

After Action Report/ Improvement Plan

Exercise Date – May 4, 2021

Radiological Emergency Preparedness (REP) Program



Davis-Besse Nuclear Power Station



FEMA

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EXECUTIVE SUMMARY

On May 4, 2021, the U.S. Department of Homeland Security, Federal Emergency Management Agency (DHS/FEMA) Region V evaluated a Radiological Emergency Preparedness Program, Full Participation, Plume Exposure Pathway Exercise in the 10-mile Emergency Planning Zone (EPZ) for the Davis-Besse Nuclear Power Station (DBNPS).

The DBNPS is located approximately 21 miles east-south-east of Toledo, Ohio. The 10-mile Plume Exposure Pathway EPZ of the DBNPS includes part of Lake Erie and part, or all, of the following communities: City of Port Clinton, Carroll, Erie, Bay, Benton, Harris, and Salem Townships in Ottawa County and Jerusalem Township in Lucas County. The 50-mile Ingestion Pathway EPZ is comprised of all of Ottawa, Lucas, Wood, Sandusky, Erie, Seneca, Huron, Lorain, Fulton, Henry, Crawford, Hancock, and Wyandot Counties in Ohio; and all of Monroe, Lenawee, Washtenaw, and Wayne Counties in Michigan. Essex County and part of Kent County within the province of Ontario, Canada, are also contained within the 50-mile Emergency Planning Zone.

The purpose of the exercise was to assess the level of state and local preparedness in responding to an incident at the DBNPS. 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 16 and 17, 2019. The qualifying emergency preparedness exercise was conducted on March 31, 1987.

Officials and representatives from the State of Ohio, Ottawa and Lucas Counties, and the Energy Harbor 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 the State of Ohio and Ottawa and Lucas Counties as a result of the 2021 DBNPS Exercise.

The DHS/FEMA wishes to acknowledge the efforts of the many individuals who participated in the exercise and made it a success. Approximately 121 individuals participated in the offsite portion of the exercise, including local volunteers and DBNPS owner/operator personnel.

The ongoing COVID-19 Public Health Emergency and other disasters that occurred during 2021 presented the State of Ohio 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 Microsoft Teams[®] and Basecamp[®] collaboration software. The Microsoft Teams[®] software was configured by the State of Ohio Emergency Management Agency and Ottawa and Lucas County 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.

This exercise also involved extensive use of well-documented Full and Partial Actual Incident Credit, as well as the successful tethering and implementation of virtual technologies and logistics, to assess the State of Ohio and Ottawa and Lucas Counties 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 Public Health Emergency response, Lucas County requested and received Full Actual Incident Credit for Evaluation Criteria 1.c.1, 1.d.1, 1.e.1, 3.d.1, and 6.c.1 and Partial Actual Incident Credit for Criteria 5.b.1. Criteria selected for partial or full demonstration are as follows: 1.a.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 2.c.1, 3.a.1, 3.b.1, 3.d.2, 5.a.1, and 5.b.1. All other eight-year and biennial requirements had been met by the Lucas County during previous exercises and drills.

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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 Full-Participation Plume Exposure Pathway Exercise was conducted on May 4, 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 Davis-Besse Nuclear Power Station. The purpose of this exercise report is to present the exercise results and findings on the performance of the Offsite Response Organizations (ORO) during a simulated radiological emergency.

The Scenario and Extent-of-Play Agreements submitted by the State of Ohio on April 2, 2021, by Ottawa County on April 2, 2021, and by Lucas County on April 5, 2021 were approved by the DHS/FEMA Region V RAC Chair on April 14, 2021.

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 Ohio in collaboration with DHS/FEMA Region V. The use of computer-based Microsoft Teams® and Basecamp® 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. Access to WebEOC® web-based emergency management software platforms was also provided by the DBNPS and State of Ohio. Additional hardcopy exercise documentation was provided electronically by the State of Ohio and Lucas and Ottawa County 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 Criteria 1.c.1, 1.d.1, 1.e.1, 3.d.1 and 6.c.1 was approved for Lucas County by DHS/FEMA Region V on April 14, 2021. Partial Actual Incident Credit for Evaluation Criteria 5.b.1 was approved for Lucas County by DHS/FEMA Region V on April 14, 2021. All other eight-year and biennial requirements had been met by Lucas County during previous exercises and drills.

