

Final After-Action Report/ Improvement Plan

Exercise Date – March 9, 2021

Radiological Emergency Preparedness (REP) Program



Palisades Nuclear Power Plant



FEMA

Published May 4, 2021

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EXECUTIVE SUMMARY

On March 9, 2021, the Department of Homeland Security, Federal Emergency Management Agency (DHS/FEMA) Region V evaluated a Radiological Emergency Preparedness Program, Partial Participation, Plume Exposure Pathway Exercise in the Emergency Planning Zone (EPZ) for the Palisades Nuclear Power Plant (PNPP).

The PNPP plant is located in northwestern Van Buren County, Michigan, on the shore of Lake Michigan, approximately five miles south-southwest of South Haven. The 10-mile Plume Exposure Pathway EPZ of the PNPP encompasses parts of Allegan, Berrien, and Van Buren Counties, with the major portion of the zone falling within Van Buren County.

The purpose of the exercise was to assess the level of state and local preparedness in responding to an incident at the PNPP. 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 for this site was conducted on April 24, 2018. The qualifying emergency preparedness exercise was conducted December 9, 1990.

Officials and representatives from the State of Michigan and the risk counties of Allegan and Van Buren and the Licensee participated in this exercise. State and Local officials demonstrated knowledge of their emergency response plans and procedures and successfully implemented them. No Findings or Plan Issues were identified for Allegan and Van Buren counties during the 2021 PNPP Exercise.

The DHS/FEMA wishes to acknowledge the efforts of the many individuals who participated in the exercise and made it a success. Approximately 61 individuals participated in the offsite portion of the exercise, including many PNPP owner/operator personnel and local volunteers.

The ongoing COVID-19 Public Health Emergency and other disasters that occurred during 2020 - 2021 presented the State of Michigan with substantial logistical and communications challenges for simultaneously developing and implementing a successful commercial nuclear power plant exercise plan in a combined virtual and physical environment. The exercise was evaluated virtually using Zoom collaboration software configured by the Van Buren County Emergency Management Agency (EMA).

This exercise also involved extensive use of well-documented Actual Incident Credit, as well as the successful tethering and implementation of virtual technologies and logistics, to assess the state's capabilities for protecting public health and safety. These combined efforts significantly expand the REP Program's relevance and capabilities. Pursuant to the documented and ongoing COVID-19 Pandemic response. Allegan and Van Buren Counties requested and received substantial Actual Incident Credit for Evaluation Criteria 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.c.1 and 3.d.1.

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Allegan County also received credit for Criterion 3.c.1 and both counties received Partial Incident Credit for Criteria 2.c1.

SECTION 1: EXERCISE OVERVIEW

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

- Taking the lead in offsite emergency planning and in the review and evaluation of Radiological Emergency Response Plans (RERPs) and procedures developed by State and local governments;
- Determining whether such plans and procedures can be implemented on the basis of observation and evaluation of exercises of the plans and procedures conducted by State and local governments;
- Responding to requests by the U.S. Nuclear Regulatory Commission (NRC) pursuant to the Memorandum of Understanding between the NRC and FEMA dated 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; and
 - U.S. Nuclear Regulatory Commission.

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

A REP Partial-Participation Plume Exposure Pathway Exercise was conducted on March 9, 2021, and evaluated by the DHS/FEMA to assess the capabilities of State and Local offsite emergency preparedness organizations in implementing their RERPs and procedures to protect the public's health and safety during a radiological emergency involving the Palisades Nuclear Power Plant. The purpose of this exercise report is to present the exercise results and findings on the performance of the Offsite Response Organizations (ORO) during a simulated radiological emergency.

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The Scenario and Extent-of-Play Agreements submitted by the State of Michigan and, Allegan and Van Buren counties on September 3, 2020, were approved by the DHS/FEMA Region V RAC Chair on September 18, 2020.

The COVID-19 Public Health Emergency related travel and social distancing restrictions made it necessary to adopt and adapt virtual technologies to conduct the exercise. A virtual exercise platform was developed by the State of Michigan in collaboration with DHS/FEMA Region V.

The use of computer-based ZOOM® audio-visual collaboration software, supported by email, and cellular telephone voice and text communications, allowed DHS/FEMA evaluation teams to remotely observe demonstration activities at multiple locations and access exercise documentation in real time. Additional hardcopy exercise documentation was provided electronically by the State of Michigan and Allegan and Van Buren counties immediately following the exercise.

