacuate Schools and/or Special Populations.></i>		NA	NA	NA	NA	NA	NA
General Information Message: <i><Public advised of incident at Braidwood Station></i>		NA	NA	1000	1011	NA	NA
Siren Activation:		NA	NA	1005	1005	NA	NA
EAS Message:		NA	NA	1008	1007	NA	NA
Protective Action Recommendation		1049	NA	1058	1100	NA	NA
Evacuation of Sub-Areas: 1, 3, 6, 10		1128	NA	1105	1107	NA	NA
Protective Action Decision: 1, 3, 6, 7, 10		NA	NA	1112	1115	NA	NA
Siren Activation:		NA	NA	1114	1119	NA	NA
EAS Message:		NA	NA	1114	1119	NA	NA
KI Administration Emergency Workers and Immobile Populations Decision (SEOC/REAC)/Implementation (UAC/Counties) To not issue KI		1049	NA	1120	1115	NA	NA

Unclassified
Radiological Emergency Preparedness Program

After Action Report

2018 Braidwood Station

Appendix B: Exercise Evaluators and Team Leaders

Regional Assistance Committee (RAC) Chair: Sean O’Leary

Exercise Director: Stephen Tulley

Site Specialist: Curtis Williams

LOCATION	EVALUATOR	AGENCY
State of Illinois – REAC	John Fill	FEMA HQ
State of Illinois – EV MON/DECON and REG JJC	Kim Alahmadi	FEMA Region V
State of Illinois – CCC JJC	Kim Alahmadi	FEMA Region V
MS-1 Silver Cross Hospital	Carl Bebrich	FEMA Region V
MS-1 Silver Cross Hospital	Michael Petullo	ICF
Will County – Initial Warning Point	Ken Wierman	FEMA HQ
Will County – EOC	Jesse King	FEMA HQ
Will County – EOC	Danny Loomis	ICF
Will County – EOC	Mark Dalton	ICF
Will County – EOC	George Odom	FEMA HQ
Will County – State Rad Advisor	David Ortman	FEMA Region V
Will County – IEMA Liaison	David Ortman	FEMA Region V
Will County – TACP	Karl Rabenhorst	FEMA Region V
Will County – TACP – DCO Brief	Ken Wierman	FEMA HQ
Radio Station WJOL/WSSR/WCCQ/WRXQ	Paul Ward	FEMA HQ
EV-2 School Interview – Wilmington CUSD 209U	Kim Alahmadi	FEMA Region V
Kankakee County – Initial Warning Point	Brett Beardsley	FEMA Region V
Kankakee County – EOC	Gary Bolender	ICF
Kankakee County – EOC	Dave Stuenkel	ICF
Kankakee County – EOC	Deborah Blunt	ICF
Kankakee County – State Rad Advisor	David Persaud	FEMA Region V
Kankakee County – IEMA Liaison	David Persaud	FEMA Region V
Kankakee County – DCO Brief	Brett Beardsley	FEMA Region V
Kankakee County – TACP	Lenora Borchardt	ICF
Radio Station WVLI	Katie Boyce	FEMA Region V
EV-2 School Interview Gardner Elementary	Kim Alahmadi	FEMA Region V

Appendix C: Extent-of-Play Agreement and Scenario Timelines

STATE OF ILLINOIS EXTENT-OF-PLAY AGREEMENT

FOR THE

BRAIDWOOD EXERCISE

MARCH 7, 2018

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 Chair 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), and the IEMA Communications Center (24-hour Warning Point) will be partially activated to support state and county-level exercise participation but will not be evaluated. REAC will be fully activated and evaluated.

The utility will issue a NARS to both the state and counties simultaneously. A follow-up state NARS may be issued to the counties after further assessment.

The Unified Area Command (UAC) and Radiological Response Group (RRG) will provide a sim cell to support exercise needs but will not be evaluated. IEMA personnel will be prepositioned in the local area and dispatched to the county Emergency Operation Centers (EOCs), Emergency Operation Facility (EOF), Technical Support Center (TSC) and the Joint Information Center (JIC) to support exercise play. State JIC personnel will be located in Warrenville and the SEOC but will not be evaluated. FEMA will not evaluate the TSC.

