



**FEMA**

August 23, 2023

Captain Kevin Sweeney  
Deputy State Director of Emergency Management  
Emergency Management and Homeland Security Division  
Michigan State Police  
7150 Harris Drive  
Dimondale, MI 48821

Dear Captain Sweeney,

Enclosed is a copy of the Final After-Action Report/Improvement Plan (AAR/IP) for the D.C. Cook Radiological Emergency Preparedness, Full-Participation, Plume Exposure Pathway Exercise conducted on May 16, 2023, and associated out-of-sequence activities.

The exercise resulted in no Level 1 Findings, no Level 2 Findings, and no Plan Issues for the State of Michigan and Berrien County.

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

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

Sincerely,

MICHAEL S  
CHESNEY

Digitally signed by  
MICHAEL S CHESNEY  
Date: 2023.08.23  
10:04:21 -05'00'

for Thomas C. Sivak  
Regional Administrator

Attachment:  
DCCNP FPX23 Final AAR-IP.pdf

Cc: DHS/FEMA Headquarters  
NRC Region III  
NRC Headquarters Document Control Desk

UNCLASSIFIED

Radiological Emergency Preparedness (REP) Program

Final After-Action Report/Improvement Plan

D.C. Cook Nuclear Plant

# Final After-Action Report/ Improvement Plan

## 2023 DC Cook Nuclear Plant Exercise

Exercise Date – May 16, 2023

Radiological Emergency Preparedness (REP) Program



## D.C. Cook Nuclear Plant



FEMA

*Final AAR/IP  
Published August 21, 2023*

UNCLASSIFIED

# CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>SECTION 1: Exercise Overview .....</b>	<b>2</b>
1.1 Exercise Details .....	4
1.2 Exercise Planning Team Leadership .....	5
1.3 Participating Organizations .....	7
<b>SECTION 2: Exercise Design Summary .....</b>	<b>8</b>
2.1 Exercise Purpose and Design .....	8
2.2 FEMA Core Capabilities and Exercise Objectives.....	8
<b>SECTION 3: Analysis of Capabilities .....</b>	<b>12</b>
3.1 Summary Results of Exercise Evaluation .....	12
3.2 Exercise Evaluation and Results .....	14
Table 3.2.1 – Summary of Exercise Evaluation – State of Michigan .....	15
Table 3.2.2 – Summary of Exercise Evaluation – State of Michigan – Out-of-Sequence ...	16
Table 3.2.3 – Summary of Exercise Evaluation – Berrien County .....	17
Table 3.2.4 – Summary of Exercise Evaluation – Berrien County – Out-of-Sequence .....	18
3.3 Jurisdictional Summary of Exercise Evaluation Results .....	19
<b>3.3.1 State of Michigan Demonstrations .....</b>	<b>19</b>
3.3.1.1 Initial Notification / Michigan Intelligence Operations Center Warning Point .....	19
3.3.1.2 Emergency Operations Center .....	20
3.3.1.3 Incident Management Group.....	22
3.3.1.4 Technical Support Unit .....	24
3.3.1.5 Joint Information Center .....	26
3.3.1.6 Rumor Control Media Monitoring (Hotline) .....	28
3.3.1.7 State Liaison in the County Emergency Operations Center .....	28
<b>3.3.2 State of Michigan Out-of-Sequence Demonstrations.....</b>	<b>30</b>
3.3.2.1 Emergency Worker Monitoring and Decontamination .....	30
3.3.2.2 Emergency Worker Vehicle and Equipment Monitoring and Decontamination .....	32
3.3.2.3 State Field Monitoring Team No. 1 .....	34
3.3.2.4 State Field Monitoring Team No. 2 .....	36
<b>3.3.3 Berrien County Demonstrations.....</b>	<b>38</b>
3.3.3.1 Initial Warning Point.....	38
3.3.3.2 Emergency Operations Center .....	38

3.3.3.3 Berrien County at the Joint Information Center.....	42
<b>3.3.4 Berrien County Out-of-Sequence Demonstrations .....</b>	<b>44</b>
3.3.4.1 MS-1 Spectrum Health - Lakeland Niles Hospital.....	44
3.3.4.2 MS-1 Southwestern Michigan Community Ambulance Service .....	45
<b>SECTION 4: Conclusion .....</b>	<b>47</b>
<b>APPENDIX A: Improvement Plan .....</b>	<b>48</b>
<b>APPENDIX B: Exercise Timeline .....</b>	<b>49</b>
<b>APPENDIX C: Exercise Evaluation Team.....</b>	<b>50</b>
<b>APPENDIX D: Acronyms and Abbreviations.....</b>	<b>51</b>
<b>APPENDIX E: Extent-of-Play Agreement .....</b>	<b>54</b>
<b>APPENDIX F: Onsite Scenario/Timeline.....</b>	<b>69</b>

## EXECUTIVE SUMMARY

On May 16, 2023, the U.S. Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA) Region 5 evaluated a Radiological Emergency Preparedness Program (REPP), Full Participation, Plume Exposure Pathway Exercise for the Donald C. Cook Nuclear Plant (DCCNP).

The DCCNP is located along Lake Michigan's eastern shoreline near Bridgman, Michigan, 13 miles south of Benton Harbor, in Berrien County, Michigan. The plant is owned by American Electric Power and operated by Indiana Michigan Power. The DCCNP 10-mile Plume Exposure Pathway Emergency Planning Zone (EPZ) encompasses a portion of Berrien County and Lake Michigan.

The purpose of the exercise was to assess the level of state and local preparedness in responding to an incident at the DCCNP. This exercise was conducted in accordance with DHS/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 virtually on September 21, 2021. The qualifying emergency preparedness exercises were conducted on July 16, 1985, and August 8 and 9, 1989.

Officials and representatives from the State of Michigan, Berrien County, and the licensee participated in this exercise. State and local officials demonstrated knowledge of their emergency response plans and procedures, and successfully implemented them.

The exercise resulted in no Level 1 Findings, no Level 2 Findings, and no Plan Issues, for the State of Michigan and no Level 1 Findings, no Level 2 Findings, and no Plan Issues for Berrien County. Consequently, all demonstrated criteria were met.

The DHS/FEMA Region 5 wishes to acknowledge the efforts of the many individuals who participated in the exercise and made it a success. Approximately, 253 individuals participated in the offsite portion of the exercise. The professionalism and teamwork of the participants were evident throughout all phases of the exercise.

## SECTION 1: Exercise Overview

The U.S. Department of Homeland Security Federal Emergency Management Agency (DHS/FEMA) responsibilities in radiological emergency planning for fixed nuclear facilities include the following:

- Taking the lead in offsite emergency planning and in the review and evaluation of Radiological Emergency Preparedness (REP) Plans and procedures developed by State and Local governments;
- Determining whether such plans and procedures can be implemented on the basis of observation and evaluation of exercises of the plans and procedures conducted by State and Local governments;
- Responding to requests by the U.S. Nuclear Regulatory Commission (NRC) pursuant to the Memorandum of Understanding between the NRC and FEMA dated December 7, 2015 (Federal Register, Vol. 82, No. 88, May 9, 2017); and
- Coordinating the activities of Federal agencies with responsibilities in the radiological emergency planning process:
  - U.S. Department of Agriculture,
  - U.S. Department of Commerce,
  - U.S. Department of Energy,
  - U.S. Department of Health and Human Services,
  - U.S. Department of the Interior,
  - U.S. Department of Transportation,
  - U.S. Environmental Protection Agency,
  - U.S. Food and Drug Administration,
  - U.S. Nuclear Regulatory Commission.

Representatives of these agencies serve on the DHS/FEMA Region 5 Regional Assistance Committee (RAC), which is chaired by DHS/FEMA.

A REP Full Participation, Plume Exposure Pathway Exercise was conducted on May 16, 2023, and evaluated by the DHS/FEMA to assess the capabilities of State and Local offsite emergency preparedness organizations in implementing their plans and procedures to protect the public's health and safety in the event of a radiological emergency at the D.C. Cook Nuclear Power Plant (DCNPP). Out-of-sequence activities were conducted on March 16 and May 17, 2023, in support of this exercise.

The DHS/FEMA Region 5 completed a technical review of the Plume Phase Scenario and Extent-of-Play Agreements submitted by the State of Michigan and Berrien County for the May 16, 2023, Biennial Radiological Emergency Preparedness Program, Full-Participation, Plume Exposure Pathway Exercise for the D.C. Cook Nuclear Plant, including the technical scenario, dose assessment material, field data, and extent-of-play submissions by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) for the May 17, 2023, out-of-sequence Field Operations Demonstration.

Results of the technical review of the Plume Pathway Scenario, submitted on April 12, 2023, and the technical scenario, dose assessment material, and field data, submitted on March 17, 2023, and as updated on May 16, 2023, indicated that the scenarios and technical data were adequate to support demonstration of the DHS/FEMA requirements. The final Extent-of-Play Agreement (EoPA) for this exercise was submitted by the State of Michigan on March 8, 2023, for the May 16, 2023, REP Full Participation, Plume Exposure Pathway Exercise and for the May 17, 2023, out-of-sequence Field Operations Demonstration. Review of the EoPA by the DHS/FEMA Region 5 indicated that the Criteria selected for demonstration were adequate. The Plume Pathway Scenario and EoPA were approved on April 19, 2023.

**UNCLASSIFIED**

Radiological Emergency Preparedness (REP) Program

Final After-Action Report/Improvement Plan

D.C. Cook Nuclear Plant

The purpose of this report is to present exercise results and findings related to the performance of the Offsite Response Organizations (OROs) during a simulated radiological emergency. The results and findings are based on the evaluations of the Federal Evaluation Team, with final determinations made by the DHS/FEMA Region 5 RAC Chair and approved by the DHS/FEMA Headquarters.

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

- NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980; and
- FEMA P-1028 REP Program Manual dated January 2016.

The exercise resulted in no Level 1 Findings, no Level 2 Findings, and no Plan Issues for the State of Michigan and no Level 1 Findings, no Level 2 Findings, and no Plan Issues for Berrien County. Consequently, all demonstrated criteria were met.

Officials and representatives from the State of Michigan, Berrien County, and the licensee, participated in this exercise. State and local representatives demonstrated knowledge of their emergency plans and procedures and successfully implemented them.

The DHS/FEMA wishes to acknowledge the efforts of the many individuals who participated in the exercise and made it a success. Two hundred and fifty-three individuals participated in the offsite portion of the exercise, including DCNPP personnel and local volunteers.