This exercise involved extensive approval of REP Actual Incident Credit for documented state and local response to the COVID-19 Public Health Emergency and other declared disasters. The approval of Actual Incident Credit required OROs to submit documentation substantiating demonstration capabilities consistent with NUREG-0654 FEMA-REP-1, Rev. 1, and FEMA P-1028 REP Program Manual guidance. Assessment credit was approved for response actions that met REP Program capability targets and provided reasonable assurance for protecting public health and safety.

Full Actual Incident Credit for Evaluation Criterion 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.c.1 and 3.d.1. was approved for Van Buren County by DHS/FEMA Region V on September 3, 2020. Full Actual Incident Credit for Evaluation Criteria 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.c.1, 3.c.1, and 3.d.1 was approved for Allegan County by DHS/FEMA Region V on January 27, 2021. Partial Actual Incident Credit for Evaluation Criteria 2.c.1 was approved for Allegan County by DHS/FEMA Region V on September 27, 2021.

The findings presented in this report are based on the evaluations of the Federal Evaluation Team, with final determinations made by the DHS/FEMA Region V RAC 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.

1.1 Exercise Details

Exercise Name

2021 Palisades Nuclear Power Plant Radiological Emergency Preparedness Exercise, Partial-Participation, Plume Pathway Exercise

Type of Exercise

Plume Exposure Pathway

Exercise Date

March 9, 2021

Program

DHS/FEMA REP Program

Scenario Type

Radiological Emergency

1.2 Exercise Planning Team Leadership

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1.3 Participating Organizations

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

State Jurisdictions

Michigan State Police Emergency Management Homeland Security Division (MSP/EMHSD)
Michigan Department of Transportation (MDOT)

Risk Jurisdictions

Allegan County Chairman of the County Board
Allegan County Department of Human Services
Allegan County Department of Mental Health
Allegan County Emergency Management Agency
Allegan County Emergency Medical Services
Allegan County Fire Services
Allegan County Government
Allegan County Health Department
Allegan County Public Information Officer
Allegan County Public Works Department
Allegan County Roads Commission
Allegan County School Support
Allegan County Sherriff
Plainwell Public Safety
Radiological Defense (RADEF)

Van Buren Community Mental Health Authority (VBCMH)
Van Buren County – Administration Department (VBS ADMIN)
Van Buren County – Chief Elected Official (VBC CEO)
Van Buren County – District Attorney Office (VBC DA)
Van Buren County – Fire Services
Van Buren County – Human Services
Van Buren County – Information Technology (VBC/IT)
Van Buren County – Intermediate School District (VBC/ISD)
Van Buren County – Office of Domestic Preparedness (VBC/ODP – EMC & RO)
Van Buren County – Public Health Department (VBC/PHD)
Van Buren County – Road Commission (Public Works) (VBC/RC/PW)
Van Buren County – Sheriff's Office - Central Dispatch (VBC/SO/CD)
Van Buren County – Sheriff's Office (VBC/SO)

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Private Organizations

Van Buren – RACES

Entergy Corporation (ENTERGY)

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Federal Jurisdictions

U.S. Department of Homeland Security

Section 2: Exercise Design Summary

2.1 Exercise Purpose and Design

The 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 Code of Federal Regulation 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 (AAR/IP) to the United States NRC that the affected state, tribal, and local plans and preparedness are: (1) adequate to protect the health and safety of the public living in the vicinity of the nuclear power facility by providing reasonable assurance that appropriate protective measures can be taken offsite in the event of a radiological emergency; and (2) capable of being implemented. 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 the Palisades Nuclear Power Plant to FEMA Region V by the State of Michigan and involved local jurisdictions occurred on December 9, 1980. Formal approval of these RERPs was granted by FEMA on July 6, 1982, under 44 CFR 350.

2.2 DHS/FEMA Exercise Objectives and Core Capabilities

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

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

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

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

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

Critical 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.

Critical Transportation: Provide transportation (including infrastructure access and

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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.

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

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

Objective 1: Demonstrate the ability to provide direction and control and make protective action decisions through the state emergency operations centers, county emergency operations centers, and field activities by exercise play and discussion of plans and procedures.

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

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

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

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

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

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

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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 successfully demonstrated the Core Capabilities and Evaluation Criteria selected by the jurisdictions 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 Exercise Evaluation and Results

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 D Extent-of-Play Agreements. It employs an integration of the Homeland Security Exercise Evaluation Program and 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, Tables 3.2 and 3.3, of this report. Criteria-specific narrative summaries are presented in Section 3.2 of the report. The narratives summarize observations made pursuant to the REP Program Evaluation Criteria used to assess the organizations and locations that were selected by the Allegan and Van Buren Counties. The organizations, locations, and evaluation criteria selected by Allegan and Van Buren Counties are described in Appendix D, Extent-of-Play Agreements, which were approved by DHS/FEMA on January 27, 2021.