An actual phone call will be made to the FEMA Duty Officer advising him/her of the situation at Braidwood 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 evaluated during this exercise.

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

The ability to direct and control emergency response activities will be demonstrated at the SEOC, REAC, state & county-level exercise play but will not be evaluated. Coordination will be demonstrated between the SEOC, UAC, REAC, RRG, JIC, EOF and the county EOCs for state & county-level exercise play and for training purposes but will not be evaluated. REAC will demonstrate the ability to direct & control emergency response activities and coordination with SEOC, RRG, JIC and 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.

This criterion has been successfully demonstrated at the SEOC, REAC, UAC, JIC and RRG in the last two years, and as such, will not be evaluated during this exercise.

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

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

Dosimetry Control Officer (DCO) logs will be available in each county EOC to support county-level exercise play and evaluation.

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

The authorization process for an emergency worker to exceed the administrative limit will not be demonstrated during this exercise.

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 evaluate the data and make a protective action recommendation (PAR) to the SEOC. SEOC participation will be limited to supporting REAC and county-level exercise play but will not be evaluated.

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).

SEOC participation will be limited to supporting REAC and county-level exercise play but will not be evaluated.

The coordination to determine 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 the county EOCs via NARS.

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

The decision making process to recommend the use of KI to institutionalized persons will be demonstrated in REAC. SEOC participation will be limited to supporting REAC and county-level exercise play but will not be evaluated.

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 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 should a decision to recommend use of KI is made. Appropriate record keeping of the administration of KI for institutionalized individuals is maintained.

This criterion will not be evaluated 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 will not be demonstrated during this exercise.

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

This criterion 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, relocation, and return of individuals during the post-plume 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 (2 or more) are managed to obtain sufficient information to help characterize the release and to control radiation exposure.

RRG will provide a sim cell to support exercise needs but they will not be evaluated.

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.

RRG will provide a sim cell to support exercise needs but they will not be evaluated.

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.

RRG will provide a sim cell to support exercise needs but they will not be evaluated.

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.

This criterion does not apply to the State of Illinois.

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.

The JIC will be activated in Warrenville and Springfield for training purposes and to support state, county and utility-level exercise play, however the state will not be evaluated for this criterion.

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.

An interview of state and local officials and inspection of Joliet Junior College will be conducted on **Wednesday, February 28th at 1:00 PM (confirmed)**. The following organizations will be represented at the interview: local EMA, Police and Fire Departments, American Red Cross and IEMA. Evacuees will not be processed.

Monitoring equipment will not be available at the interview/inspection.

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

An interview of state and local officials and inspection of Joliet Junior College will be conducted on **Wednesday, February 28th at 1:00 PM (confirmed)**. The following organizations will be represented at the interview: local EMA, Police and Fire Departments, American Red Cross and IEMA. Evacuees will not be processed.

This criterion will not be evaluated 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 American Red Cross planning guidelines. Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate prior to entering congregate care facilities.

An interview of state and local officials and inspection of Joliet Junior College will be conducted on **Wednesday, February 28th at 1:00 PM (confirmed)**. The following organizations will be represented at the interview: local EMA, Police and Fire Departments, American Red Cross and IEMA. Evacuees will not be processed.

This criterion will not be evaluated during 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 Silver Cross in New Lenox on **Tuesday, March 6th at 8:30AM (confirmed)**.

WILL COUNTY EXTENT-OF-PLAY AGREEMENT

FOR THE

BRAIDWOOD STATION EXERCISE

MARCH 7, 2018

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 Chair 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.

Will County intends to fully activate the Emergency Operations Center (EOC) in Joliet, Illinois. The County will implement notification procedures as defined in IPRA-Braidwood. Representatives from IEMA and Exelon will staff the county EOC but will not be pre-positioned in the EOC. A roster will be provided to demonstrate 24-hour staffing of the EOC. The roster will be available for review; however, it will not be removed from the EOC.

The utility will issue a NARS to both the state and counties simultaneously. A follow-up state NARS may be issued to the counties after further assessment. The NARS line will be answered at both the county 24-hour warning point and the county EOC.