## 1.1 Exercise Details

### EXERCISE NAME

2023 D.C. Cook Nuclear Plant Radiological Emergency Preparedness (REP), Full Participation Exercise

### TYPE OF EXERCISE

Plume Exposure Pathway Exercise

### EXERCISE DATE

May 16, 2023

### LOCATIONS

See Appendices C and E for a complete list of locations.

### SPONSORS

Michigan State Police  
Emergency Management and Homeland Security Division  
7150 Harris Drive  
Dimondale, Michigan

Indiana Michigan Power – D.C. Cook Nuclear Plant  
1 Cook Place  
Bridgman, Michigan

### PROGRAM

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

### MISSION

Response

### SCENARIO TYPE

Radiological Emergency



## 1.2 Exercise Planning Team Leadership

Sean O'Leary  
Chair, Regional Assistance Committee  
Chief, Technological Hazards Branch  
DHS/FEMA Region 5  
536 South Clark Street  
Chicago, Michigan 60605  
312-408-5389  
[sean.oleary@fema.dhs.gov](mailto:sean.oleary@fema.dhs.gov)

Carl Bebrich  
Exercise Director  
DHS/FEMA Region 5  
8Supervisory Team Leader  
536 South Clark Street  
Chicago, Michigan 60605  
(312) 848-0992  
[carl.bebrich@fema.dhs.gov](mailto:carl.bebrich@fema.dhs.gov)

Danielle Stormy Coetzee  
Michigan Site Specialist  
DHS/FEMA Region 5  
536 South Clark Street  
Chicago, Michigan 60605  
(202) 894-4817  
[danielle.friday@fema.dhs.gov](mailto:danielle.friday@fema.dhs.gov)

Debra Schneck  
Michigan Site Specialist  
DHS/FEMA Region 5  
536 South Clark Street  
Chicago, Illinois 60605  
202-372-7052  
[debra.a.schneck@fema.dhs.gov](mailto:debra.a.schneck@fema.dhs.gov)

Danica Frederick  
Training, Exercise & Radiological Unit Manager  
Emergency Management and Homeland Security Division  
Michigan State Police  
7150 Harris Drive  
Dimondale, Michigan 48821  
517-285-9714  
[frederickd3@michigan.gov](mailto:frederickd3@michigan.gov)

**UNCLASSIFIED**

Radiological Emergency Preparedness (REP) Program

Final After-Action Report/Improvement Plan

D.C. Cook Nuclear Plant

---

Shasta Cole  
Training, Exercise & Radiological Unit  
Emergency Management and Homeland Security Division  
Michigan State Police  
7150 Harris Drive  
Dimondale, Michigan 48821  
517-449-5345  
[coles6@michigan.gov](mailto:coles6@michigan.gov)

David Asselin, Supervisor  
Radiological Protection Section  
Radiological Emergency Preparedness Unit  
Materials Management Division  
Michigan Department of Environment, Great Lakes, and Energy  
525 W. Allegan St.  
Lansing, Michigan 48909  
517-614-9913  
[asselind1@michigan.gov](mailto:asselind1@michigan.gov)

Captain Rockey J. Adams  
Berrien County Sheriff's Office Emergency Management/Homeland Security Division  
919 Port Street  
St. Joseph, Michigan 49085  
269-983-7141  
[Radams1@berriencounty.org](mailto:Radams1@berriencounty.org)

## 1.3 Participating Organizations

Agencies and organizations of the following jurisdictions participated in the exercise.

### STATE OF MICHIGAN

Department of Agriculture and Rural Development  
Department of Civil Rights  
Department of Community Health  
Department of Correction  
Department of Education  
Department of Environment, Great Lakes, and Energy  
Department of Health and Human Services  
Department of Natural Resources  
Department of Technology, Management, and Budget  
Department of Transportation  
Environment, Great Lakes, and Energy  
Governor's Office  
Labor and Economic Opportunity  
Michigan Licensing and Regulatory Affairs  
Michigan Public Service Commission  
Michigan State Police  
Michigan State Police Emergency Management and Homeland Security Division  
Military and Veterans Affairs  
Office of Aging and Adult Services  
Treasury

### BERRIEN COUNTY

Administration (Commissioners)  
Berrien Amateur Radio Emergency Service  
Berrien County Equalization Department  
Berrien County Fire Chiefs Association  
Berrien County GIS/Land Description Dept  
Berrien County Public Health Department  
Berrien County Public Safety Communications Center  
Berrien County Road Department  
Berrien County Sheriff's Office  
Berrien Regional Educational Service Agency/First Student Transportation

### NON-PROFIT AND PRIVATE SECTOR ORGANIZATIONS

American Red Cross  
Indiana Michigan Power – D.C. Cook Nuclear Plant  
Spectrum Health – Lakeland Niles Hospital  
Southwestern Michigan Community Ambulance Service  
United Way Southwest Michigan

### FEDERAL ORGANIZATIONS

Department of Homeland Security/Federal Emergency Management Agency  
National Weather Service  
U.S. Nuclear Regulatory Commission

## SECTION 2: Exercise Design Summary

### 2.1 Exercise Purpose and Design

The U.S. Department of Homeland Security, Federal Emergency Management Agency (DHS/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 CFR Part 350 names 16 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 DHS/FEMA. One of the REP Program requirements established by these regulations is the biennial exercise of offsite response capabilities. During these exercises, DHS/FEMA evaluates state, tribal, and local government 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 DHS/FEMA provides a statement with the transmission of this Final After Action Report/Improvement Plan to the U.S. Nuclear Regulatory Commission 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. The report and statement are based on the results of this exercise, 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.

Formal submission of the Radiological Emergency Response Plans for D.C. Cook Nuclear Power Plant to DHS/FEMA Region 5 by the State of Michigan and involved local jurisdictions occurred on January 23, 1986. Formal approval of the plans was granted by FEMA on June 15, 1987, under 44 CFR 350.

### 2.2 FEMA Core Capabilities and Exercise Objectives

Planning based on Core Capabilities 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 Michigan and Berrien County. 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. Mobilize all critical resources and establish command, control, and coordination structures within the affected community, in other coordinating bodies in surrounding communities, and across the Nation, and maintain as needed throughout the duration of an incident. Enhance and maintain command, control, and coordination structures consistent with the National Incident Management System to meet basic human needs, stabilize the incident, and transition to recovery.

**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. Deliver information sufficient to inform decision-making regarding immediate lifesaving and life-sustaining activities, and engage governmental, private, and civic sector resources within and outside of the affected area to meet basic human needs and stabilize the incident. Deliver enhanced information to reinforce ongoing lifesaving and life-sustaining activities, and engage governmental, private, and civic sector resources within and outside of the affected area to meet basic human needs, stabilize the incident, and transition to recovery.

**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. Inform all affected segments of society of critical lifesaving and life-sustaining information by all means necessary, including accessible tools, to expedite the delivery of emergency services and aid the public to take protective actions. Deliver credible and actionable messages to inform ongoing emergency services and the public about protective measures and other life-sustaining actions and facilitate the transition to recovery.

**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. Identify, assess, and mitigate worker health and safety hazards, and disseminate health and safety guidance and resources to response and recovery workers. Minimize public exposure to environmental hazards through assessment of the hazards and implementation of public protective actions. Detect, assess, stabilize, and clean up releases of oil and hazardous materials into the environment, including buildings/structures, and properly manage waste. Identify, evaluate, and implement measures to prevent and minimize impacts to the environment, natural and cultural resources, and historic properties from all-hazard emergencies and response operations.

**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. Establish a safe and secure environment in an affected area. Provide and maintain on-scene security and meet the protection needs of the affected population over a geographically dispersed area while eliminating or mitigating the risk of further damage to persons, property, and the environment.

**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. Establish physical access through appropriate transportation corridors and deliver required resources to save lives and to meet the needs of disaster survivors. Ensure basic human needs are met, stabilize the incident, transition into recovery for an affected area, and restore basic services and community functionality. Clear debris from any route type (i.e., road, rail, airfield, port facility, waterway) to facilitate response operations.

**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. Move and deliver resources and capabilities to meet the needs of disaster survivors, including individuals with access and functional needs. Establish, staff, and equip emergency shelters and other temporary housing options (including accessible housing) for the affected population. Move from congregate care to non-congregate care alternatives and provide relocation assistance or interim housing solutions for families unable to return to their pre-disaster homes.

**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. Deliver medical countermeasures to exposed populations. Complete triage and initial stabilization of casualties and begin definitive care for those likely to survive their injuries and illnesses. Return medical surge resources to pre-incident levels, complete health assessments, and identify recovery processes.

**Operational Communications:** Ensure the capacity for timely communications in support of security, situational awareness, and operations, by any and all means available, among and between affected communities in the impact area and all response forces. Ensure the capacity to communicate with both the emergency response community and the affected populations and establish interoperable voice and data communications between Federal, Tribal, state, and local first responders.

**Infrastructure Systems:** Stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services to support a viable, resilient community. Re-establish critical infrastructure within the affected areas to support ongoing emergency response operations, life sustainment, community functionality, and a transition to recovery. Provide for the clearance, removal, and disposal of debris. This core capability includes the capability to address roadway impediments due to landslides and other events that impair/impede safe evacuation of the public.

The Core Capabilities and their associated Evaluation Criteria, selected for demonstration by the jurisdictions, establish the assessment objectives for the exercise. 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 make protective action decisions affecting state and county emergency workers and the public through exercise play and discussion of plans and procedures.

**Objective 3:** Demonstrate the ability to implement protective actions for state and county emergency workers and the public through exercise play and discussion of plans and procedures.

**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 and discussion of plans and procedures.

**Objective 5:** Demonstrate the effectiveness of plans, policies, and procedures in the joint information centers and the joint information system for public and private sector emergency information communications through exercise play and discussion of plans and procedures.

**Objective 6:** Demonstrate the ability to monitor, decontaminate, register, and shelter evacuees through exercise play and discussion of plans and procedures.

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

**Objective 8:** Demonstrate the capacity for timely communications in support of security, situational awareness, and operations in accordance with the plan, procedures, and Extent-of-Play Agreement, among and between affected communities in the impact area and all response forces.

**Objective 9:** Demonstrate the capacity to stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services to support a viable, resilient community. Demonstrate the capacity to 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.