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

Davis-Besse Nuclear Power Station Radiological Emergency Preparedness (REP), Full-Participation, Plume Exposure Pathway Exercise

TYPE OF EXERCISE

Plume Exposure Pathway

EXERCISE DATE

May 4, 2021

LOCATIONS

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

SPONSORS

Ohio Emergency Management Agency
2855 West Dublin-Granville Road
Columbus, Ohio 43235

Energy Harbor, Inc.
Davis-Besse Nuclear Power Station
5501 N State Route 2
Oak Harbor, Ohio 43449

PROGRAM

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

MISSION

Response

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 ORGANIZATIONS

Ohio Department of Agriculture (ODA)
Ohio Department of Health (ODH)
Ohio Department of Natural Resources (ODNR)
Ohio Department of Public Safety (ODPS)
Ohio Department of Transportation (ODOT)
Ohio Emergency Management Agency (Ohio EMA)
Ohio Emergency Management Services (Ohio EMS)
Ohio Environmental Protection Agency (OEPA)
Ohio Geographically Referenced Information Program (OGRIP)
Ohio National Guard (OHNG)
Ohio State University Extension (OSU – Ext)
Ohio State Highway Patrol (OSHP)
Ohio Civil Air Patrol (OCAP)
Public Utilities of Ohio (PUCO)
State Fire Marshall (SFM)

Other State Organizations Supporting State of Ohio Operations

Michigan Department of Environment, Great Lakes, and Energy

Private Organizations Supporting State of Ohio Operations

Amateur Radio Emergency Services (ARES)
Energy Harbor
Ohio Fire Chiefs Association (OFCA)

RISK COUNTY ORGANIZATIONS

Ottawa County

Ottawa County Commissioners
Ottawa County Emergency Management Agency
Ottawa County Engineer
Ottawa County Sheriff's Office

State Agency Representatives at Ottawa County

Ohio Emergency Management Agency (DBNPS Resident Radiological Analyst)

Private Organizations Supporting Ottawa County

Energy Harbor

Lucas County

Lucas County Administrator
Lucas County Commissioners
Lucas County Emergency Management Agency
Lucas County Sheriff's Office
Toledo-Lucas County Health Department

PRIVATE ORGANIZATIONS

Energy Harbor (DBNPS Owner/Operator)

FEDERAL ORGANIZATIONS

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

U.S. Coast Guard (USCG)

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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 sixteen planning standards that form the basis for radiological emergency response planning for state, tribal, and local governments impacted by the EPZs 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 Davis-Besse Nuclear Power Station to FEMA Region V by the State of Ohio and Ottawa and Lucas Counties occurred on May 24, 1989. Formal approval of these RERPs was granted by FEMA on March 15, 1991, under 44 CFR 350.

2.2 FEMA CORE CAPABILITIES AND EXERCISE OBJECTIVES

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 Ohio and Ottawa and Lucas 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. 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 (NIMS) 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.

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 successfully demonstrated the Core Capabilities and Evaluation Criteria selected by the jurisdictions in accordance with NUREG-0654/FEMA-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 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 3.1, Tables 3.2.1 through 3.2.3, 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 Program Evaluation Criteria used to assess the organizations and locations that were selected by the State of Ohio and Ottawa and Lucas Counties. The organizations, locations, and evaluation criteria selected by the State of Ohio and Ottawa and Lucas Counties are described in Appendix E, Extent-of-Play Agreements, which were approved by DHS/FEMA on April 14, 2021.

The results of the assessment are summarized below by Core Capability, as demonstrated during the May 4, 2021, DBNPS REP, Full-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 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 Ohio Emergency Management Agency, Ohio Environmental Protection Agency, and the Ohio Department of Health demonstrated proficiency in the use of dose assessment software to calculate dose projections independent of the Davis-Besse Nuclear Power Station'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 the Ottawa and Lucas Counties EMA. Alert and notification of the public and media was completed in a timely manner by simulated means of sounding of sirens, Emergency Alert System (EAS) 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. State Liaisons at the DBNPS Emergency Operations Facility communicated well with the State Emergency Operations Center to ensure that state protective action recommendations and county protective action decisions and responses 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, 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: Evaluation Criterion 1.d.1, 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 capability of Ottawa and Lucas Counties to address impediments to mass evacuation. Ottawa and Lucas Counties demonstrated the capability to address roadway impediments due to landslides and other events that impair/impede safe evacuation of the public.

3.2 EXERCISE EVALUATION AND RESULTS

Tables 3.2.1 through 3.2.3 present the results and findings of the evaluation of all jurisdictions and functional entities that participated in the DBNPS REP, Full-Participation, Plume Exposure Pathway Exercise and *ad hoc* demonstrations and interviews.

Each jurisdiction and functional entity was evaluated based on their demonstration of Core Capabilities and their equivalent Radiological Emergency Preparedness 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:

- 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.