An evaluator will be positioned at the County Sheriff's Communications Center (24-hour warning point) at the start of the exercise.

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

This criterion will be evaluated during this exercise (911 Center).

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

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

Will County will utilize multiple communication systems to communicate with departments and agencies at other locations. Possible systems include commercial telephone, cell phone, radio, electronic mail, internet-based systems (such as WebEOC) and/or telefax.

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

Communication systems may be discussed, but not demonstrated, during the school EV-2 interviews.

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

Will County will demonstrate the ability to support operations through the use of maps, status boards and other displays as appropriate. Dosimetry Control Logs will be available from the IEMA Radiological Advisor in the Will County EOC. The availability of dosimetry and KI will be demonstrated at the county EOC during the traffic and access control demonstration.

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

Dosimetry and KI will be discussed, inspected and evaluated during the school EV-2 interview at Wilmington CUSD #209U on **Thursday, March 1st at 1:30 PM (confirmed)**. At the interview, the District Superintendent, a principal, a teacher, the transportation coordinator (DCO), bus driver and the maintenance supervisor will be present, as well as a representative from the Regional Office of Education.

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 Will 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 Will 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 PADs to Will County officials in the county EOC. The Will 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 PARs to Will County officials in the County EOC. The Will 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.

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 Will 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 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.

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

The authorization process for an emergency worker to exceed the administrative limit will not be demonstrated during this exercise.

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

This criterion will be evaluated during an out of sequence school interview at Wilmington CUSD #209U **Thursday, March 1st at 1:30 PM (confirmed)**.

Criterion 3.b.1: KI and appropriate instructions are available should 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, Will 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.

The State of Illinois will make an announcement through the JIC of the appropriate time for the public to consider voluntarily taking KI. However, the JIC will not be evaluated 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 will be demonstrated by Will 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 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.

Will 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 with the Wilmington CUSD #209U **Thursday, March 1st at 1:30 PM (confirmed)**. At the interview, the District Superintendent, a principal, a teacher, the transportation coordinator (DCO), bus driver and the maintenance supervisor will be present, as well as a representative from the Regional Office of Education.

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

Coordination between Will County agencies designated to provide traffic and access control will be exhibited in the County EOC. A Sheriff's deputy will be available during the exercise to simulate the staffing of one post. The post for the demonstration will be selected by Will 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 Will 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 address 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.

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 Will 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 Will County.

Criterion 3.f.1: Decisions regarding controlled re-entry, relocation, and return of individuals during the post-plume 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 Will 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.

Will 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 decision (PAD).

This capability will be demonstrated only through ~~the simulated activation~~ an interview with personnel responsible for activation of the Braidwood Station EPZ outdoor warning sirens as defined in IPRA-Braidwood at, or prior to the start of the exercise. The outdoor warning sirens will not be activated during the exercise. Every effort will be taken by controllers, evaluators and players to avoid inadvertent activation of sirens or emergency messaging systems.

The ability to provide instructions to the public will be demonstrated through the simulated activation of the local radio station (WJOL/WSSR/WCCQ/WRXQ). The local radio station will be contacted during the first, and possibly the second, alert and notification sequence. An evaluator and controller will be positioned at the radio station during the exercise to monitor for a message containing a PAR.

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

Coordination between Will County, Grundy County and Kankakee 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.

The Will Public Safety Communication Center is the primary activation point for the Alert Notification System. Will/Kankakee County also activates the Emergency Alert System using IPAWS. An interview with XYZ personnel may be conducted by DHS/ FEMA following transmittal of EAS messages where appropriate.

Actual sounding of the ANS system to the public will not be performed. The process will be explained through interview of Communications staff. Every effort will be taken by controllers, evaluators and players to avoid inadvertent activation of sirens or messaging systems.

Actual airing of EAS messages will not be performed. A "Required Weekly Test" (RWT) code will be used for demonstration. The vendor origination software, EmNet has message status tracking features (Sent, Acknowledged, Aired, etc.). Such system logs messages will be provided to FEMA.

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 Will County.