Collectively, these nine Objectives and the associated Core Capabilities and Evaluation Criteria were successfully demonstrated in accordance with NUREG-0654/FEM-REP-1 and the REP Program Manual (FEMA P-1028, dated January 2016).



## SECTION 3: Analysis of Capabilities

### 3.1 Summary Results of Exercise Evaluation

This section provides a combined assessment of state and local jurisdictions based upon their collective demonstrated performance under the core capabilities associated with the exercise evaluation criteria described in Appendix E Extent-of-Play Agreements. It employs an integration of the Homeland Security Exercise Evaluation Program and Radiological Emergency Preparedness (REP) Program evaluation methodologies – 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 REP Program evaluation criteria provide the conditions and performance standards for establishing reasonable assurance that state and local authorities can protect public health and safety in response to a nuclear power plant accident.

An overall summary of demonstrated capabilities is presented in Section 3.2, and Tables 3.2.1 through 3.2.4 of this report. Criteria-specific narrative summaries are presented in Section 3.3 of the report. The narratives summarize observations made pursuant to the REP Evaluation Criteria used to assess the organizations and locations that were selected by the State of Michigan, and Berrien County. The organizations, locations, and evaluation criteria selected by the State of Michigan and Berrien County are described in Appendix E, the Extent-of-Play Agreement, which was approved by DHS/FEMA on April 19, 2023.

The results of the assessment are summarized below by Core Capability, as demonstrated during the May 16, 2023, D.C. Cook Nuclear Power Plant REP Exercise, and the out-of-sequence demonstrations conducted on March 16 and May 17, 2023.

**Operational Coordination:** Key leadership personnel established and maintained a unified and coordinated operational structure which provided effective and responsive command, direction and control and coordination within and between the affected jurisdictions to meet basic human needs and stabilize the incident. Critical stakeholders were appropriately integrated within the overall decision-making process, which enabled protective action recommendations to be evaluated in an appropriate 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 emergency workers and the general public and protecting property and infrastructure protective action decisions were made without undue delay.

**Situational Assessment:** Decision makers were provided with decision-relevant information regarding the nature and extent of the simulated radiological and other hazards, any cascading effects, and the status of the response. The Michigan State Police Emergency Management and Homeland Security Division Radiological Technical Support Unit demonstrated proficiency in the use of dose assessment software to calculate dose projections independent of the D.C. Cook Nuclear Power Plant's dose projections. The staff calculated hypothetical dose projections based on plant conditions, possible release scenarios, and controller-injected field monitoring team data. Leadership was prepared to gather and deliver enhanced information to reinforce lifesaving and life-sustaining activities, if needed, and engage governmental and private sector resources within and outside of the affected area to meet basic human needs and stabilize the incident, as necessary.

**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-up on instructions were made



with the formulation of news releases being reviewed from the Joint Information System and briefings conducted at Joint Information Center. Alert and notification of the public and media was completed in a timely manner by simulated means of sounding of, Emergency Alert System messaging, Integrated Public Alert and Warning System (IPAWS), news releases, and media briefings. The simulated release of information via 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:** Appropriate measures were taken to ensure the protection of the health and safety of the public and workers, as well as the environment in support of responder operations and the affected communities. The availability of guidance and resources to address hazardous radiological materials was integrated in support of responder operations and the affected communities. State Liaisons at the D.C. Cook Nuclear Power Plant Emergency Operations Facility, Berrien County Emergency Operations Center (EOC) communicated well with the State EOC to ensure that state protective action recommendations and protective action orders were coordinated properly. Leadership identified, assessed, and mitigated worker health and safety hazards and disseminated health and safety guidance and resources to responders in accordance with the scenario, plans and procedures, and the extent-of-play agreements.

**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 response personnel who could have been directed to engage in lifesaving and life-sustaining operations. The implementation of traffic and access control was appropriately assessed and coordinated in a timely manner. On-scene security at Emergency Operations Centers (EOCs), schools, reception centers and other facilities met protection requirements and eliminated or mitigated the risk of damage to persons, property, and the environment.

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

**Public Health, Healthcare, and Medical Services:** Qualified medical personnel successfully demonstrated the ability to provide targeted public health, medical, and behavioral health support and products to populations that might enter shelters and deliver medical countermeasures to exposed populations at Lakeland Medical Center.

**Operational Communications:** Evaluation Criterion 1d1, which is the key criterion for this capability, was evaluated for applicable organizations and functional entities. Each applicable organization and location demonstrated the capacity for timely communications in support of security, situational awareness, and operations by primary and backup means, the ability to communicate with both the emergency response community and the affected populations, and to establish interoperable communications between Federal, state, and local all response groups and locations and between affected communities in the impact area.

**Infrastructure Systems:** Evaluation Criterion 3.d.2, which is the key criterion for this capability, was assessed pursuant to the State of Michigan and Berrien County capabilities to address impediments to mass evacuation. The State of Michigan and Berrien County demonstrated the capability to address roadway impediments due to road blockages and other events that impair/impede safe evacuation of the public.

## 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 May 16, 2023, Full-Participation, Plume Exposure Pathway Exercise and out-of-sequence interviews and demonstrations.

Each jurisdiction and functional entity were evaluated based on their demonstration of Core Capabilities and their equivalent REP Evaluation 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:

- **Met (M):** The jurisdiction or functional entity performed all activities under the criterion to the level required per the work plan and/or the extent-of-play agreement, with no level 1 or level 2 findings evaluated under that criterion during the current activity and no unresolved prior level 2 finding(s).
- **Level 1 Finding (L1):** An observed or identified inadequacy of organizational performance during an assessment activity that could cause a determination that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a nuclear power plant.
- **Level 2 Finding (L2):** An observed or identified inadequacy of organizational performance during an assessment activity that is not considered, by itself, to adversely impact public health and safety.
- **Plan Issue (P):** An observed or identified inadequacy in the offsite response organization's emergency plan/implementing procedures, rather than in that of the offsite response organization's performance.

**UNCLASSIFIED**

Radiological Emergency Preparedness (REP) Program

Final After-Action Report/Improvement Plan

D.C. Cook Nuclear Plant

**Table 3.2.1 – Summary of Exercise Evaluation – State of Michigan**

DATE: May 16, 2023 SITE: D.C. Cook Nuclear Plant M: Met L1: Level 1 Finding L2: Level 2 Finding P: Plan Issue	CRITERION	State of Michigan Initial Warning Point	SEOC	State Liaison in Berrien County EOC	Incident Management Group	Technical Support Unit	Joint Information Center (JIC)	JIC Rumor Control Media Monitoring (Hotline)
Emergency Operations Management								
Mobilization	1a1	M	M	M			M	
Facilities	1b1						M	
Direction and Control	1c1		M	M			M	
Communications Equipment	1d1	M	M				M	
Equipment and Supplies to Support	1e1		M				M	
Protective Action Decision-Making								
EW Exposure Control Decisions	2a1				M	M		
PARs	2b1					M		
PADs	2b2				M	M		
PADs for Disabled/Functional Needs	2c1				M	M		
Ingestion PADs	2d1							
RRR Decisions	2e1							
Protective Action Implementation								
EW Exposure Control Implementation	3a1							
KI Public/Institutionalized	3b1				M			
PAD Implementation Disabled/Functional	3c1							
PAD Implementation Schools	3c2							
TACP Establishment	3d1		M					
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		M	M				
RESERVED	5a2							
Backup Alert & Notification	5a3							
Exception Area Alerting	5a4							
Subsequent Information & Instructions	5b1		M				M	M
Support Operations and Facilities								
Reception Center Operations	6a1							
EW Monitoring & Decontamination	6b1							
Congregate Care	6c1							
Contaminated Injured	6d1							

**UNCLASSIFIED**

Radiological Emergency Preparedness (REP) Program

Final After-Action Report/Improvement Plan

D.C. Cook Nuclear Plant

**Table 3.2.2 – Summary of Exercise Evaluation – State of Michigan – Out-of-Sequence**

DATE: May 17, 2023 SITE: D.C. Cook Nuclear Plant M: Met L1: Level 1 Finding L2: Level 2 Finding P: Plan Issue	CRITERION	EGL-Field Team Center	Field Team 1	Field Team 2	Emergency Worker MON/DECON	Emergency Worker Vehicle/Equipment MON/DECON
<b>Emergency Operations Management</b>						
Mobilization	1a1	M				
Facilities	1b1					
Direction and Control	1c1	M	M	M	M	M
Communications Equipment	1d1	M	M	M	M	M
Equipment and Supplies to Support Operations	1e1	M	M	M	M	M
<b>Protective Action Decision-Making</b>						
EW Exposure Control Decisions	2a1					
PARs	2b1					
PADs	2b2					
PADs for Disabled/Functional Needs	2c1					
Ingestion PADs	2d1					
RRR Decisions	2e1					
<b>Protective Action Implementation</b>						
EW Exposure Control Implementation	3a1	M	M	M	M	M
KI Public/Institutionalized	3b1	M				
PAD Implementation Disabled/Functional	3c1					
PAD Implementation Schools	3c2					
TACP Establishment	3d1					
Impediments	3d2					
Implement Ingestion PADs	3e1					
Ingestion Pathway Decisions	3e2					
Implementation of RRR Decisions	3f1					
<b>Field Measurement and Analysis</b>						
RESERVED	4a1					
Field Team Management	4a2	M				
Field Team Operations	4a3		M	M		
Field Team Sampling	4b1					
Laboratory Operations	4c1					
<b>Emergency Notification and Public Info</b>						
Initial Alert & Notification	5a1					
RESERVED	5a2					
Backup Alert & Notification	5a3					
Exception Area Alerting	5a4					
Subsequent Information & Instructions	5b1					
<b>Support Operations and Facilities</b>						
Reception Center Operations	6a1					
EW Monitoring & Decontamination	6b1				M	M
Congregate Care	6c1					
Contaminated Injured	6d1					