The results of the assessment are summarized below by Core Capability, as demonstrated during the March 9, 2021, PNPP REP, Partial-Participation, Plume Exposure Pathway Exercise.

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 considered 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. Allegan and Van Buren Counties demonstrated

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proficiency in the radiation levels and the dose projections provided by controller inject. 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 the Van Buren County EOC. Alert and notification of the public and media was completed in a timely manner by simulated means of sounding of sirens, Emergency Alert System messaging, warning in state parks, 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. 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.

Operational Communications: 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 capability of Allegan and Van Buren Counties to address impediments to mass evacuation.

3.2 Summary Results of Exercise Evaluation

Tables 3.2 through 3.3 present the results and findings of the evaluation of all jurisdictions and functional entities that participated in the PNPP Radiological Emergency Preparedness (REP), Partial Participation, Plume Exposure Pathway Exercise and *ad hoc* demonstrations and interviews.

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 REP Manual dated January 2016. Exercise criteria are listed by number, and the demonstration status of those criteria are indicated by the use of the following terms:

- M: Met (no unresolved Level 1 or Level 2 Findings were assessed, and there were no unresolved Findings from prior exercises)
- NA: Not Applicable
- NS: Not Selected (the criterion was not selected for demonstration)
- FC: Full Actual Incident Credit Received.
- PC: Partial Actual Incident Credit Received.

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Table 3.2 - Summary of Exercise Evaluation – Allegan County

DATE: March 9, 2021 SITE: Palisades Nuclear Power Plant M: Met NA: Not Applicable NS; Not Selected FC: Full Credit PC: Partial Credit				
	Criterion	Allegan Co EOC	Allegan Co DCO Brief at EOC	Allegan TACP EW interview at Allegan Co EOC
Emergency Operations Management				
Mobilization	1a1	FC	FC	NA
Facilities	1b1	NS	NS	NS
Direction and Control	1c1	FC	NA	NA
Communications Equipment	1d1	FC	NA	NA
Equipment and Supplies to Support Operations	1e1	FC	M	M
Protective Action Decision-Making				
EW Exposure Control Decisions	2a1	M	NA	NA
PARs	2b1	FC	NA	NA
PADs	2b2	M	NA	NA
PADs for Disabled/Functional Needs	2c1	PC	NA	NA
Ingestion PADs	2d1	NS	NA	NA
RRR Decisions	2e1	NS	NA	NA
Protective Action Implementation				
EW Exposure Control Implementation	3a1	M	M	M
KI Public/Institutionalized	3b1	M	NA	NA
PAD Implementation Disabled/Functional Needs	3c1	M	NA	NA
PAD Implementation Schools	3c2	NS	NA	NA
TACP Establishment	3d1	FC	NA	NA
Impediments	3d2	M	NA	M
Implement Ingestion PADs	3e1	NS	NA	NA
Ingestion Pathway Decisions	3e2	NS	NA	NA
Implementation of RRR Decisions	3f1	NS	NA	NA
Field Measurement and Analysis				
RESERVED	4a1	NA	NA	NA
Field Team Management	4a2	NA	NA	NA
Field Team Operations	4a3	NA	NA	NA
Field Team Sampling	4b1	NA	NA	NA
Laboratory Operations	4c1	NA	NA	NA

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Emergency Notification and Public Info				
Initial Alert & Notification	5a1	M	NA	NA
RESERVED	5a2	NA	NA	NA
Backup Alert & Notification	5a3	NS	NA	NA
Exception Area Alerting	5a4	NA	NA	NA
Subsequent Information & Instructions	5b1	M	NA	NA
Support Operations and Facilities				
Reception Center Operations	6a1	NS	NA	NA
EW Monitoring & Decontamination	6b1	NS	NA	NA
Congregate Care	6c1	NS	NA	NA
Contaminated Injured	6d1	NS	NA	NA

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Table 3.3 - Summary of Exercise Evaluation – Van Buren County