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

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

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

The ability to address rumors will be demonstrated by Will County through coordination between the county EOC and the JIC. The Will County EOC controller will inject exercise messages that 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. Rumors identified will be shared with the JIC.

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

EVALUATION AREA 6 - SUPPORT OPERATION/FACILITIES

This evaluation area does not apply to Will County.

KANKAKEE COUNTY EXTENT-OF-PLAY AGREEMENT

FOR THE

BRAIDWOOD STATION EXERCISE

MARCH 7, 2018

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 Chair 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.

Kankakee County intends to fully activate the Emergency Operations Center (EOC) in Kankakee, Illinois. The County will implement notification procedures as defined in IPRA-Braidwood. Notifications will be made from the 24-hour warning point and the EOC. Representatives from IEMA and Exelon will staff the County EOC but will not be pre-positioned in the EOC. A roster will be provided to demonstrate 24-hour staffing of the EOC. The roster will be available for review; however, it will not be removed from the EOC.

The utility will issue a NARS to both the state and counties simultaneously. A follow-up state NARS may be issued to the counties after further assessment. The NARS line will be answered at both the county 24-hour warning point and the county EOC.

An evaluator will be positioned at the County Sheriff's Communications Center (24-hour warning point) and the EOC at the start of the exercise.

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

This criterion will not be evaluated 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 at the Kankakee County EOC. Coordination of decisions and emergency activities will be demonstrated between Kankakee County, SEOC, UAC and JIC, and between the county and municipalities within the EPZ. Coordination between Will County, Grundy County and Kankakee 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.

Kankakee County will utilize multiple communication systems to communicate with departments and agencies at other locations. Possible systems include commercial telephone, cell phone, radio, electronic mail, internet-based systems (such as WebEOC) and/or telefax.

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

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

Kankakee County will demonstrate the ability to support operations through the use of maps, status boards and other displays as appropriate. Dosimetry Control Logs will be available from the IEMA Radiological Advisor in the Kankakee County EOC. The availability of dosimetry and KI will be demonstrated at the County EOC, during the traffic and access control demonstration.

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

EVALUATION AREA 2 - PROTECTIVE ACTION DECISION MAKING

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

This criterion does not apply to Kankakee 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 Kankakee 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 PADs to Kankakee County officials in the county EOC. The Kankakee 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 PARs to Kankakee County officials in the County EOC. The Kankakee 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.

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 Kankakee 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 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.

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

The authorization process for an emergency worker to exceed the administrative limit will not be demonstrated during this exercise.

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

Criterion 3.b.1: KI and appropriate instructions are available should 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, Kankakee County officials will discuss the issuance of KI to immobile populations, as a voluntary measure, and will notify the municipalities of the State's recommendation.

The State of Illinois will make an announcement through the JIC of the appropriate time for the public to consider voluntarily taking KI. However, the JIC will not be evaluated 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 will be demonstrated by Kankakee 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 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.

There are no schools located within the 10 mile EPZ in Kankakee County. Accommodations for school children that live within the EPZ, but attend school outside the EPZ will be demonstrated during the exercise by interview with the Regional Office of Education Superintendent in the county EOC.

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

Coordination between Kankakee County agencies designated to provide traffic and access control will be exhibited in the County EOC. A Sheriff's deputy will be available during the exercise to simulate the staffing of one post. The post for the demonstration will be selected by Kankakee County during the exercise based on exercise play. If this evaluation is done out of sequence to exercise play, the controller will determine the post. 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 Kankakee 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 address 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.

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 Kankakee 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 Kankakee County.

Criterion 3.f.1: Decisions regarding controlled re-entry, relocation, and return of individuals during the post-plume 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 Kankakee 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.

Kankakee 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 decision (PAD).

This capability will be demonstrated only through ~~the simulated activation~~ an interview with personnel responsible for activation of the Braidwood Station EPZ outdoor warning sirens as defined in IPRA-Braidwood at, or prior to the start of the exercise. The outdoor warning sirens will not be activated during the exercise. Every effort will be taken by controllers, evaluators and players to avoid inadvertent activation of sirens or emergency messaging systems.