**UNCLASSIFIED**

Radiological Emergency Preparedness (REP) Program

Final After-Action Report/Improvement Plan

D.C. Cook Nuclear Plant

**Table 3.2.3 – Summary of Exercise Evaluation – Berrien County**

DATE: May 16, 2023 SITE: D.C. Cook Nuclear Plant M: Met L1: Level 1 Finding L2: Level 2 Finding P: Plan Issue	CRITERION	Initial Warning Point	Emergency Operations Center	County Representative in the JIC
<b>Emergency Operations Management</b>				
Mobilization	1a1	M	M	M
Facilities	1b1		M	
Direction and Control	1c1		M	
Communications Equipment	1d1	M	M	M
Equipment and Supplies to Support Operations	1e1		M	
<b>Protective Action Decision-Making</b>				
EW Exposure Control Decisions	2a1			
PARs	2b1			
PADs	2b2			
PADs for Disabled/Functional Needs	2c1			
Ingestion PADs	2d1			
RRR Decisions	2e1			
<b>Protective Action Implementation</b>				
EW Exposure Control Implementation	3a1			
KI Public/Institutionalized	3b1		M	
PAD Implementation Disabled/Functional	3c1			
PAD Implementation Schools	3c2			
TACP Establishment	3d1		M	
Impediments	3d2		M	
Implement Ingestion PADs	3e1			
Ingestion Pathway Decisions	3e2			
Implementation of RRR Decisions	3f1			
<b>Field Measurement and Analysis</b>				
RESERVED	4a1			
Field Team Management	4a2			
Field Team Operations	4a3			
Field Team Sampling	4b1			
Laboratory Operations	4c1			
<b>Emergency Notification and Public Info</b>				
Initial Alert & Notification	5a1		M	
RESERVED	5a2			
Backup Alert & Notification	5a3			
Exception Area Alerting	5a4			
Subsequent Information & Instructions	5b1		M	M
<b>Support Operations and Facilities</b>				
Reception Center Operations	6a1			
EW Monitoring & Decontamination	6b1			
Congregate Care	6c1			
Contaminated Injured	6d1			

**UNCLASSIFIED**

Radiological Emergency Preparedness (REP) Program

Final After-Action Report/Improvement Plan

D.C. Cook Nuclear Plant

**Table 3.2.4 – Summary of Exercise Evaluation – Berrien County – Out-of-Sequence**

DATE: March 16, 2023 SITE: D.C. Cook Nuclear Plant M: Met L1: Level 1 Finding L2: Level 2 Finding P: Plan Issue	CRITERION	Niles MS-1 (H)	Niles MS-1 (T)
Emergency Operations Management			
Mobilization	1a1		
Facilities	1b1		
Direction and Control	1c1		
Communications Equipment	1d1		M
Equipment and Supplies to Support Operations	1e1	M	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	M
KI Public/Institutionalized	3b1		
PAD Implementation Disabled/Functional Needs	3c1		
PAD Implementation Schools	3c2		
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	M	M

## 3.3 Jurisdictional Summary of Exercise Evaluation Results

The Homeland Security Exercise and Evaluation Program methodology is an analytical process used to assess the demonstration of specific evaluation criteria and capabilities during an exercise. A capability provides a means to perform one or more capability targets under specified conditions and to specific performance standards. Core capabilities form the foundation of the Department of Homeland Security/Federal Emergency Management Agency Region 5 Radiological Emergency Preparedness Program evaluations. Results of the assessments were summarized in Tables 3.2.1, 3.2.2, 3.2.3, and 3.2.4. Each jurisdiction's standalone capability summaries are provided below.

### 3.3.1 State of Michigan Demonstrations

#### 3.3.1.1 Initial Notification / Michigan Intelligence Operations Center Warning Point

##### Criterion 1.a.1 – Mobilization

###### Core Capability: Operational Communications

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

##### Criterion 1.d.1 – Communications Equipment

###### Core Capability: Operational Communications

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

### 3.3.1.2 Emergency Operations Center

#### Criterion 1.a.1 – Mobilization

##### Core Capability: Operational Communications

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

#### Criterion 1.c.1 – Direction and Control

##### Core Capability: Operational Coordination

##### Core Capability: Operational Communications

##### Core Capability: Situational Assessment

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

#### Criterion 1.d.1 – Communications Equipment

##### Core Capability: Operational Communications

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE



- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 1.e.1 – Equipment and Supplies to Support Operations**

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

**Core Capability: Mass Care Services**

**Core Capability: Public and Private Services and Resources**

**Core Capability: Public Health and Medical Services**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 3.d.1 – Implementation of Traffic and Access Control**

**Core Capability: Operational Coordination**

**Core Capability: Critical Transportation**

**Core Capability: On-Scene Security and Protection**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 5.a.1– Initial Alert and Notification****Core Capability: Public Information and Warning****Core Capability: Operational Coordination****Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 5.b.1 – Emergency Information and Instructions for the Public and the Media****Core Capability: Public Information and Warning****Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**3.3.1.3 Incident Management Group****Criterion 2.a.1 – Emergency Worker Exposure Control****Core Capability: Operations Coordination****Core Capability: Environmental Response/Health and Safety****Core Capability: Situational Assessment**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.

- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 2.b.2 – Protective Action Decisions**

**Core Capability: Operational Coordination**  
**Core Capability: Intelligence and Information Sharing**  
**Core Capability: Environmental Response/Health and Safety**  
**Core Capability: Operational Communications**  
**Core Capability: Situational Assessment**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 2.c.1 – Protective Action Decisions for Disabled/Functional Needs**

**Core Capability: Operational Coordination**  
**Core Capability: Operational Communications**  
**Core Capability: Situational Assessment**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 3.b.1 – KI for the General Public and Institutionalized Populations**

**Core Capability: Public Information and Warning**

**Core Capability: Operational Coordination**

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

**Core Capability: Public and Private Services and Resources**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**3.3.1.4 Technical Support Unit**

**Criterion 2.a.1 – Emergency Worker Exposure Control**

**Core Capability: Operations Coordination**

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

**Core Capability: Situational Assessment**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 2.b.1 – Protective Action Decisions**

**Core Capability: Operational Coordination**

**Core Capability: Intelligence and Information Sharing**

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

**Core Capability: Operational Communications**

**Core Capability: Situational Assessment**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 2.b.2 – Protective Action Decisions**

**Core Capability: Operational Coordination**

**Core Capability: Intelligence and Information Sharing**

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

**Core Capability: Operational Communications**

**Core Capability: Situational Assessment**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 2.c.1 – Protective Action Decisions for Disabled/Functional Needs**

**Core Capability: Operational Coordination**

**Core Capability: Operational Communications**

**Core Capability: Situational Assessment**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE

- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

### **3.3.1.5 Joint Information Center**

#### **Criterion 1.a.1 – Mobilization**

##### **Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

#### **Criterion 1.b.1 – Facilities**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

#### **Criterion 1.c.1 – Direction and Control**

##### **Core Capability: Operational Coordination**

##### **Core Capability: Operational Communications**

##### **Core Capability: Situational Assessment**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 1.e.1 – Equipment and Supplies to Support Operations****Core Capability: Environmental Response/Health and Safety****Core Capability: Mass Care Services****Core Capability: Public and Private Services and Resources****Core Capability: Public Health and Medical Services**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 5.b.1 – Emergency Information and Instructions for the Public and the Media****Core Capability: Public Information and Warning****Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**3.3.1.6 Rumor Control Media Monitoring (Hotline)****Criterion 5.b.1 – Emergency Information and Instructions for the Public and the Media****Core Capability: Public Information and Warning****Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**3.3.1.7 State Liaison in the County Emergency Operations Center****Criterion 1.a.1 – Mobilization****Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 1.c.1 – Direction and Control****Core Capability: Operational Coordination****Core Capability: Operational Communications****Core Capability: Situational Assessment**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.



- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 5.a.1 – Initial Alert and Notification**

**Core Capability: Public Information and Warning**

**Core Capability: Operational Coordination**

**Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

### 3.3.2 State of Michigan Out-of-Sequence Demonstrations

#### 3.3.2.1 Emergency Worker Monitoring and Decontamination

##### Criterion 1.c.1 – Direction and Control

**Core Capability: Operational Coordination**

**Core Capability: Operational Communications**

**Core Capability: Situational Assessment**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

##### Criterion 1.d.1 – Communications Equipment

**Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

##### Criterion 1.e.1 – Equipment and Supplies to Support Operations

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

**Core Capability: Mass Care Services**

**Core Capability: Public and Private Services and Resources**

**Core Capability: Public Health and Medical Services**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 3.a.1 – Emergency Worker Exposure Control Implementation**  
**Core Capability: Environmental Response/Health and Safety**  
**Core Capability: Operational Coordination**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 6.b.1 – Emergency Worker Monitoring and Decontamination**  
**Core Capability: Environmental Response/Health and Safety**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

### 3.3.2.2 Emergency Worker Vehicle and Equipment Monitoring and Decontamination

#### Criterion 1.c.1 – Direction and Control

**Core Capability: Operational Coordination**

**Core Capability: Operational Communications**

**Core Capability: Situational Assessment**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

#### Criterion 1.d.1 – Communications Equipment

**Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

#### Criterion 1.e.1 – Equipment and Supplies to Support Operations

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

**Core Capability: Mass Care Services**

**Core Capability: Public and Private Services and Resources**

**Core Capability: Public Health and Medical Services**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.

- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 3.a.1 – Emergency Worker Exposure Control Implementation****Core Capability: Environmental Response/Health and Safety****Core Capability: Operational Coordination**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 6.b.1 – Emergency Worker Monitoring and Decontamination****Core Capability: Environmental Response/Health and Safety**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**3.3.2.3 State Field Monitoring Team No. 1****Criterion 1.c.1 – Direction and Control****Core Capability: Operational Coordination****Core Capability: Operational Communications****Core Capability: Situational Assessment**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 1.d.1 – Communications Equipment****Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 1.e.1 – Equipment and Supplies to Support Operations****Core Capability: Environmental Response/Health and Safety****Core Capability: Mass Care Services****Core Capability: Public and Private Services and Resources****Core Capability: Public Health and Medical Services**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.

- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 3.a.1 – Emergency Worker Exposure Control Implementation****Core Capability: Operational Coordination****Core Capability: Environmental Response/Health and Safety**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 4.a.3 – Field Team Operations****Core Capability: Environmental Response/Health and Safety****Core Capability: Operational Coordination**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**3.3.2.4 State Field Monitoring Team No. 2****Criterion 1.c.1 – Direction and Control****Core Capability: Operational Coordination****Core Capability: Operational Communications****Core Capability: Situational Assessment**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 1.d.1 – Communications Equipment****Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 1.e.1 – Equipment and Supplies to Support Operations****Core Capability: Environmental Response/Health and Safety****Core Capability: Mass Care Services****Core Capability: Public and Private Services and Resources****Core Capability: Public Health and Medical Services**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.



- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 3.a.1 – Emergency Worker Exposure Control Implementation****Core Capability: Operational Coordination****Core Capability: Environmental Response/Health and Safety**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 4.a.3 – Field Team Operations****Core Capability: Environmental Response/Health and Safety****Core Capability: Operational Coordination**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Michigan is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

### 3.3.3 Berrien County Demonstrations

#### 3.3.3.1 Initial Warning Point

##### Criterion 1.a.1 – Mobilization

###### Core Capability: Operational Communications

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

##### Criterion 1.d.1 – Communications Equipment

###### Core Capability: Operational Communications

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

#### 3.3.3.2 Emergency Operations Center

##### Criterion 1.a.1 – Mobilization

###### Core Capability: Operational Communications

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE

- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 1.b.1 – Facilities**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 1.c.1 – Direction and Control**

**Core Capability: Operational Coordination**

**Core Capability: Operational Communications**

**Core Capability: Situational Assessment**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 1.d.1 – Communications Equipment**

**Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.

- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 1.e.1 – Equipment and Supplies to Support Operations****Core Capability: Environmental Response/Health and Safety****Core Capability: Mass Care Services****Core Capability: Public and Private Services and Resources****Core Capability: Public Health and Medical Services**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 3.b.1 – KI for the General Public and Institutionalized Populations****Core Capability: Public Information and Warning****Core Capability: Operational Coordination****Core Capability: Environmental Response/Health and Safety****Core Capability: Public and Private Services and Resources**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 3.d.1 –Traffic Access and Control Points Establishment****Core Capability: Critical Transportation****Core Capability: Infrastructure Systems****Core Capability: Operational Coordination**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 3.d.2 – Impediments to Evacuation****Core Capability: Critical Transportation****Core Capability: Infrastructure Systems****Core Capability: Operational Coordination**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 5.a.1– Initial Alert and Notification****Core Capability: Public Information and Warning****Core Capability: Operational Coordination****Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.

- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 5.b.1 – Emergency Information and Instructions for the Public and the Media****Core Capability: Operational Communications****Core Capability: Public Information and Warning**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**3.3.3.3 Berrien County at the Joint Information Center****Criterion 1.a.1 – Mobilization****Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 5.b.1 – Emergency Information and Instructions for the Public and the Media**

**Core Capability: Public Information and Warning**

**Core Capability: Operational Communications**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

### 3.3.4 Berrien County Out-of-Sequence Demonstrations

#### 3.3.4.1 MS-1 Spectrum Health - Lakeland Niles Hospital

##### Criterion 1.e.1 – Equipment and Supplies to Support Operations

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

**Core Capability: Mass Care Services**

**Core Capability: Public and Private Services and Resources**

**Core Capability: Public Health and Medical Services**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

##### Criterion 3.a.1 – Emergency Worker Exposure Control Implementation

**Core Capability: Operational Coordination**

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

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

##### Criterion 6.d.1 – Transportation and Treatment of Contaminated Injured Individuals

**Core Capability: Operational Coordination**

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

**Core Capability: Public Health and Medical Services**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:



- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

### 3.3.4.2 MS-1 Southwestern Michigan Community Ambulance Service

#### Criterion 1.d.1 – Communications Equipment

##### Core Capability: Operational Communications

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

#### Criterion 1.e.1 – Equipment and Supplies to Support Operations

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

##### Core Capability: Mass Care Services

##### Core Capability: Public and Private Services and Resources

##### Core Capability: Public Health and Medical Services

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 3.a.1 – Emergency Worker Exposure Control Implementation****Core Capability: Operational Coordination****Core Capability: Environmental Response/Health and Safety**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

**Criterion 6.d.1 – Transportation and Treatment of Contaminated Injured Individuals****Core Capability: Operational Coordination****Core Capability: Environmental Response/Health and Safety****Core Capability: Public Health and Medical Services**

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Berrien County is as follows:

- a. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- b. LEVEL 1 FINDINGS: NONE
- c. LEVEL 2 FINDINGS: NONE
- d. PLAN ISSUES: NONE
- e. PRIOR ISSUES – RESOLVED: NONE
- f. PRIOR ISSUES – UNRESOLVED: NONE

## SECTION 4: Conclusion

As noted in the summary tables in Section 3.2 of this report, the State of Michigan and Berrien County selected 19 Criteria for demonstration. Some REP Demonstration Criteria were not selected because either these Criteria had already been successfully demonstrated during the current 8-Year Demonstration Cycle, or they were not applicable.

The U.S. Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA) Evaluation Team identified no Level 1 Findings, no Level 2 Findings, and no Plan Issues for the State of Michigan and no Level 1 Findings, no Level 2 Findings, and no Plan Issues for Berrien County during the 2023 D.C. Cook Nuclear Plant REP, Full Participation, Plume Exposure Pathway Exercise.

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

## APPENDIX A: Improvement Plan

The purpose of the 2023 D.C. Cook Nuclear Plant REP Full-Participation, Plume Exposure Pathway Exercise was to test the offsite emergency response capabilities of local governments in the 10-mile Emergency Planning Zone surrounding DCCNP and recommend corrective actions and a schedule of corrective actions, if necessary, for the identified primary responsible agency.

The U.S. Department of Homeland Security/Federal Emergency Management Agency evaluation team identified no Level 1 Findings, no Level 2 Findings, and no Plan Issues for the State of Michigan and no Level 1 Findings, no Level 2 Findings, and no Plan Issues for Berrien County during the 2023 D.C. Cook Nuclear Plant REP Full-Participation, Plume Exposure Pathway Exercise.

There were no recommended corrective actions.

## APPENDIX B: Exercise Timeline

### Exercise Timeline

DATE AND SITE: May 16, 2023 – D.C. Cook Nuclear Plant

Emergency Classification Level, Action, or Event	Time Utility Declared	Time (EDT) that Action Was Taken or Notification Was Received		
		State of Michigan SEOC	Berrien County EOC	State of Michigan JIC
Unusual Event	0741	0812	0749	N/A
Alert	N/A	N/A	N/A	N/A
Site Area Emergency	0929	0933	0932	0931
General Emergency	1017	1023	1019	1020
Release of Radioactive Material Started	0929	0933	0932	0931
Release of Radioactive Material Terminated	N/A	N/A	N/A	N/A
Facility Declared Operational		1004	0955	1014
Declaration of State/Local Emergency		1020	0953	0953
Exercise Termination		1200	1205	1201
Precautionary Action Decision: <The State issued an order to evacuate state parks and hunting areas.>		1010	N/A	N/A
Precautionary Action Decision: <The State issued a Livestock Advisory: All livestock are to be sheltered and placed on stored feed and water within the 10-mile EPZ.>		1004	1023	1024
Precautionary Action Decision: <The state issued Air, water, and rail traffic within restrict 5 miles (360°)/10 miles downwind of DCCNP>		1040	1040	1059
Precautionary Action Decision: <Evacuate Schools and/or Special Populations.>		N/A	0953	0953
Protective Action Recommendation Evacuation of Protective Action Areas (PAAs): 1 and 3 - Clear 6		1034	N/A	1059
Protective Action Decision/Order: Evacuate PAAs 1 and 3 - Clear PAA 6		1040	1040	
IPAWS Activation:		1052	1052	1059
EAS Message:		1052	1054	1059
KI Administration Emergency Workers and Special Populations - Distribution		0958	1014	1025
KI Administration Emergency Workers and Special Populations - Ingestion		1034	1051	1040

## APPENDIX C: Exercise Evaluation Team

**EXERCISE DATE: May 16, 2023**  
**SITE: D.C. Cook Nuclear Power Plant**

Exercise Management	Name	Agency/ Organization
Chair, Regional Assistance Committee	Sean O’Leary	FEMA Region 5
Exercise Director	Carl Bebrich	FEMA Region 5
Michigan Site Specialist	Danielle Coetzee	FEMA Region 5
Team Leader – State of Michigan	Todd Gemske	FEMA Region 5
Team Leader – Berrien County	Brian Reinhart	FEMA Region 5
Contractor Evaluator Support – Regional Coordinator	John Wills	ICFI

Evaluated Off-Site Response Organizations/Locations	Evaluator	Agency/ Organization
<b>State of Michigan</b>		
Michigan Initial Warning Point	Curtis Williams	FEMA Region 5
Technical Support Unit	Ken Wierman	FEMA HQ
Incident Management Group	David Persaud	FEMA Region 5
SEOC	Ed Diaz	FEMA Region 5
SEOC	Curtis Williams	FEMA Region 5
Joint Information Center	Debra Schneck	FEMA Region 5
Joint Information Center	Angie Cloutier	FEMA Region 5
Joint Information Center Public Inquiry Hotline	Angie Cloutier	FEMA Region 5
Liaison in Berrien County	Brian Reinhart	FEMA Region 5
Field Team Center	Michael Howe	FEMA HQ
Field Monitoring Team 1	Janise Stoliarova	FEMA HQ
Field Monitoring Team 2	Narvaez Stinson	FEMA HQ
Emergency Worker Mon/Decon	Jim King	FEMA Region 5
Emergency Worker Vehicle/Equipment Mon/Decon	Anthony Adduci	FEMA Region 5
<b>Berrien County</b>		
Initial Warning Point	John Wills	ICFI
Emergency Operations Center	Jim King	FEMA Region 5
Emergency Operations Center	Steven Candurra	FEMA Region 2
Emergency Operations Center	John Wills	ICFI
Berrien County Rep in JIC	Angie Cloutier	FEMA Region 5
MS-1 Niles (Facility)	Ed Diaz	FEMA Region 5
MS-1 Niles (Transportation)	Cheryl Weaver	ICFI

## APPENDIX D: Acronyms and Abbreviations

Acronym	Description
AEP	American Electric Power
ALC	Annual Letter of Certification
BCPSCC	Berrien County Public Safety Communication Center
CAD	Computer-aided Dispatch
CETC	Core Exit Thermal Couples
CFR	Code of Federal Regulations
CPM	Counts Per Minute
CTS	Containment Spray System
DCF	Dose Correction Factor
DHS	Department of Homeland Security
DLR	Dosimeter of Legal Record
DRD	Direct-Reading Dosimeter
EAS	Emergency Alert System
ECCS	Emergency Core Cooling System
ECL	Emergency Classification Level
EDT	Eastern Daylight Time
EGLE	Michigan Department of Environment, Great Lakes, and Energy
EMC	Emergency Management Coordinator
EMHSD	Emergency Management and Homeland Security Division
EMS	Emergency Medical Services
EMSS	Emergency Management Security Specialist
ENC	Emergency News Center
EOC	Emergency Operations Center
EPZ	Emergency Planning Zone
ER	Emergency Room
EW	Emergency Worker
FEMA	Federal Emergency Management Agency
FMT	Field Monitoring Team
FTC	Field Team Center
FTCC	Field Team Center Coordinator
GE	General Emergency
ICF	ICF International
IPAWS	Integrated Public Alert and Warning System
JIC	Joint Information Center
JIT	Joint Information Team
KI	potassium iodide