DATE: March 9, 2021 SITE: Palisades Nuclear Power Plant M: Met NA: Not Applicable NS; Not Selected FC: Full Credit PC: Partial Credit				
	Criterion	Van Buren Co EOC	Van Buren Co EOC TACP DOS Brief	Van Buren Co EOC TACP/DOS Brief
Emergency Operations Management				
Mobilization	1a1	FC	FC	NA
Facilities	1b1	NS	NA	NA
Direction and Control	1c1	FC	NA	NA
Communications Equipment	1d1	M	NA	NA
Equipment and Supplies to Support Operations	1e1	FC	FC	FC
Protective Action Decision-Making				
EW Exposure Control Decisions	2a1	M	NA	NA
PARs	2b1	M	NA	NA
PADs	2b2	M	NA	NA
PADs for Disabled/Functional Needs	2c1	PC	NA	NA
Ingestion PADs	2d1	NS	NA	NA
RRR Decisions	2e1	NS	NA	NA
Protective Action Implementation				
EW Exposure Control Implementation	3a1	M	M	M
KI Public/Institutionalized	3b1	M	NA	NA
PAD Implementation Disabled/Functional Needs	3c1	M	NA	NA
PAD Implementation Schools	3c2	NS	NS	NS
TACP Establishment	3d1	FC	NA	NA
Impediments	3d2	M	NA	NA
Implement Ingestion PADs	3e1	NS	NA	NA
Ingestion Pathway Decisions	3e2	NS	NA	NA
Implementation of RRR Decisions	3f1	NS	NA	NA
Field Measurement and Analysis				
RESERVED	4a1	NA	NA	NA
Field Team Management	4a2	NA	NA	NA
Field Team Operations	4a3	NA	NA	NA
Field Team Sampling	4b1	NA	NA	NA
Laboratory Operations	4c1	NA	NA	NA

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Emergency Notification and Public Info				
Initial Alert & Notification	5a1	M	NA	NA
RESERVED	5a2	NA	NA	NA
Backup Alert & Notification	5a3	NS	NA	NA
Exception Area Alerting	5a4	NA	NA	NA
Subsequent Information & Instructions	5b1	M	NA	NA
Support Operations and Facilities				
Reception Center Operations	6a1	NS	NA	NA
EW Monitoring & Decontamination	6b1	NS	NA	NA
Congregate Care	6c1	NS	NA	NA
Contaminated Injured	6d1	M	NA	NA

3.3 Criteria Evaluation Summaries

3.3.1 Allegan County EOC

Criterion 2.a.1 – Core Capability: Operational Coordination

Core Capability: Environmental Response/Health and Safety

Core Capability: Situational Assessment

Criterion 2.b.1 – Core Capability: Protective Action Decision Making

Criterion 2.b.2 – Core Capability: Operational Coordination

Core Capability: Environmental Response/Health and Safety

Core Capability: Operational Communications

Core Capability: Situational Assessment

Criterion 2.c.1 – Core Capability: Operational Coordination

Criterion 3.a.1 – Core Capability: Operational Coordination

Core Capability: Environmental Response/Health and Safety

Criterion 3.a.1 – Core Capability: Operational Coordination

Core Capability: Environmental Response/Health and Safety

Criterion 3.d.2 – Core Capability: Operational Coordination

Core Capability: Critical Transportation

Core Capability: Critical Infrastructure Systems

Criterion 5.a.1 – Core Capability: Core Capability: Public Information and Warning

Core Capability: Operational Coordination

Core Capability: Operation Communications

Criterion 5.b.1 – Core Capability: Public Information and Warning

Core Capability: Operational Coordination

Core Capability: Operation Communications

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Allegan 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

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

3.3.2 Van Buren County EOC

Criterion 2.a.1 – Core Capability: Operational Coordination

Core Capability: Environmental Response/Health and Safety

Core Capability: Situational Assessment

Criterion 2.b.1 – Core Capability: Protective Action Decision Making

Criterion 2.b.2 – Core Capability: Operational Coordination

Core Capability: Environmental Response/Health and Safety

Core Capability: Operational Communications

Core Capability: Situational Assessment

Criterion 2.c.1 – Core Capability: Operational Coordination

Criterion 3.a.1 – Core Capability: Operational Coordination

Core Capability: Environmental Response/Health and Safety

Criterion 3.a.1 – Core Capability: Operational Coordination

Core Capability: Environmental Response/Health and Safety

Criterion 3.b.1 – Core Capability: Operational Coordination

Criterion 3.d.2 – Core Capability: Operational Coordination

Core Capability: Critical Transportation

Core Capability: Critical Infrastructure Systems

Criterion 5.a.1 – Core Capability: Core Capability: Public Information and Warning

Core Capability: Operational Coordination

Core Capability: Operation Communications

Criterion 5.b.1 – Core Capability: Public Information and Warning

Core Capability: Operational Coordination

Core Capability: Operation Communications

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for Van Buren 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

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

SECTION 4: CONCLUSION

The DHS/FEMA evaluation team identified no Findings and no Plan Issues for Allegan and Van Buren Counties during the 2021 PNPP Exercise. The ongoing COVID-19 Public Health Emergency and other disasters that occurred during 2021 presented Allegan and Van Buren Counties with substantial logistical and communications challenges for simultaneously developing and implementing a successful commercial nuclear power plant exercise. The response to these challenges and the results of the exercise are discussed in Appendix A of this After-Action Report/Improvement Plan.