Table 3.2.1 – Summary of Exercise Evaluation – State of Ohio

DATE: May 4, 2021 SITE: Davis-Besse Nuclear Power Station M: Met NA: Not Applicable NS: Not Selected FC: Full Credit (Actual Incident)	CRITERION	State RRA @ County EOC	SEOC – MARCS Check	SEOC – Dose Assessment Room	SEOC – Assessment Room	SEOC – ESF-10	EOF – State Liaisons	SEOC – Executive Room	SEOC – Operations Floor	SEOC – JIC – PIO	DBNPS JIC – PIOs	ODNR – DC Briefing/KI	ODNR – Interview
Emergency Operations Management													
Mobilization	1a1	NS	NS	M	M	NS	NS	M	M	M	M	NS	NS
Facilities	1b1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Direction and Control	1c1	M	NS	M	M	NS	M	M	M	NS	NS	NS	NS
Communications Equipment	1d1	M	M	M	M	NS	M	M	M	M	M	NS	M
Equipment and Supplies to Support	1e1	M	NS	M	NS	NS	M	M	NS	M	M	M	M
Protective Action Decision-Making													
EW Exposure Control Decisions	2a1	NS	NS	M	NS	M	NS	NS	NS	NS	NS	NS	NS
PARs	2b1	NS	NS	M	NS	NS	NS	M	NS	NS	NS	NS	NS
PADs	2b2	NS	NS	M	NS	NS	NS	NS	NS	NS	NS	NS	NS
PADs for Disabled/Functional Needs	2c1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ingestion PADs	2d1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
RRR Decisions	2e1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Protective Action Implementation													
EW Exposure Control Implementation	3a1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	M	M
KI Public/Institutionalized	3b1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PAD Implementation Disabled/Functional	3c1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PAD Implementation Schools	3c2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
TACP Establishment	3d1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Impediments	3d2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Implement Ingestion PADs	3e1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ingestion Pathway Decisions	3e2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Implementation of RRR Decisions	3f1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Field Measurement and Analysis													
RESERVED	4a1	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Field Team Management	4a2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Field Team Operations	4a3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Field Team Sampling	4b1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Laboratory Operations	4c1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Emergency Notification and Public Info													
Initial Alert & Notification	5a1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	M
RESERVED	5a2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Backup Alert & Notification	5a3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS
Exception Area Alerting	5a4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS
Subsequent Information & Instructions	5b1	NS	NS	NS	NS	NS	NS	NS	NS	M	M	NS	NS
Support Operations and Facilities													
Reception Center Operations	6a1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EW Monitoring & Decontamination	6b1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Congregate Care	6c1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Contaminated Injured Transport & Care	6d1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 3.2.2 – Summary of Exercise Evaluation – Ottawa County

DATE: May 4, 2021 SITE: Davis-Besse Nuclear Power Station M: Met NA: Not Applicable NS: Not Selected FC: Full Credit (Actual Incident) PC: Partial Credit (Actual Incident)	CRITERION	EOC – MARCS Check	EOC – Initial Notification	EOC – Assessment Room	EOC Executive Room	EOC – Public Information	Alert and Notifications	EOC – TACPS/ Impediments	EOC – DC Briefing/ Dosimetry/KI Distribution	EOC – Emergency Work Exposure Control
Emergency Operations Management										
Mobilization	1a1	NS	M	NS	M	NS	NS	NS	NS	NS
Facilities	1b1	NS	NS	NS	NS	NS	NS	NS	NS	NS
Direction and Control	1c1	NS	NS	M	M	NA	NS	NS	NS	NS
Communications Equipment	1d1	M	M	NS	M	M	M	NS	NS	NS
Equipment and Supplies to Support	1e1	NS	M	NS	M	M	M	NS	M	M
Protective Action Decision-Making										
EW Exposure Control Decisions	2a1	NS	NS	NS	NS	NS	NS	NS	NS	NS
PARs	2b1	NS	NS	NS	NS	NS	NS	NS	NS	NS
PADs	2b2	NS	NS	NS	M	NS	NS	NS	NS	NS
PADs for Disabled/Functional Needs	2c1	NS	NS	NS	M	NS	NS	NS	NS	NS
Ingestion PADs	2d1	NS	NS	NS	NS	NS	NS	NS	NS	NS
RRR Decisions	2e1	NS	NS	NS	NS	NS	NS	NS	NS	NS
Protective Action Implementation										
EW Exposure Control Implementation	3a1	NS	NS	M	NS	NS	NS	NS	M	M
KI Public/Institutionalized	3b1	NS	NS	M	NS	NS	NS	NS	NS	NS
PAD Implementation Disabled/Functional	3c1	NS	NS	NS	NS	NS	NS	NS	NS	NS
PAD Implementation Schools	3c2	NS	NS	NS	NS	NS	NS	NS	NS	NS
TACP Establishment	3d1	NS	NS	NS	NS	NS	NS	M	NS	NS
Impediments	3d2	NS	NS	NS	NS	NS	NS	M	NS	NS
Implement Ingestion PADs	3e1	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ingestion Pathway Decisions	3e2	NS	NS	NS	NS	NS	NS	NS	NS	NS
Implementation of RRR Decisions	3f1	NS	NS	NS	NS	NS	NS	NS	NS	NS
Field Measurement and Analysis										
RESERVED	4a1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Team Management	4a2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Team Operations	4a3	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Team Sampling	4b1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Laboratory Operations	4c1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Emergency Notification and Public Info										
Initial Alert & Notification	5a1	NS	NS	NS	NS	NS	M	NS	NS	NS
RESERVED	5a2	NS	NS	NS	NS	NS	NS	NS	NS	NS
Backup Alert & Notification	5a3	NS	NS	NS	NS	NS	NS	NS	NS	NS
Exception Area Alerting	5a4	NS	NS	NS	NS	NS	NS	NS	NS	NS
Subsequent Information & Instructions	5b1	NS	NS	NS	NS	M	NS	NS	NS	NS
Support Operations and Facilities										
Reception Center Operations	6a1	NA	NA	NA	NA	NA	NA	NA	NA	NA
EW Monitoring & Decontamination	6b1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Congregate Care	6c1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Contaminated Injured Transport & Care	6d1	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 3.2.3 – Summary of Exercise Evaluation – Lucas County