**UNCLASSIFIED**

## Radiological Emergency Preparedness (REP) Program

## Final After-Action Report/Improvement Plan

D.C. Cook Nuclear Plant

<b>Acronym</b>	<b>Description</b>
LOCA	Core Exit Thermal Couples
MDAFP	Motor Driven Auxiliary Feed Pump
MDARD	Michigan Department of Agriculture and Rural Development
MDHHS	Michigan Department of Health and Human Services
MDOT	Michigan Department of Transportation
MEMP	Michigan Emergency Management Plan
MHz	Megahertz
MICIMS	Michigan Critical Incident Management System
MIOC	Michigan Intelligence Operations Center
MOSA	Michigan Office of Services to the Aging
MSP	Michigan State Police
NOUE	Notification of Unusual Event
NRC	Nuclear Regulatory Commission
NUREG	Nuclear Regulatory Guide
NWAS	National Warning System
OBE	Operating Basis Event
ORO	Off-site Response Organization
OSLD	Optically Stimulated Luminescent Dosimeter
PAA	Protective Action Area
PAD	Protective Action Decision
PAG	Protective Action Guide
PAG	Protective Action Guides
PAO	Protective Action Order
PAR	Protective Action Recommendation
PIO	Public Information Officer
PORVs	Power Operator Relief Valves
PPE	Personal Protective Equipment
PRD	Permanent Record Dosimeter
psig	Pounds per square inch
RAC	Regional Assistance Committee
RCMM	Rumor Control Media Monitoring
RCS	Reactor Coolant System
RDL	Radiological Decontamination Leader
REA	Radiation Emergency Area
REP	Radiological Emergency Preparedness
RETCO	U.S. Department of Transportation's Regional Emergency Coordinator
RPT	Radiation Protection Technician
SAE	Site Area Emergency



**UNCLASSIFIED**

Radiological Emergency Preparedness (REP) Program

Final After-Action Report/Improvement Plan

D.C. Cook Nuclear Plant

Acronym	Description
SEOC	State Emergency Operations Center
SI	Safety Injection
SMCAS	Southwestern Michigan Community Ambulance Service
SOG	Standard Operating Guide
TACP	Traffic and Access Control Post
TSU	Technical Support Unit
WDC	Worker Decontamination Center

# APPENDIX E: Extent-Of-Play Agreement

## DC Cook REP Exercise Objectives

May 16, 2023

### Extent of Play Agreement for Berrien County and the State of Michigan

#### Criteria:

Criteria that will be demonstrated during this exercise and can be re-demonstrated immediately for credit upon the decision of the Jurisdiction FEMA Team Leader: 1.a.1, 2.a.1, 3.a.1, 3.b.1, 3.c.2, 3.d.1, 4.a.2, 4.a.3, 6.a.1, 6.b.1, 6.d.1.

Criteria that will be demonstrated during this exercise and may be re-demonstrated, as approved on a case-by-case basis by the RAC Chair: 2.b.1, 2.b.2, 2.c.1, 3.d.2, 5.a.1.

Criteria that will be demonstrated during this exercise and can be re-demonstrated immediately for credit upon the decision of the Jurisdiction FEMA Team Leader, or may be re-demonstrated, as approved on a case-by-case basis by the RAC Chair: 1.c.1, 5.b.1.

Criteria that are not evaluated for this exercise include the following: 2.d.1, 2.e.1, 3.c.1, 3.e.1, 3.e.2, 3.f.1, 4.a.1, 4.b.1, 4.c.1, 5.a.2, 5.a.3, 5.a.4, 6.c.1.

#### Out of Sequence:

- EGLE FTC – MDOT Garage at 3880 Red Arrow Highway, Coloma on May 17, 2023, at 0930 hrs.
  - **Important:** The MDOT facility is an active facility with heavy equipment in motion. High-visibility safety vests and closed-toe shoes are required.
- WDC – Berrien Springs High School on July 10, 2023, at 1800 hrs.
- MS1 – Niles on March 16, 2023, at 0800 hrs.
- EV2 – Saint Joseph Schools on October 10, 2023, at 1230 hrs.
- PRDC – New Buffalo High School on July 18, 2024, at 1700 hrs.

**Evaluation Area 1 - Emergency Operations Management**

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

**State of Michigan-State**

1. The State Emergency Operations Center (SEOC) and MSP Operations/Michigan Intelligence Operations Center (MIOC) will be activated. A FTC sim cell will be utilized for participation. State personnel reporting to the SEOC will be mobilized in accordance with procedures.
2. State personnel reporting to the county Emergency Operation Center (EOC) will be pre-staged and will report when mobilized by the SEOC (approximately 15-20 minutes after play begins).
3. State personnel reporting to the Joint Information Center (JIC) will be pre-staged and will begin participation after the arrival of Berrien County JIC personnel.
4. If state personnel are involved in out of sequence demonstrations, they will be pre-staged.
5. A roster will be provided to demonstrate 24-hour staffing.

**State of Michigan-EGLE (OOS)**

1. The FTC, WDC and two FMTs will be activated.
  - a. The FTC, WDC, and FMTs will be staffed per appropriate Standard Operating Guides.
  - b. No other response areas or individuals will be activated for this out-of-sequence demonstration.
2. Personnel will be pre-positioned and will begin exercise participation as directed by controller injects.
3. The demonstration will take place on May 17, 2023, at 0930 hrs., in the vicinity of the Cook plant. Play will begin at approximately at 0930 hrs., at 3880 Red Arrow Highway, Coloma, MI.
4. A roster will be provided to demonstrate 24-hour staffing capability for EGLE.

**Berrien County**

1. The Berrien County EOC will be activated and mobilized in accordance with procedures. EOC Staff will be pre-assembled in an area of the building and will report to the EOC through a staggered release of resources from an assembly area.
2. Berrien County JIC personnel may be pre-staged and will report at the time determined by the scenario and controller injects (approximately 30 minutes after activation during play).
3. All personnel involved in out of sequence demonstrations will be pre-staged.
4. A roster will be provided to demonstrate 24-hour staffing of the county EOC.

***Note: This criterion may be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader.***

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

State of Michigan

1. The SEOC is maintained in operational readiness and set up will not be demonstrated for evaluation. No significant changes have been made in the SEOC since the last evaluation in 2016 due in 2024.
2. The JIC is maintained in operational readiness and set up will be demonstrated for evaluation. Any questions from the evaluator will be asked at the conclusion of the exercise.

Berrien County

1. The EOC is maintained in operational readiness and will be demonstrated for evaluation. Any questions from the evaluator will be asked at the conclusion of the 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.

State of Michigan-State

1. This criterion will be demonstrated at the SEOC, JIC, and the State Liaison in the EOC.

State of Michigan-EGLE (OOS)

1. The FTC Coordinator will provide overall command and control of FMTs, with each FMT commanded in the field by its own respective FMT Leader.
2. The Radiological Decontamination Leader (RDL) commands the WDC. The RDL takes direction from the FTC Coordinator.

Berrien County

1. This criterion will be demonstrated at the county EOC and the JIC.

***Note: This criterion may be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader - OR - may be re-demonstrated as approved on a case-by-case basis by the Chairperson of the Radiological Assistance Committee.***

**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.

State of Michigan-State

1. This criterion will be demonstrated by the SEOC and the JIC.

State of Michigan-EGLE (OOS)

1. Communication systems will be used to communicate between the FTC and FMTs per procedures. If both the primary and back-up systems fail, this objective may be met by successful use of an alternate method of communication.
2. The use of MI CIMS will not be demonstrated.
3. The FTC Dispatcher serves as the communications link between the FTC and FMTs. These communications will be demonstrated per procedures.

- a. The FTC Communicator serves as the communications link between the FTC and other facilities. The SIMCELL will simulate all external communications for the FTC Communicator.

Berrien County

1. This criterion will be demonstrated by the county EOC, JIC, WDC and Access Control.

***Note: This criterion may be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader.***

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

State of Michigan-State

1. Equipment, maps, displays, and other supplies will be demonstrated to support emergency operations at the SEOC, JIC, Berrien County EOC, and out-of-sequence events.
2. Additional supplies of potassium iodide are stored at the Michigan State Police Emergency Management and Homeland Security Division (MSP/EMHSD) office in Lansing. Documentation was provided to FEMA on February 9, 2023.
3. Documentation related to emergency worker KI shelf-life extension (where appropriate) is maintained by MSP/EMHSD and will be provided to FEMA along with instrument calibration data and documented in the 2022 ALC.
4. Additional monitoring instruments are stored at the Department of Environment, Great Lakes, and Energy facility located on Filly Street in Lansing. This stockpile was documented in the 2022 ALC.
5. Calibration records for all survey and monitoring equipment used by the State of Michigan and Berrien County will be provided in the 2022 ALC and will not be available at the facilities being demonstrated.

State of Michigan-EGLE (OOS)

1. Calibration records are supplied as part of the Annual Letter of Certification for the previous calendar year. Updated calibration records will be provided to show equipment used for the demonstration are within their calibration periods.
2. Players will not be responsible for providing calibration records.
3. Players will be equipped according to appropriate plans and procedures.
4. Radiological instrumentation will be labeled with applicable current calibration/end date information.

Berrien County

1. Equipment, maps, displays, and other supplies will be demonstrated to support emergency operations at the EOC, JIC and out-of-sequence events.
2. Personnel involved in traffic and access control points will demonstrate knowledge of where to secure traffic control equipment.
3. Potassium iodide and dosimeters are stored at the county.
4. Records will be provided to FEMA within the 2022 ALC submission.

***Note: This criterion can be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader.***

**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.

State of Michigan

1. This criterion will be demonstrated by the Incident Management Group in the SEOC in conjunction with appropriate support staff including the Technical Support Unit (TSU) and the Michigan Department of Health and Human Services (MDHHS).
2. An inject will be provided at the SEOC for an emergency worker exceeding dose. All phone calls will be simulated.