Based on the results of this exercise, the planning and preparedness for the State of Michigan and Allegan and Van Buren Counties 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 Allegan and van Buren Counties remains in effect.

APPENDIX A: IMPROVEMENT PLAN

This appendix summarizes the results from the of the evaluation of all jurisdictions and functional entities that participated in March 9, 2021, Palisades Nuclear Power Plant (PNPP), Partial Participation, Plume Exposure Pathway REP Exercise to test the offsite emergency response capabilities of State and local governments in the 10-mile EPZ surrounding the PNPP, recommended corrective actions, and a schedule of corrective actions for the identified primary responsible agency. The DHS/FEMA evaluation team identified no Level 1 or Level 2 Findings and no Plan Issues for the counties of Allegan and Van Buren during the PNPP exercise. The ongoing COVID-19 Pandemic and other disasters that occurred during 2020 presented the State of Michigan with substantial logistical and communications challenges for simultaneously developing and implementing a successful commercial nuclear power plant exercise plan in a combined virtual and physical environment. Travel and social distancing restrictions made it necessary to adopt and adapt virtual technologies to conduct the exercise and assess demonstration activities remotely. Best Practices The exercise was evaluated virtually using Microsoft Teams collaboration software configured by the State of Michigan Emergency Management Agency (EMA) and Allegan and Van Buren Counties to establish multiple Channels, each with audio/visual, chat, and exercise-related document sharing features. A virtual exercise evaluation platform was developed by the State of Michigan in collaboration with DHS/FEMA Region V. The use of computer-based audio-visual collaboration software, email, and cellular telephone-facilitated voice, text, and FaceTime communications allowed DHS/FEMA evaluation teams to remotely observe demonstration activities at multiple locations and access exercise documentation in real time. This exercise also involved extensive approval of REP Actual Incident Credit for documented state and local response to the COVID-19 Pandemic and other declared disasters. The approval of Actual Incident Credit required Offsite Response Organizations to submit documentation substantiating demonstration capabilities consistent with NUREG-0654 FEMA-REP-1, Rev. 1, and FEMA P-1028 REP Program Manual guidance. Assessment credit was approved for response actions that met REP Program capability targets and provided reasonable assurance for protecting public health and safety.

Best Practices

The exercise was evaluated virtually using ZOOM[®] collaboration software. In collaboration with DHS/FEMA Region V, Microsoft Teams[®] software was configured by the State of Michigan Emergency Management Agency and Allegan and Van Buren Counties to establish multiple Channels, each with audio/visual, chat, and exercise-related document sharing features. Electronic mail and cellphone voice and texting modalities were also used to support the exercise. The use of computer-based audio-visual collaboration software, email, and cellular telephone-facilitated voice and text communications allowed DHS/FEMA evaluation teams to

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remotely observe demonstration activities at multiple locations and access exercise documentation in real time.

This exercise also involved approval of REP Actual Incident Credit for documented state and local response to the COVID-19 Public Health Emergency and other declared disasters. The approval of Full and Partial Actual Incident Credit required Offsite Response Organizations to submit documentation substantiating demonstration capabilities consistent with NUREG-0654 FEMA-REP-1, Rev. 1, and FEMA P-1028 REP Program Manual guidance. Assessment credit was approved for response actions that met REP Program capability targets and provided reasonable assurance for protecting public health and safety.

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APPENDIX B: EXERCISE EVALUATION TEAM

DATE: March 9, 2021

SITE: Palisades Nuclear Power Plant

LOCATION	TL/Evaluator	AGENCY
Allegan County EOC	Brian Reinhart	DHS/FEMA RV
Allegan County EOC	Gary Goldberg	ICFI
Allegan County EOC	Bruce Swiren	ICFI
Van Buren County EOC	James King	DHS/FEMA RV
Van Buren County EOC	Marcy Campbell	ICFI
Van Buren County EOC	Mike Meshenberg	ICFI

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APPENDIX C: ACRONYMS AND ABBREVIATIONS