DATE: May 4, 2021 SITE: Davis-Besse Nuclear Power Station M: Met NA: Not Applicable NS: Not Selected FC: Full Credit (Actual Incident) PC: Partial Credit (Actual Incident)	CRITERION	EOC – MARCS Check	EOC – Initial Notification	EOC – Executive Room	EOC – Assessment Room	EOC – Operations Room	EOC – Public Information/A&N	EOC – DC Briefing/Dosimetry/KI Distribution	EOC – Emergency Work Exposure Control
Emergency Operations Management									
Mobilization	1a1	NS	M	M	M	M	M	NS	NS
Facilities	1b1	NS	NS	NS	NS	NS	NS	NS	NS
Direction and Control	1c1	NS	NS	FC	FC	FC	FC	NS	NS
Communications Equipment	1d1	M	FC	FC	FC	FC	FC	NS	NS
Equipment and Supplies to Support Operations	1e1	NS	FC	FC	FC	FC	FC	M	M
Protective Action Decision-Making									
EW Exposure Control Decisions	2a1	NS	NS	NS	NS	M	NS	NA	NA
PARs	2b1	NS	NS	NS	NS	NS	NS	NA	NA
PADs	2b2	NS	NS	M	M	NS	NS	NA	NA
PADs for Disabled/Functional Needs	2c1	NS	NS	M	NS	NS	NS	NA	NA
Ingestion PADs	2d1	NS	NS	NS	NS	NS	NS	NA	NA
RRR Decisions	2e1	NS	NS	NS	NS	NS	NS	NA	NA
Protective Action Implementation									
EW Exposure Control Implementation	3a1	NS	NS	NS	NS	M	NS	M	M
KI Public/Institutionalized	3b1	NS	NS	NS	NS	M	NS	NA	NA
PAD Implementation Disabled/Functional	3c1	NS	NS	NS	NS	NS	NS	NA	NA
PAD Implementation Schools	3c2	NS	NS	NS	NS	NS	NS	NA	NA
TACP Establishment	3d1	NS	NS	NS	NS	NS	FC	NA	NA
Impediments	3d2	NS	NS	NS	NS	NS	M	NA	NA
Implement Ingestion PADs	3e1	NS	NS	NS	NS	NS	NS	NA	NA
Ingestion Pathway Decisions	3e2	NS	NS	NS	NS	NS	NS	NA	NA
Implementation of RRR Decisions	3f1	NS	NS	NS	NS	NS	NS	NA	NA
Field Measurement and Analysis									
RESERVED	4a1	NA	NA	NA	NA	NA	NA	NA	NA
Field Team Management	4a2	NA	NA	NA	NA	NA	NA	NA	NA
Field Team Operations	4a3	NA	NA	NA	NA	NA	NA	NA	NA
Field Team Sampling	4b1	NA	NA	NA	NA	NA	NA	NA	NA
Laboratory Operations	4c1	NA	NA	NA	NA	NA	NA	NA	NA
Emergency Notification and Public Info									
Initial Alert & Notification	5a1	NS	NS	NS	NS	NS	M	NS	NS
RESERVED	5a2	NS	NS	NS	NS	NS	NS	NS	NS
Backup Alert & Notification	5a3	NS	NS	NS	NS	NS	NS	NS	NS
Exception Area Alerting	5a4	NS	NS	NS	NS	NS	NS	NS	NS
Subsequent Information & Instructions	5b1	NS	NS	NS	NS	NS	PC/M	NS	NS
Support Operations and Facilities									
Reception Center Operations	6a1	NA	NA	NA	NA	NA	NA	NA	NA
EW Monitoring & Decontamination	6b1	NA	NA	NA	NA	NA	NA	NA	NA
Congregate Care	6c1	NA	NA	FC	NA	NA	NA	NA	NA
Contaminated Injured Transport & Care	6d1	NA	NA	NA	NA	NA	NA	NA	NA