State of Michigan-EGLE (OOS)

1. FMTs and the FTC will demonstrate appropriate exposure control, per plans and procedures. As noted elsewhere, interactions with other facilities and response locations (e.g., the SEOC) will be simulated.
2. FMTs are not, under normal circumstances, expected to need to exceed dose limits. However, if this issue does arise during exercise play, it will be handled via Controller Inject or Evaluator Interview, as appropriate, with the FTC Coordinator and FMTs.

Berrien County

1. Berrien County may recommend that emergency workers ingest KI and/or authorize emergency workers to exceed State exposure limits based on best available information, if the incident (intentional vs. unintentional) warrants, and if the State is unable to provide Protective Actions Orders to protect emergency workers in a timely manner.
2. Any decision regarding the implementation of protective measures prior to a Governor's Declaration by an agency with authority to warn and protect the emergency workers in a timely manner will be viewed and documented by the evaluators as an "Interim Protective Measures Decision" in lieu of a "Protective Action Decision."

***Note: This criterion may be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader.***

**Criterion 2.b.1:** Appropriate Protective Action Recommendations (PARs) are based on available information on plant conditions, field monitoring data, and licensee and ORO dose projections, as well as knowledge of onsite and offsite environmental conditions.

State of Michigan

1. The TSU in the SEOC will evaluate licensee and FTC (sim cell) provided information and complete an independent analysis of scenario data.

Berrien County – Does not apply unless situation warrants immediate action.

1. Berrien County may implement protective measures prior to a Governor's Declaration to warn and protect the public based on best available information if the incident (intentional vs. unintentional) warrants and if the State is unable to provide Protective Actions Orders to warn and protect the public in a timely manner.
2. Any decision regarding the implementation of protective measures prior to a Governor's Declaration by an agency with authority to warn and protect the emergency workers in a timely manner will be documented as an "Interim Protective Measures Decision" in lieu of a "Protective Action Decision."

***Note: This criterion may be re-demonstrated as approved on a case-by-case basis by the Chair of the Regional Assistance Committee.***

**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 it is ORO policy).

State of Michigan

1. This criterion will be demonstrated by the Incident Management Group in the SEOC in conjunction with appropriate support staff including the TSU and the Michigan Department of Health and Human Services (MDHHS).
2. The Potassium Iodide (KI) policy will be demonstrated at the General Emergency declaration through SEOC discussion and a press release at the JIC.

Berrien County

This criterion will not be demonstrated by the County.

***Note: This criterion may be re-demonstrated as approved on a case-by-case basis by the Chair of the Regional Assistance Committee.***

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

State of Michigan

1. This criterion will be demonstrated by the Incident Management Group and TSU in the SEOC in coordination with applicable support staff, through the decision to recommend the use of KI to institutionalized persons that cannot be evacuated.

Berrien County – Does not apply unless situation warrants immediate action.

1. Berrien County may implement protective measures prior to a Governor's Declaration to warn and protect the public based on best available information if the incident (intentional vs. unintentional) warrants and if the State is unable to provide Protective Actions Orders to warn and protect the public in a timely manner.

***Note: This criterion may be re-demonstrated as approved on a case-by-case basis by the Chair of the Regional Assistance Committee.***

**Criterion 2.d.1:** Radiological consequences for the ingestion pathway are assessed and appropriate Protective Action Decisions are made based on the ORO planning criteria.

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

**Criterion 2.e.1:** Timely post-plume phase relocation, reentry, and return decisions are made and coordinated as appropriate, based on assessments of the radiological conditions and criteria in the ORO's plan and/or procedures.

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

### **Evaluation Area 3 - Protective Action Implementation**

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

#### **State of Michigan-State**

**This is an EGLE function.**

#### **State of Michigan-EGLE (OOS)**

1. Adequate equipment and supplies (including dosimetry and KI) will be provided to players through the usual equipment issuance process.
2. Briefings will be conducted by the FTC Coordinator, per procedures.
3. Emergency worker doses will be reported to the FTC by the FMTs, per procedures.
4. Certain aspects of the Dose Limit Guide require consultation with assessment staff at the SEOC. As the SEOC will not be in play, the SIMCELL will be able to provide the necessary information. Those aspects of the process that are solely the responsibility of the SEOC will be demonstrated during in-sequence activities on the day of the exercise and will not be evaluated during this part of the exercise.
5. The ingestion of KI will be simulated.

#### **Berrien County**

1. Dosimetry and survey instrument calibration and maintenance records will be provided in the 2022 ALC.
2. Berrien County will demonstrate radiological equipment and PPE distribution and use through out-of-sequence WDC activities at **Berrien Springs High School on July 10, 2023, at 1800 hrs.**

***Note: This criterion may be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader.***



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

State of Michigan-State

1. The State will demonstrate this objective at the SEOC and through decision-making and directives to implement appropriate Protective Action Orders.

State of Michigan-EGLE (OOS)

1. FMTs will simulate taking KI prior to deployment into the field and will fill out appropriate paperwork, per procedures.
2. Other players will simulate taking KI as appropriate for the scenario and in accordance with plans and procedures.
3. The FTC and WDC are not responsible for maintaining records for KI administration to institutionalized individuals or the public.

Berrien County

1. Berrien County will demonstrate the ability (simulate) to distribute KI to institutionalized individuals. This criterion will be demonstrated in the EOC via staff discussions regarding identification of institutionalized populations' needs. These discussions will be documented in situation logs.
2. If institutionalized populations are found to exist at the time of the exercise, actual contacts will not be evaluated. Simulated contact will be made and logged on a situation log, unless it is found there are no institutionalized populations that would apply within the EPZ.

***Note: This criterion may be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader.***

**Criterion 3.c.1:** Protective Action Decisions (PADs) are implemented for people with disabilities and those with access/functional needs other than schools within areas subject to protective actions.

State of Michigan

***This criterion will not be demonstrated by the State, this is a county function.***

Berrien County

**This criterion was last demonstrated in 2019.**

***Note: This criterion may be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader.***

**Criterion 3.c.2:** OROs/School officials implement protective actions for schools.

State of Michigan

**This criterion will not be demonstrated by the State, this is a county function.**

Berrien County

1. This criterion will be demonstrated by Berrien County EOC as driven by the scenario.
2. EV-2 interview will be conducted in: **Saint Joseph High School October 10, 2023, at 1230 hrs.**
3. Refer to the Table of Exercise Demonstrations for specific times. This will be conducted out-of-sequence.
4. Dosimetry and survey instrument calibration and maintenance records will be provided in the ALC.
5. Berrien County will demonstrate radiological PPE distribution through out-of-sequence at the WDC and not during the EV-2 activities.

***Note: This criterion may be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader.***

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

State of Michigan

1. This criterion will be demonstrated by the SEOC through the simulated restriction of air, interstate, rail, and waterway access.

Berrien County

1. Decisions related to traffic and access control will be demonstrated in the Berrien County EOC. Berrien County demonstration locations will be determined during the exercise at a time agreed upon by the FEMA evaluator, the Exercise Controller, and the county Emergency Management Coordinator.
2. Staffing of all other access and traffic control points will be simulated.

***Note: This criterion can be re-demonstrated immediately for credit upon the decision of the Jurisdiction FEMA Team Leader.***

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

State of Michigan

**This criterion will not be demonstrated by the State. This is a county function.**

Berrien County

1. This will be demonstrated through discussions, injects, messages and situation log at the county EOC. Messages will be injected by Exercise Controllers to drive these demonstrations. Personnel will address the impediments by discussing the need for equipment, discussing its estimated time of arrival, etc. If the impediment posed involves road closures that would have been known to exercise participants during the course of normal operations, this information will be provided to the players as part of the initial conditions for the exercise. All contacts, actual or simulated will be logged. Information will be provided to the JIC for each impediment and disseminated to evacuees through a press briefing.
2. The Controller will notify players when the impediment has been resolved. The players will then notify the JIC that the issue has been resolved. Controllers will not end the exercise until the JIC has concluded their demonstration elements that may require the EOC's support.

***Note: This criterion may be re-demonstrated as approved on a case-by-case basis by the Chair of the Regional Assistance Committee.***

**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 reentry, 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 (two or more) are managed to obtain sufficient information to help characterize the release and to control radiation exposure.

State of Michigan-State

***This is an EGLE function.***

State of Michigan-EGLE (OOS)

1. This criterion will be demonstrated per procedures, except as indicated elsewhere in this document.
2. Radiological releases will be simulated, and data will be provided by simulator and controller inject.

***Note: This criterion may be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader.***

**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.

State of Michigan-State**This is an EGLE function.**State of Michigan-EGLE (OOS)

1. All radiological releases will be simulated.
2. Radiological data will be provided by controller inject, Virtual Plumes and Teletrix, or other appropriate means.
3. Two FMTs will demonstrate the capability to take and record ambient radiation measurements of a simulated airborne plume per procedures.
4. The release point and monitoring routes will be based on Cook.
5. To avoid creating a dangerous situation, such as roadside sampling or trespassing on private property, FMTs will not take air samples in the field. Instead, they will demonstrate the ability to operate air sampling equipment at the WDC. Apart from the location, air samples will be collected and counted by FMTs per applicable procedures.
6. While in the field, FMTs will announce where (based on monitoring data and orders from the FTCC) they would take an air sample. The controller will provide appropriate readings as if the sample had been taken so that it may be reported back to the FTC.
7. FMTs will demonstrate relinquishing control of samples to the WDC, per applicable procedures.

***Note: This criterion may be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader.***

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

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

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

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

**Evaluation Area 5 - Emergency Notification and Public Information**

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

**State of Michigan**

1. The State will provide information to the county for release in the Emergency Alert System messages.

**Berrien County**

1. The Berrien County Public Safety Communication Center is the primary activation point for the Alert Notification System. Berrien County also activates the Emergency Alert System using IPAWS.
2. Actual sounding of the **ANS** system to the public will not be performed. A "Test Mode" message will be used for demonstration. The FEMA IPAWS lab produces a report to validate the test and the report will be obtained by the evaluator at [https://messageviewer.demo.apps.fema.gov/ALERT\\_SERVICES/POSTEDMESSAGES.PHP?COGID=300107](https://messageviewer.demo.apps.fema.gov/ALERT_SERVICES/POSTEDMESSAGES.PHP?COGID=300107).
3. Actual airing of **EAS** messages will not be performed. A "Test Mode" message will be used for demonstration. The FEMA IPAWS lab produces a report to validate the test and the report will be obtained by the evaluator at [https://messageviewer.demo.apps.fema.gov/ALERT\\_SERVICES/POSTEDMESSAGES.PHP?COGID=300107](https://messageviewer.demo.apps.fema.gov/ALERT_SERVICES/POSTEDMESSAGES.PHP?COGID=300107).
4. System logs regarding live tests, system maintenance, and messages will be provided to FEMA during the 2022 ALC.