ACRONYM	DESCRIPTION
AAR	After Action Report
ACMED	Allegan County Emergency Management Director
CFR	Code of Federal Regulations
DCO	Dosimetry Control Officer
DHS	Department of Homeland Security
DRD	Direct Reading Dosimeter
EAS	Emergency Alert System
ECL	Emergency Classification Level
EGLE	Environment Great Lakes and Energy
EST	Eastern Standard Time
EMD	Emergency Management Director
EMHSD	Emergency Management Homeland Security Division
EMnet	Emergency Management Network
EOC	Emergency Operation Center
EPT	Exercise Planning Team
EPZ	Emergency Planning Zone
EW	Emergency Worker
DHS/FEMA	Department of Homeland Security/Federal Emergency Management Agency
GE	General Emergency
GIS	Geographical Information System
IP	Improvement Plan
JIC	Joint Information Center
KI	Potassium Iodide
MDOT	Michigan Department of Transportation
MG	Milligram
MHz	Megahertz
MSP	Michigan State Police
NRC	Nuclear Regulatory Commission
OOS	Out-of-Sequence
ORO	Offsite Response Organizations
OSL	Optically Stimulated Luminescence
PAA	Protective Action Area
PAD	Protective Action Decision
PAO	Protective Action Order

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ACRONYM	DESCRIPTION
PAR	Protective Action Recommendation
PDP	Personal Dosimetry Packet
PED	Personal Electronic Dosimeter
PIO	Public Information Officer
PNPP	Palisades Nuclear Power Plant
PRD	Permanent Record Dosimeter
RAC	Regional Assistance Committee
RACES	Radio Amateur Civil Emergency Services
RADEF	Radiological Defense
REP	Radiological Emergency Preparedness
RERP	Radiological Emergency Response Plan
RRR	Relocation, Reentry, and Return
SAE	Site Area Emergency
SEOC	State Emergency Operations Center
TACP	Traffic and Access Control Point
TEDE	Total Effective Dose Equivalent
THD	Technological Hazards Division
TLD	Thermo-luminescent Dosimeter
UE	Unusual Event
VBC	Van Buren County
VBC CEO	Van Buren County Chief Elected Official
VBC DA	Van Buren County District Attorney Office
VBC/ISD	Van Buren County Intermediate School District
VBC/IT	Van Buren County Information Technology
VBC/PHD	Van Buren Public Health Department
VBC/RC/PW	Van Buren County Road Commission (Public Works)
VBC/SO/CD	Van Buren County Sheriff's Office Central Dispatch
VBCMH	Van Buren Community Mental Health Authority
VBS ADMIN	Van Buren County Administration Department
WEA	Wireless Emergency Alert

APPENDIX D: EXTENT-OF-PLAY

This appendix lists the exercise criteria which were scheduled for demonstration in the Palisades Nuclear Power Plant REP Partial-Participation Plume Exposure Pathway Exercise on March 9, 2021, and the (corrected) offsite Extent-of-Play agreement accepted by DHS/FEMA Region V on March 3, 2021. The exercise criteria, contained in the DHS/FEMA, REP Program Manual (January 2016), represent a functional translation of the planning standards and evaluation criteria of NUREG-0654/DHS/FEMA-REP-1, Rev. 1, "Criteria for the Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980. Because the exercise criteria are intended for use at all nuclear power plant sites, and because of variations among offsite plans and procedures, an Extent-of-Play agreement is prepared by the State and accepted by DHS/FEMA to provide Evaluators with guidance on expected actual demonstration of the criteria.

Exercise Criteria

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

Extent of Play Agreements for Allegan County, Berrien County, Van Buren County and the State of Michigan

Palisades Partial Participation Plume Exposure Pathway
REP Exercise Objectives- Virtual Exercise

March 9 ,2021

Criteria:

Criteria that will be virtually demonstrated during this exercise and can be re-demonstrated immediately for credit, include the following:

3.a.1, 3.b.1.

Criteria that may be re-demonstrated, as approved on a case-by-case basis by the DHS/FEMA Region V Chairperson of the Regional Assistance Committee, include the following: 2.a.1, 2.b.1, 2.b.2, 2.c.1 (partial) 3.d.2, 5.a.1, 5.b.1

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

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

This criterion will not be evaluated.

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Allegan County

Actual incident credit has been approved.

Berrien County

This criterion will not be evaluated.

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Van Buren County

Actual incident credit has been approved.

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.
2. The JIC is maintained in operational readiness and set up will not be demonstrated for evaluation.
3. The FTC will not be demonstrated.

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Allegan County

1. The EOC is maintained in operational readiness and set up will not be demonstrated for evaluation.

Berrien County

1. The EOC is maintained in operational readiness and set up will not be demonstrated for evaluation.

Van Buren County

1. The EOC is maintained in operational readiness and set up will not be demonstrated for evaluation.

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

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Allegan County

Actual incident credit has been approved.

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Berrien County

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Van Buren County

Actual incident credit has been approved.

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

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Allegan County

Actual incident credit has been approved.