The ability to provide instructions to the public will be demonstrated through the simulated activation of the local radio station (WVLI). The local radio station will be contacted during the first, and possibly the second, alert and notification sequence. An evaluator and controller will be positioned at the radio station during the exercise to monitor for a message containing a PAR.

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

Coordination between Will County, Grundy County and Kankakee 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.

The Kankakee County Public Safety Communication Center is the primary activation point for the Alert Notification System. Will/Kankakee County also activates the Emergency Alert System using IPAWS. An interview with EMA personnel may be conducted by DHS/ FEMA following transmittal of EAS messages where appropriate.

Actual sounding of the ANS system to the public will not be performed. The process will be explained through interview of Communications staff. Every effort will be taken by controllers, evaluators and players to avoid inadvertent activation of sirens or messaging systems.

Actual airing of EAS messages will not be performed. A test message will be demonstrated. The vendor origination software, EmNet has message status tracking features (Sent, Acknowledged, Aired, etc.). Such system logs messages will be provided to FEMA.

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 Kankakee County.

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

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

The ability to provide information to the media will be demonstrated by Will County through briefings held at the Kankakee County media briefing location. If real media are

not present for the briefings, the controller will serve as mock media. Evaluators will not serve as mock media.

The ability to address rumors will be demonstrated by Kankakee County through coordination between the county EOC and the JIC. The Kankakee County EOC controller will inject exercise messages that 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. Rumors identified will be shared with the JIC.

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

EVALUATION AREA 6 - SUPPORT OPERATION/FACILITIES

This evaluation area does not apply to Kankakee County.

GRUNDY COUNTY EXTENT-OF-PLAY AGREEMENT

FOR THE

BRAIDWOOD STATION EXERCISE

MARCH 7, 2018

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 Chair 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 support the exercise play of the state, Will County, Kankakee County and the utility. IEMA will provide a representative(s) at the Grundy County EOC, but they will not be evaluated.

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 support the exercise play of the state, Will County, Grundy County, and the 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 support the exercise play of the State, Will County, Grundy County and the utility.

Communication systems may be discussed, but not demonstrated, during the school EV-2 interviews.

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, Will County, Grundy County and the utility.

Dosimetry and KI will be discussed, inspected and evaluated during the school EV-2 interview at Gardner Elementary school on Friday, February 23rd at 9:30 AM (confirmed).

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 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 support the exercise play of the state, Will County, Kankakee County and the 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 support the exercise play of the state, Will County, Kankakee County and the 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 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 in the EOC; however, Grundy County will participate for training purposes and to support the exercise play of the State, Will County, Kankakee County and the utility.

This criterion will be evaluated during an out of sequence school interview at Gardner Elementary School on Friday, February 23rd at 9:30 AM (confirmed).

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

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

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

A school interview (EV-2) will be conducted with the Gardner Elementary School on Friday, February 23rd at 9:30 AM (confirmed). At the interview, the District Superintendent, a principal, a teacher, the transportation coordinator (DCO), bus driver and the maintenance supervisor will be present, as well as a representative from the Regional Office of Education.

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 support the exercise play of the state, Will County, Kankakee County and the 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 support the exercise play of the State, Will County, Kankakee County and the utility.

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, relocation, and return of individuals during the post-plume 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 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 support the exercise play of the State, Will County, Kankakee County and the 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 during this exercise.

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.

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 support the exercise play of the state, Will County, Kankakee County and the utility.

EVALUATION AREA 6 - SUPPORT OPERATION/FACILITIES

This evaluation area does not apply to Grundy County.

OFFSITE EXERCISE TIMELINE
March 7, 2018

Approx. Time	Event/Anticipated Response
0800 CST	Initial conditions/weather forecast message to players.
0808 CST	An Alert is declared at Braidwood Station.
0823 CST	<p>Exelon sends Utility NARS to IEMA Telecommunicator and County Initial Warning Points of the ALERT via NARS. (Utility NARS #1)</p> <p>IEMA Telecommunicator verifies the NARS message.</p> <p>An IEMA Duty Officer contacts the Braidwood 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. (Simulated)</p> <p>IEMA Telecommunicator notifies appropriate State agencies of the ALERT.</p> <p>IEMA notifies DHS/FEMA of the ALERT. (Simulated)</p>
0833 CST	<p>IEMA Telecommunicator notifies the counties of the ALERT via NARS (State NARS #1)</p> <p>County telecommunicators complete and verify the NARS message.</p> <p>County telecommunicators notify County officials and municipalities of the ALERT per SOP.</p> <p>The counties may activate the EOCs, if appropriate.</p> <p>Municipal telecommunicators complete and verify the NARS message.</p> <p>Municipal telecommunicators notify officials of the ALERT per SOP.</p>