***Note: This criterion may be re-demonstrated as approved on a case-by-case basis by the Chair of the Regional Assistance Committee.***

**Criterion 5.a.2: [RESERVED]**

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

The D.C. Cook EPZ does not contain any DHS/FEMA approved exception areas.

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

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

State of Michigan

1. This will be demonstrated at the JIC via dissemination of emergency information and instructions through media briefings and news release announcements in coordination with the SEOC and County EOCs. All media briefings will be conducted at the JIC.
2. A public inquiry hotline will be operated by AEP personnel based at the JIC during the exercise. Trending is performed by the Inquiry Response Coordinator, who identifies trends and ensures appropriate information is provided to the inquiry response staff and the JIC for inclusion in press briefings.

Berrien County

1. This will be demonstrated at the JIC via dissemination of emergency information and instructions through media briefings and news release announcements in coordination with the SEOC and County EOCs. All media briefings will be conducted at the JIC.
2. A public inquiry hotline will be operated by AEP personnel based at the JIC during the exercise. Trending is performed by the Inquiry Response Coordinator, who identifies trends and ensures appropriate information is provided to the inquiry response staff and the JIC for inclusion in press briefings.

***Note: This criterion may be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader - OR - may be re-demonstrated as approved on a case-by-case basis by the Chairperson of the Radiological Preparedness Coordinating Committee.***

**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.

State of Michigan

1. State personnel will provide assistance as requested per the procedures in the Nuclear Facilities Emergency Management Plan during county Public Reception/Worker Decontamination Center demonstrations

Berrien County

1. Berrien County will demonstrate a separate public reception/decontamination center out-of-sequence: **New Buffalo High School on July 18, 2024, at 1700 hrs.**
2. Public reception centers will demonstrate one team processing six individuals, 2 of which will have simulated contamination. This will establish the rate at which individuals can be monitored, decontaminated, and registered. This rate can be extrapolated to show that the facility is capable of processing 20% of the estimated population to a facility in a 12-hr period.
3. Dosimetry and survey instrument calibration and maintenance records will be provided in the ALC.
4. The process for setting up the Center will not be evaluated, nor will it be required to be set up in a determined time. Set-up will conclude at a reasonable time.
5. A Radiological Worker Break area will be demonstrated through discussion and will not be required to be set up. Workers will be allowed to eat and drink during the center setup

period, prior to demonstration of operations. Workers may use restrooms freely during center set-up and operation.

6. Decontamination of evacuees and vehicles will be demonstrated through simulated actions and interview.

***Note: This criterion may be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader.***

**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.

State of Michigan-State

**This is an EGLE function.**

State of Michigan-EGLE (OOS)

1. This will be demonstrated at the WDC per applicable procedures.
2. No water will be used for decontamination during this demonstration.
3. Specific information on the number of individuals who will be monitored, and the outcomes of monitoring people, vehicles, and equipment will be included in the technical data package. At least one individual will have simulated contamination.
4. WDC staff will be able to answer questions about the decontamination procedures.
5. Two WDC workers will demonstrate donning, use and doffing of PPE in accordance with plans and procedures and RPM guidance. The workers will not wear PPE for the entire demonstration but may be asked to perform several tasks in PPE or wear it for several minutes to demonstrate adequate mobility in and practicality of the PPE.
6. A Controller scenario package that includes injects for workers will be provided to FEMA for review at least 30 days prior to the demonstration.

Berrien County

1. Berrien County will demonstrate the emergency worker/equipment decontamination center out of sequence with the exercise at **Berrien Springs High School on July 10, 2023, at 1700 hrs.**
2. Dosimetry and survey instrument calibration and maintenance records will be provided in the ALC.
3. At least two emergency workers will be monitored and processed appropriately based upon the plan and procedures and controller injects. At least one vehicle will be monitored and processed appropriately based upon the plan and procedures and controller injects. (The two workers and one vehicle may be cycled through the stations multiple times to meet demonstration objectives and demonstrate variables within the plan.)
4. A Radiological Worker Break Area will be demonstrated through discussion and will not be required to be set up. Workers will be allowed to eat and drink during the center setup period, prior to demonstration of operations. Workers may use restrooms freely during center set-up and operation.
5. Decontamination of workers and vehicles will be demonstrated through simulated actions and interview.
6. Supplemental resources will not be used for this demonstration; just-in-time training will not be evaluated during this demonstration.



***Note: This criterion may be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader.***

**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 before entering congregate care facilities.

State of Michigan

***This criterion will not be demonstrated by the State, this is a county function.***

Berrien County

1. All Congregate Care Facilities are managed by the American Red Cross. Therefore, under the American Red Cross/FEMA MOU they will not be evaluated. They will not need to be evaluated until there is a change in facility location or any substantial changes.

**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.

State of Michigan

***This criterion will not be demonstrated by the State, this is a county function.***

Berrien County

1. Berrien County will demonstrate the MS1 at Lakeland Hospital Niles on March 16, 2023, at 0800 hrs.

***Note: This criterion may be re-demonstrated immediately for credit at the decision of the Jurisdiction FEMA Team Leader***



## APPENDIX F: Onsite Scenario/Timeline

The D.C. Cook Nuclear Plant (DCNPP) consists of two Westinghouse Pressurized Water Reactors, Unit 1, rated at 3304 Megawatts, and Unit 2, rated at 3468 Megawatts. The DCNPP is located along the eastern shore of Lake Michigan in Lake Township, Berrien County, Michigan. The eastern half of the 10-mile EPZ lies entirely within Berrien County. The western half of the 10-mile EPZ extends into Lake Michigan. The 10-mile EPZ is divided into five land-based Protective Action Areas (PAAs), numbered 1 through 5. Protective Action Area 6 includes Lake Michigan out to 5 miles from the DCNPP, and PAA 7 includes Lake Michigan 5-10 miles from the plant.

Impacted Jurisdictions	
State of Michigan	
Berrien County	
1, 2, 6	1 <sup>st</sup> PAR
1, 2, 3, 6	If 2 <sup>nd</sup> PAR required

### Initial Conditions:

Unit 1: 100% power days online – 275 days)

Equipment out of service – one Engineered Safety Feature Ventilation train inoperable

Unit 2: 100% power days online – 135 days)

### Scenario:

#### Event 1:

At **0732 Eastern Daylight Time (EDT)**, the Seismic Monitor will indicate a seismic event greater than the Operating Basis Event (OBE). This meets classification criteria for **Unusual Event HU2.1**. No radiological release will occur at this time; however, a fire header rupture occurs in the Fire Pump House and damage will be reported to the west wall of the plant screen house.

No Alert ECL is expected. Exercise should escalate from Unusual Event to Site Area Emergency.

#### Event 2:

A Small Break Loss of Coolant Accident (LOCA) occurs at **0920 EDT**. An automatic Safety Injection (SI) will occur meeting the criteria for a Loss of the Reactor Coolant System (RCS) barrier. A Containment Building penetration fails, allowing a radioactive release into the Auxiliary Building. **A radioactive release from the Auxiliary Building exhaust stack begins** through the normal ventilation fans, meeting the conditions for Loss of the Containment Barrier. Conditions exist for the declaration of a **Site Area Emergency, FS1.1**, for loss of RCS barrier and loss of Containment Barrier. Release rates will not exceed Protective Action Guides (PAG) levels at this time. At 1030 EDT, the expected Protective Action Recommendation is Evacuation of Protective Action Area 1 and 3, and clear Lake Michigan Area 6.

The West Motor Driven Auxiliary Feed Pump (MDAFP) will trip on start. The North SI pump shaft will shear on start. After several minutes, Containment pressure rises above 2.8 psig and Containment Spray System (CTS)/Containment Isolation (CI) actuates. Approximately nine minutes after the LOCA, CTS

pumps start. When the East CTS pump starts, a locked shaft will cause a trip of the East CTS pump. At 0930 EDT, a loss of Transformer TR101AB causes a loss of Train B Reserve Feed. Diesel Generator 1AB fails to start. Train B Emergency Core Cooling System (ECCS) and CTS pumps lose power. A loss of Emergency Power (EP) occurs after an additional minute. Reactor vessel level decreases due to no SI pumps or CCPs are in operation. Post LOCA Cooldown and Depressurization, manual control of Steam Generator (SG) Power Operator Relief Valves (PORVs) will fail.

### **Event 3:**

At ~1015 EDT, the Reactor Vessel level lowers below 46% and Core Exit Thermal Couples (CETC) temperature rises above 757°F. This results in a loss of the Fuel Clad barrier, concurrent with previous Loss of RCS barrier and Loss of Containment barrier. Conditions exist for declaration of **General Emergency, FG1.1**, Loss of two fission product barriers with loss or potential loss of the third barrier. Initiation of ECCS crosstie will not be successful due to valve malfunctions. Increased containment radiation levels will exceed criteria for loss of the Fuel Clad barrier at ~1110 EDT. Offsite dose will exceed PAG levels at ~1115 EDT.

### **Event 4 (If Needed):**

At 1200 EDT, a wind shift will occur requiring a follow-up PAR, followed by termination.

Licensee PARs are based upon plant conditions and dose projections. Licensee dose projections exceed EPA PAGs beyond the Site Boundary

Timeline of Licensee Notification/Protective Action Recommendation		
Time	ECL/PAR	Description
0732 EDT	UE	Seismic event greater than OBE levels
0920 EDT	Site Area Emergency	Loss of RCS barrier and loss of Containment barrier
1015 EDT	General Emergency	Loss of two fission product barriers (RCS and Containment) with loss of the third barrier (Fuel Clad)
1030 EDT	1 <sup>st</sup> PAR	Evacuate Protective Action Areas (PAAs) 1 and 3, clear Lake Michigan Area 6
1200 EDT	Termination	Option to terminate, but may be extended if a 2 <sup>nd</sup> PAR is required
1215 EDT	2 <sup>nd</sup> PAR (if needed)	Evacuate Protective Action Areas 1, 2, and 3; clear Lake Michigan PAA 6
1300 EDT	Termination	