Berrien County

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This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Van Buren County

Actual incident credit has been approved.

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

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Allegan County

Actual incident credit has been approved.

Berrien County

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Van Buren County

Actual incident credit has been approved.

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

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Allegan County

1. Allegan 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 emergency workers in a timely manner will be documented as an "Interim Protective Measures Decision" in lieu of a "Protective Action Decision."

Berrien County

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Van Buren County

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1. Van Buren 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 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 DHS/FEMA Region V Chairperson of the Regional Assistance Committee.

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

State of Michigan

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Allegan County

1. Allegan 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 a "Precautionary Protective Measures Decision" in lieu of a "Protective Action Decision."
3. This criterion will be evaluated via interview if the scenario does not require the counties to make a PAR (2b1) or PAD (2b2) independent of the State PAR/PAD process.

Berrien County

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Van Buren County

1. Van Buren 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 a "Precautionary Protective Measures Decision" in lieu of a "Protective Action Decision."
3. This criterion will be evaluated via interview if the scenario does not require the counties to make a PAR (2b1) or PAD (2b2) independent of the State PAR/PAD process.

Note: This criterion may be re-demonstrated as approved on a case-by-case basis by the DHS/FEMA Regional V Chairperson 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

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Allegan County

1. Allegan 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 a "Precautionary Protective Measures Decision" in lieu of a "Protective Action Decision."
3. This criterion will be evaluated via interview if the scenario does not require the counties to make a PAR (2b1) or PAD (2b2) independent of the State PAR/PAD process.

Berrien County

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Van Buren County

1. Van Buren 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 a "Precautionary Protective Measures Decision" in lieu of a "Protective Action Decision."
3. This criterion will be evaluated via interview if the scenario does not require the counties to make a PAR (2b1) or PAD (2b2) independent of the State PAR/PAD process.

Note: This criterion may be re-demonstrated as approved on a case-by-case basis by the DHS/FEMA Region V Chairperson 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

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Allegan County

1. Allegan 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. This criterion will be demonstrated in accordance with plans and procedures.

Berrien County

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Van Buren County

1. Van Buren 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. This criterion will be demonstrated in accordance with plans and procedures.

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Note: This criterion may be re-demonstrated as approved on a case-by-case basis by the DHS/FEMA Region V Chairperson 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 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.

State of Michigan

This criterion will not be evaluated.

Allegan County

This criterion was successfully demonstrated during the Palisades biennial exercise on April 25, 2018.

Berrien County

This criterion was successfully demonstrated during the Palisades biennial exercise on April 25, 2018.

Van Buren County

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This criterion was successfully demonstrated during the Palisades biennial exercise on April 25, 2018.

Note: This criterion may be re-demonstrated immediately for credit, at the discretion of the evaluator.

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

This criterion will not be demonstrated during this exercise.

Allegan County

1. Allegan County will demonstrate this criterion through a discussion-based interview. This will be completed through the TACP interview.
2. Two EWs will need to be interviewed if the scenario does not require dose to be exceeded.
3. Allegan County will need to demonstrate the implementation of EW KI via the scenario

Berrien County

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Van Buren County

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1. Van Buren County will demonstrate this criterion through a discussion-based interview. This will be completed through the TACP interview.
3. Two EWs will need to be interviewed if the scenario does not require dose to be exceeded.
4. Van Buren County will need to demonstrate the implementation of EW KI via the scenario

Note: This criterion may be re-demonstrated immediately for credit, at the discretion of the evaluator.

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

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Allegan County

This criterion does not apply due to Allegan County does not have institutionalized individuals within the 10 miles EPZ. The areas of the EPZ under Allegan County jurisdiction is notified via Van Buren County notification and through the JIC.

Berrien County

This criterion will not be evaluated.

Van Buren County

1. Van Buren County will demonstrate the ability (simulate) to administer KI to institutionalized individuals. This criterion will be demonstrated through a discussion-based interview.
2. If institutionalized populations are found to exist at the time of the exercise, actual contacts will not be evaluated. One simulated call will be logged on a situation log, unless it is found there are no institutionalized populations that would apply within the EPZ.

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.

Allegan County

This criterion was successfully demonstrated during the Palisades biennial exercise on April 24, 2018.

Berrien County

This criterion will not be evaluated.

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

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Van Buren County

This criterion was successfully demonstrated during the Palisades biennial exercise on April 24, 2018.

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

State of Michigan

This criterion will not be demonstrated by the State.

Allegan County

This criterion was successfully demonstrated during the Palisades biennial exercise on April 24, 2018.

Berrien County

This criterion will not be evaluated.