3.3 JURISDICTIONAL SUMMARY OF EXERCISE EVALUATION RESULTS

The following sections present narrative summaries that describe observations made during the exercise pursuant to the Evaluation Criteria and Core Capabilities demonstrated at each jurisdiction's response locations. Narrative summaries are organized by Jurisdiction, Location, Assessed Core Capability, and the Evaluation Criterion discussed in the Appendix E Extent-of-Play Agreements. The results of the assessments are summarized in Tables 3.2.1 through 3.2.3.

3.3.1 State of Ohio

3.3.1.1 State Liaison (Resident Radiological Analyst for the DBNPS) – Ottawa County Emergency Operations Center

- Criterion 1.c.1 – Core Capability: Operational Coordination
 - Core Capability: Operational Communications
 - Core Capability: Situational Assessment
- Criterion 1.d.1 – Core Capability: Operational Communications
- Criterion 1.e.1 – Core Capability: Environmental Response/Health and Safety
 - Core Capability: Mass Care Services
 - Core Capability: Public & Private Services and Resources
 - Core Capability: Public Health and Medical Services

3.3.1.2 State Initial Notification Point

- Criterion 1.a.1 – Core Capability: Operational Communications

3.3.1.3 SEOC – Executive Room

- Criterion 1.a.1 – Core Capability: Operational Communications
- Criterion 1.c.1 – Core Capability: Operational Coordination
 - Core Capability: Operational Communications
 - Core Capability: Situational Assessment
- Criterion 1.d.1 – Core Capability: Operational Communications
- Criterion 1.e.1 – Core Capability: Environmental Response/Health and Safety
 - Core Capability: Mass Care Services
 - Core Capability: Public & Private Services and Resources
 - Core Capability: Public Health and Medical Services
- Criterion 2.b.1 – 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