Approx. Time	Event/Anticipated Response
0935 CST	A SITE AREA EMERGENCY is declared at Braidwood Station.
0945 CST	<p>Exelon notifies the IEMA and county of the SITE AREA EMERGENCY via NARS phones in related jurisdictions. (most likely Utility NARS #2)</p> <p>IEMA Telecommunicator verifies the NARS message.</p> <p>REAC contacts the Braidwood Station Shift Engineer.</p> <p>SEOC is activated if not previously activated.</p> <p>SEOC notifies the Governor's Office and requests that a representative report to the State EOC. (Simulated)</p> <p>State dispatches liaisons to the County EOCs, UAC, RAFT, JIC, TSC and EOF, if not previously dispatched.</p> <p>SEOC notifies DHS/FEMA of conditions. (Simulated)</p> <p>IEMA notifies State agencies (Simulated):</p> <ul style="list-style-type: none"> - Illinois State Police - IDOT/Division of Highways - IDOT/Division of Aeronautics - IDNR - Illinois National Guard - ICC - American Red Cross - IDPH - IEPA - IDOC - Office of the State Fire Marshal - Others as appropriate

Approx. Time	Event/Anticipated Response
	<p>REAC contacts Federal agencies. (Simulated)</p> <p>REAC provides an update to the SEOC and County EOC Liaisons.</p> <p>REAC provides an update to the JIC.</p>
1015 CST	<p>IEMA notifies the counties of the SITE AREA EMERGENCY via NARS. (most likely State NARS #2)</p> <p>County telecommunicators complete and verify the NARS message.</p> <p>County telecommunicators notify County officials and municipalities of the SITE AREA EMERGENCY per SOP.</p> <p>County EOCs are activated if not previously activated.</p> <p>Counties implement public notification procedures, if appropriate. (Simulated)</p> <p>Municipal telecommunicators complete and verify the NARS message.</p> <p>Municipal telecommunicators notify officials per SOP.</p> <p>Dosimetry is issued to emergency personnel, EOC staff and exposure records are completed.</p>
1035 CST	<p>A GENERAL EMERGENCY is declared at Braidwood Station.</p>
1055 CST	<p>Exelon notifies the IEMA Telecommunicator of the GENERAL EMERGENCY via NARS. Protective actions are recommended. (most likely Utility NARS #3)</p> <p>IEMA Telecommunicator verifies the NARS message.</p> <p>The SEOC and REAC evaluate the protective action recommendation.</p> <p>A recommendation is made to the Governor. The Governor recommends that protective actions be implemented.</p> <p>SEOC staff is advised of the situation.</p> <p>SEOC advises UAC, the County EOC liaisons and JIC staff of the situation.</p> <p>SEOC notifies FEMA of conditions. (Simulated)</p>

Approx. Time	Event/Anticipated Response
	REAC provides an update to the SEOC and County EOC liaisons. REAC provides an update to the JIC.
1120 CST	SEOC notifies the counties of the GENERAL EMERGENCY and the recommended protective actions via NARS. (most likely State NARS #3) 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 and the NARS message. Municipal telecommunicators notify EOC staff.
1200 CST	Terminate exercise play (onsite).
1230 CST	Terminate exercise play (offsite).