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Van Buren County

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This criterion was successfully demonstrated during the Palisades biennial exercise on April 24, 2018.

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

State of Michigan

This criterion will not be demonstrated by the State.

Allegan County

Actual incident credit has been approved.

Berrien County

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Van Buren County

Actual incident credit has been approved.

Note: This criterion may be re-demonstrated immediately for credit, at the discretion of the evaluator.

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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.

Allegan County

1. This will be conducted through a discussion-based interview.

Berrien County

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Van Buren County

1. This will be conducted through a discussion-based interview.

Note: This criterion may be re-demonstrated immediately for credit, at the discretion of the evaluator.

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.

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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.

State of Michigan

This criterion will not be demonstrated by the State.

Allegan County

This criterion was successfully demonstrated during the Palisades biennial exercise on April 25, 2018.

Berrien County

This criterion was successfully demonstrated during the Palisades biennial exercise on April 25, 2018.

Van Buren County

This criterion was successfully demonstrated during the Palisades biennial exercise on April 25, 2018.

Note: This criterion may be re-demonstrated immediately for credit, at the discretion of the evaluator.

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.

This criterion will not be demonstrated during this exercise.

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

This criterion will not be demonstrated during this exercise.

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

This criterion will not be demonstrated during this exercise.

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

This criterion will not be demonstrated during this exercise.

Evaluation Area 5 - Emergency Notification and Public Information

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

State of Michigan

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Allegan County & Berrien County

1. Allegan and Berrien Counties will provide, as needed, information to Van Buren County for inclusion in EAS messages. Sirens located in Allegan and Berrien County will be activated through Van Buren County.

Van Buren County

1. The Van Buren County Sheriff's Department is the primary activation point for the public warning sirens. Van Buren County also activates the Emergency Alert System. Van Buren will demonstrate by successful EAS/IPAWS/WEA alert messaging through the DHS/FEMA IPAWS test lab.

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Note: This criterion may be re-demonstrated as approved on a case-by-case basis by the DHS/FEMA Region V Chairperson 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 DHS/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 Palisades EPZ does not contain any DHS/FEMA approved exception areas. This criterion will not be demonstrated during this exercise.

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

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Allegan County

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1. This will be demonstrated through a discussion-based interview with the county PIO.

Berrien County

This criterion was successfully demonstrated during the DC Cook biennial exercise on August 27, 2019.

Van Buren County

1. This will be demonstrated through a discussion-based interview with the county PIO.

Note: This criterion may be re-demonstrated as approved on a case-by-case basis by the DHS/FEMA Region V Chairperson of the Regional Assistance 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

This criterion will not be evaluated.

Allegan County

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After Action Report/Improvement Plan

Palisades Nuclear Power Plant

This criterion will not be evaluated.

Berrien County

This criterion will not be evaluated.

Van Buren County

This criterion will not be evaluated.

Note: The decontamination and washing of vehicles and individuals, if detailed in the county plans, will be simulated.

Note: This criterion may be re-demonstrated immediately for credit, at the discretion of the evaluator.

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

The State Worker Decontamination Center will not be demonstrated.

Allegan County

This criterion will not be evaluated.

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After Action Report/Improvement Plan

Palisades Nuclear Power Plant

Berrien County

This criterion was successfully demonstrated by Berrien County during the DC Cook Evaluated Exercise on May 23, 2017. (All EWC/PRC facilities supporting Palisades EPZs have been exercised in the current 8-year cycle).

Van Buren County

This criterion will not be evaluated.

Note: The decontamination and washing of vehicles and individuals, if detailed in the county plans, will be simulated.

Note: This criterion may be re-demonstrated immediately for credit, at the discretion of the evaluator.

Criterion 6.c.1: Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with American Red Cross planning guidelines. Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate prior to entering congregate care facilities.

State of Michigan

This criterion does not apply.

Allegan County

Unclassified
Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Palisades Nuclear Power Plant

This criterion will not be evaluated.

Berrien County

This criterion will not be evaluated.

Van Buren County

Credit was received as the facility is a designated American Red Cross shelter.

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

During this exercise EGLE will provide phone support upon request.

Allegan

This criterion does not apply.

Berrien

Unclassified

Radiological Emergency Preparedness (REP) Program

After Action Report/Improvement Plan

Palisades Nuclear Power Plant

This criterion will not be evaluated.

Van Buren County

This was successfully demonstrated through a discussion-based interview with Bronson South Haven Hospital and South Haven Area Emergency Response Services (SHAES) on Thursday September 24, 2020 at 10:00 am.

Note: This criterion may be re-demonstrated immediately for credit, at the discretion of the evaluator.