3.3.1.4 SEOC – JIC – Public Information Officer

Criterion 1.a.1 – Core Capability: Operational Communications

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

Criterion 1.e.1 – Core Capability: Environmental Response/Health and Safety

Core Capability: Mass Care Services

Core Capability: Public & Private Services and Resources

Core Capability: Public Health and Medical Services

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

Core Capability: Operational Coordination

Core Capability: Operation Communications

3.3.1.5 SEOC – Dose Assessment

Criterion 1.a.1 – Core Capability: Operational Communications

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

Core Capability: Operational Communications

Core Capability: Situational Assessment

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

Criterion 1.e.1 – Core Capability: Environmental Response/Health and Safety

Core Capability: Mass Care Services

Core Capability: Public & Private Services and Resources

Core Capability: Public Health and Medical Services

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: Operational Coordination

Core Capability: Intelligence and Information Sharing

Core Capability: Environmental Response/Health and Safety

Core Capability: Operational Communications

Core Capability: Situational Assessment

Criterion 2.b.2 – 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

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

Core Capability: Operational Communications

Core Capability: Situational Assessment

3.3.1.6 SEOC – ESF 10

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

Core Capability: Environmental Response/Health and Safety

Core Capability: Situational Assessment

3.3.1.7 SEOC – Assessment Room – MARCS Communications Check

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

3.3.1.8 SEOC – Assessment Room

Criterion 1.a.1 – Core Capability: Operational Communications

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

Core Capability: Operational Communications

Core Capability: Situational Assessment

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

3.3.1.9 SEOC – Operations Room

Criterion 1.a.1 – Core Capability: Operational Communications

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

Core Capability: Operational Communications

Core Capability: Situational Assessment

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

3.3.1.10 DBNPS JIC – State of Ohio PIO / ODH Liaison

Criterion 1.a.1 – Core Capability: Operational Communications

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

Criterion 1.e.1 – Core Capability: Environmental Response/Health and Safety

Core Capability: Mass Care Services

Core Capability: Public & Private Services and Resources

Core Capability: Public Health and Medical Services

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

Core Capability: Operational Coordination

Core Capability: Operational Communications

3.3.1.11 State Liaisons – Emergency Operations Facility (EOF)

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

Core Capability: Operational Communications

Core Capability: Situational Assessment

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

Criterion 1.e.1 – Core Capability: Environmental Response/Health and Safety

Core Capability: Mass Care Services

Core Capability: Public & Private Services and Resources

Core Capability: Public Health and Medical Services

3.3.1.12 ODNR Watercraft – Primary A&N – Lake Erie – DC Briefing and Dosimetry / KI Distribution

Criterion 1.e.1 – Core Capability: Environmental Response/Health and Safety

Core Capability: Mass Care Services

Core Capability: Public & Private Services and Resources

Core Capability: Public Health and Medical Services

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

Core Capability: Environmental Response/Health and Safety

3.3.1.13 ODNR Watercraft – Primary A&N – Lake Erie – Interview

Criterion 1.e.1 – Core Capability: Environmental Response/Health and Safety

Core Capability: Mass Care Services

Core Capability: Public & Private Services and Resources

Core Capability: Public Health and Medical Services

Criterion 5.a.1 – Core Capability: Operational Communications

In summary, the status of DHS/FEMA-evaluated core capabilities and criteria for the State of Ohio 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 Ottawa County

3.3.2.1 EOC MARCS Communications Check

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

3.3.2.2 EOC Executive Group

Criterion 1.a.1 – Core Capability: Operational Communications

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

Core Capability: Operational Communications

Core Capability: Situational Assessment

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

Criterion 1.e.1 – 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

Criterion 2.b.2 – 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

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

Core Capability: Operational Communications

3.3.2.3 EOC Initial Notification

Criterion 1.a.1 – Core Capability: Operational Communications

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

Criterion 1.e.1 – 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

3.3.2.4 EOC Assessment Room

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

Core Capability: Operational Communications

Core Capability: Situational Assessment

3.3.2.5 Public Information

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

Criterion 1.e.1 – 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

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

Core Capability: Operational Coordination

Core Capability: Operation Communications

3.3.2.6 Alert and Notification – Interview

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

Criterion 1.e.1 – Core Capability: Environmental Response/Health and Safety

Core Capability: Public and Private Services and Resources

Core Capability: Public Health and Medical Services

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

Core Capability: Operational Coordination

Core Capability: Operational Communications

3.3.2.7 EOC - Operations Room

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

Core Capability: Environmental Response/Health and Safety

Criterion 3.b.1 – 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

3.3.2.8 EOC – Traffic and Access Control Point / Impediments

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

Core Capability: Critical Transportation

Core Capability: On-Scene Security and Protection

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

Core Capability: Critical Transportation

Core Capability: Infrastructure Systems

3.3.2.9 EOC – Radiological Briefing and Dosimetry/KI Distribution – Interview

Criterion 1.e.1 – Core Capability: Environmental Response/Health and Safety

Core Capability: Public and Private Services and Resources

Core Capability: Public Health and Medical Services

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

Core Capability: Environmental Response/Health and Safety

3.3.2.10 Emergency Worker Radiological Exposure Control – Interview

Criterion 1.e.1 – Core Capability: Environmental Response/Health and Safety

Core Capability: Public and Private Services and Resources

Core Capability: Public Health and Medical Services

Criterion 3.a.1 – 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 Ottawa 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 Lucas County

Lucas County requested and received Full Actual Incident Credit for Evaluation Criteria 1.c.1, 1.d.1, 1.e.1, 3.d.1, and 6.c.1 and Partial Actual Incident Credit for Criteria 5.b.1. Criteria selected for partial or full demonstration are as follows: 1.a.1, 2.a.1, 2.b.2, 2.c.1, 3.a.1, 3.b.1, 5.a.1, and 5.b.1. All other eight-year and biennial requirements had been met by the Lucas County during previous exercises and drills.