ONSITE EXERCISE TIMELINE
March 7, 2018

Unit 1 Initial Conditions		Unit 2 Initial Conditions	Unit 0 Initial Conditions
Unit 1 at 1268 MWe Equipment OOS – 1A Containment Spray Pump OOS; Failed Fuel Radiation Monitor 1PR06J OOS Major evolutions scheduled – 1B AFW Pump routine surveillance in progress – Flex Inventory Surv. 321 days on-line – Online Risk GREEN (1A CS Pp)		Unit 2 at 1233 MWe Major equipment OOS – None Major evolutions scheduled – Flex Inventory Surv. 60 days on-line	Unit 0 Major equipment OOS – None Major evolutions scheduled – None Spent Fuel Pool time to 200° 34 hours Unit 1 Spent Fuel Cooling loop operating
0800	Start Scenario Wind direction – from 310 degrees, 8 mph, Stability Class D		
0805 (5)	ALERT, MA5 – Hazardous event affecting a SAFETY SYSTEM required for the current operating. <ul style="list-style-type: none"> ▪ [T=0 for ALERT] 1B AFW Pump Explosion ▪ (~0806) Control Message will be delivered to US – EO performing surveillance reports explosion of AFW pump and safely left room no fire CO2 actuated ▪ SM should declare ALERT – MA5 ▪ ERO will be activated – PA and Everbridge ▪ NARS and ENS notifications made 		
0835 (35) [ALERT + 30]	Equipment failures requiring OSC/TSC attention <ul style="list-style-type: none"> ▪ (0835) [IM task] – PZR Level channel 459 fails Low (7300 Control Modification changes channel) ▪ (0850) [IM task] – 1LT931 RWST Level Failed Low ▪ (0915) [MM task] – 1A SX Pump Trip – pump seized 		
0935 (95) [ALERT + 90]	SITE AREA EMERGENCY, FS1 - Loss or Potential Loss of ANY two barriers. <ul style="list-style-type: none"> ▪ (0913) LOCA - Unit 1 Reactor Trip and Safety Injection – 4 Control Rods will NOT fully insert (J3, L13, P6 & K8) ▪ Containment Rad Monitors will increase - Containment Rad Monitors - 1AR020(21) rise and then continue to increase to >1950 R/hr @ 0935) – 1AR011(12) rise to 10000 mR/hr. ▪ Loss of RCS: (RC1.1.a) - RCS leakage An automatic or manual SI actuation is required by the following: a. UNISOLABLE RCS leakage ▪ Loss of RCS: (RC3) - Containment radiation monitor reading - (AR020(21)) reading > 25 R/hr. ▪ (~0935) Loss of Fuel Clad: (FC3.1) - [1AR020(21) rise to >1950 R/hr T=0 for SAE] ▪ Equipment Issues: <ul style="list-style-type: none"> ▪ 1A RCFC does NOT start in low speed on SI actuation – Electrical issue [EM follow-up] ▪ Ops Crew will respond per 1BwEP-1-followed by 1BwEP-1 ▪ TSC should declare SITE AREA EMERGENCY – FS1 ▪ NARS and ENS notifications made ▪ ACTUAL Site Assembly/Accountability – Simulated Evacuation. 		
1035 (155) [SAE +~60]	GENERAL EMERGENCY, FG1 - Loss of ANY two barriers and Potential Loss or Loss of third barrier – (1030) Large break LOCA Containment Penetration Failure – RELEASE IN PROGRESS <ul style="list-style-type: none"> ▪ [~1035 significant decrease in Containment pressure after increase T=0 for GE] Loss of Containment: (CT4.1 or CT4.2) - 1. Containment isolation is required and EITHER of the following: a. UNPLANNED lowering in containment pressure or rise in radiation monitor readings outside of containment in the Emergency Director judgment indicate a loss of containment integrity. OR b. UNISOLABLE pathway from containment to the environment exists. OR 2. Indication of RCS leakage outside of containment ▪ Containment Spray Pump '1B' does not start– Electrical issue [EM follow-up] ▪ URI Path Release Path H <RCS><Containment><Aux Building><Filters><Stack><Environment> ▪ TSC should declare GENERAL EMERGENCY – FG1 ▪ Plant based PARs – Evacuate sub areas 1,3, 6,10 Release in progress (Wind Dir From 310°, 8 mph - Stability Class D) ▪ NARs and ENS notification made 		
1200 (240) [GE + 85]	Exercise Termination		

This page is intentionally blank