3.3.3.1 MARCS Communications Check

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

3.3.3.2 EOC – Initial Notification Point

Criterion 1.a.1 – Core Capability: Operational Communications

3.3.3.3 EOC - Executive Room

Criterion 1.a.1 – Core Capability: Operational Communications

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

Core Capability: Operational Communications

Core Capability: Situational Assessment

Criterion 2.b.2 - 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

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

Core Capability: Operational Communications

Core Capability: Situational Assessment

3.3.3.4 EOC – Assessment Room

Criterion 1.a.1 – Core Capability: Operational Communications

Criterion 2.b.2 - 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

3.3.3.5 EOC – Operations Room

Criterion 1.a.1 – Core Capability: Operational Communications

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

Core Capability: Environmental Response/Health and Safety

Criterion 3.b.1 – 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

3.3.3.6 EOC – Impediments / Public Information / Alert and Notifications

Criterion 1.a.1 – Core Capability: Operational Communications

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

Core Capability: Critical Transportation

Core Capability: Infrastructure Systems

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

Core Capability: Operational Coordination

Core Capability: Operational Communications

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

Core Capability: Operational Communications

3.3.3.7 EOC – Radiological Briefing and Dosimetry/KI Distribution – Interview

Criterion 1.e.1 – Core Capability: Environmental Response/Health and Safety

Core Capability: Public and Private Services and Resources

Core Capability: Public Health and Medical Services

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

Core Capability: Environmental Response/Health and Safety

3.3.3.8 Emergency Worker Radiological Exposure Control – Interview

Criterion 1.e.1 – Core Capability: Environmental Response/Health and Safety

Core Capability: Public and Private Services and Resources

Core Capability: Public Health and Medical Services

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

Core Capability: Environmental Response/Health and Safety

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

- g. MET: All Core Capabilities and Evaluation Criteria identified in the DHS/FEMA-approved extent-of-play agreement.
- h. LEVEL 1 FINDINGS: NONE
- i. LEVEL 2 FINDINGS: NONE
- j. 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 the State of Ohio and for Ottawa and Lucas County during the 2021 DBNPS Exercise. The ongoing COVID-19 Public Health Emergency and other disasters that occurred during 2021 presented the State of Ohio and Ottawa and Lucas 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 Ohio 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 Ohio, remains in effect.

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APPENDIX A: Improvement Plan

This appendix summarizes the results from the of the evaluation of all jurisdictions and functional entities that participated in May 4, 2021, Davis-Besse Nuclear Power Station (DBNPS), Radiological Emergency Preparedness Full Participation, Plume Exposure Pathway Exercise to test the offsite emergency response capabilities of State and local governments in the 10-mile Emergency Planning Zone (EPZ) surrounding the DBNPS, recommended corrective actions, and a schedule of corrective actions for the identified primary responsible agency.

The U. S. Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA) evaluation team identified no Level 1 or Level 2 Findings and no Plan Issues for the State of Ohio and for Ottawa and Lucas Counties during the 2021 DBNPS exercise..

The ongoing COVID-19 Public Health Emergency and other disasters that occurred during 2021 presented the State of Ohio and Ottawa and Lucas County 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® and Basecamp® collaboration software. In collaboration with DHS/FEMA Region V, Microsoft Teams® software was configured by the State of Ohio Emergency Management Agency and Ottawa and Lucas 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 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 Timeline

Date and Site: May 4, 2021 – Davis-Besse Nuclear Power Station

*All times in Eastern Daylight Time

Emergency Classification Level Event or Action	Time UTILITY Declared	Time that Notification Was Received or Action Was Taken								
		EOF	SEOC DA Group	SEOC EXEC Group	SEOC ASSESSMENT Group	SEOC OPS Group	OTTAWA County	LUCAS County	SEOC JIC	DBNPS JIC
Unusual Event:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alert:	0802	-----	0828	0830	0819	0819	0812	0815	-----	0841
Site Area Emergency:	1009	1010	1021	1021	1021	1021	1020	1022	1021	1021
General Emergency:	1123	1124	1136	1142	1140	1140	1138	1136	1151	1125
Release of Rad Material Started:	1120	1120	1121	1123	-----	-----	1121	1123	-----	1122
Release of Rad Material Terminated:	1250	1250	1252	-----	-----	-----	-----	-----	-----	-----
Facility Declared Operational:		0925	0858	0848			0837	0820	-----	0921
Declaration of State/Local Emergency: ⁵			1139	1125	1125	1125	1052	1053	-----	1134
Exercise Terminated: 1314 @ Utility ENDEX:		1314	1408 1408	1343	1350	1356	1314 1356	1315 1400	-----	1316
Early Precautionary Action Recommendations:										
1. Relocate School Children:		-----	0913	N/A	N/A	N/A	1031	0915	-----	1053
2. Restrict Boating Traffic: Lake		-----	0850/1035	0913	-----	-----	0913	0913	-----	1106
3. Restrict Air			Air: 0850	Air 0913	Air: 0913		Air: 0904	Air: 0907		
4. Rail Traffic: [3 notifications to RRs from SEOC DA – Initial Notification; Prohibit Entry into 10-mile EPZ. Prohibit Exit from 10-mile EPZ]		-----	[Notif'd] 0850 [No Entry] 1055 [No Exit] 1202	Rail 0913	Rail: 0913	-----	Rail: 0904	Rail: 0907	-----	1110
5. Close Parks: Wildlife Refuge		-----	0913	0913	0913	-----	0908	0920	-----	1106
6. Livestock Advisory:		-----	1050	1050	1050		1105	1055		1053
General Information Message Only: MSG B "Monitor EAS"		-----	1048	1048	-----	1048	1048	1053	-----	-----
1 st Siren Activation:		-----	1055	1055	1055	1055	1055	1055	-----	1055
1 st EAS/EBS Message: B		-----	1058	1058	1058	1058	1058	1058	-----	1058
1 st Protective Action Recommendation: State PAR[s] to County: Evacuate SAs: 1, 2, 10, 12 [@ 1205 EDT] Amended PAR: 1, 2, 3, 10, 11, 12 [@ 1221 EDT] KI to Gen. Pub. Sub-Areas: Same as Evacuated SAs		-----	1205 1221	1205 1221	1205 1221	1205 1221	1205 1222	1205 1222	-----	1206 -----

LEGEND: N/A = ECL/Event/Action Not Applicable at Location

----- = Time Not Reported

UNCLASSIFIED
Radiological Emergency Preparedness (REP) Program

Final After Action Report/Improvement Plan

Davis-Besse Nuclear Power Station

Date and Site: May 4, 2021 – Davis-Besse Nuclear Power Station

***All times are in Eastern Daylight Time**

Emergency Classification Level Event or Action	Time that Notification Was Received or Action Was Taken								
	EOF	SEOC DA Group	SEOC EXEC Group	SEOC ASSESSMENT Group	SEOC OPS Group	OTTAW A County	LUCAS County	SEOC JIC	DBNPS JIC
1st Protective Action Decision[s] –County PAD[s]: <input type="checkbox"/> No Action <input type="checkbox"/> Shelter-In-Place Sub-Areas [List]: <input checked="" type="checkbox"/> Evacuate Sub-Areas [List]: 1, 2, 3, 10, 11, 12 DRD Correction: No Change	-----	1210	1209	1209	1209	1209	1209	-----	1215
	-----	1210	1221	-----	-----	-----	-----	-----	1215
2nd Siren Activation:	-----	1215	1215	1215	1215	1215	1215	-----	1215
2nd EAS Message: D	-----	1218	1218	1218	1218	1218	1218	-----	1218
KI Administration Recommendation:									
Emergency Workers: Sub-Area[s]: 1, 2, 10, 12 1, 2, 3, 10, 11, 12	-----	1210 1221	1209 1221	1209 1221	1209 1221	1209 1221	1209 1221	-----	1215
Institutionalized Persons: Sub-Area[s]: 1, 2, 10, 12 1, 2, 3, 10, 11, 12	-----	1210 1221	1209 1221	1209 1221	1209 1221	1209 1221	1209 1221	-----	1215
General Public: Sub-Area[s]: 1, 2, 10, 12 1, 2, 3, 10, 11, 12	-----	1210 1221	1209 1221	1209 1221	1209 1221	1209 1221	1209 1221	-----	1215

LEGEND: N/A = ECL/Event/Action Not Applicable at Location

----- = Time Not Reported

APPENDIX C: Exercise Evaluation Team

SITE: Davis-Besse Nuclear Power Station

EXERCISE DATE: May 4, 2021

Exercise Management	Name	Agency/ Organization
Chair, Regional Assistance Committee	Sean O’Leary	DHS/FEMA
Exercise Director	Edward Golinski	DHS/FEMA
Assistant Exercise Director	Stephen Tulley	DHS/FEMA
Ohio Site Specialist	Carl Bebrich	DHS/FEMA
Ohio Site Specialist	Brian Reinhart	DHS/FEMA
Team Leader – State of Ohio	Carl Bebrich	DHS/FEMA
Team Leader – Ottawa County	Brian Reinhart	DHS/FEMA
Team Leader – Lucas County	Curtis Williams	DHS/FEMA
Contractor Evaluator Support – Regional Coordinator	Marcy Campbell	ICFI
Contractor Scenario Technical Reviewer	Jill Leatherman	ICFI

Evaluated Offsite Response Organizations/Locations	Evaluator	Agency/ Organization
State of Ohio		
Ohio – State EOC – Dose Assessment Room / ESF 10	Jill Leatherman	ICFI
Ohio – State EOC – Dose Assessment Room	Marcy Campbell	ICFI
Ohio – State EOC – Executive Room	Bruce Swiren	ICFI
Ohio – State EOC – Assessment Room / Operations Floor	Rebecca Thompson	ICFI
Ohio – State EOC – JIC – PIO	Tom Hegele	ICFI
Ohio – State EOC – MARCS Check / INP	Carl Bebrich	DHS/FEMA
Ohio – State Liaison – County EOC (RRA)	Cheryl Weaver	ICFI
Ohio – State Liaison – DBNPS Emergency Operations Facility (EOF)	Brad McRee	ICFI
Ohio – State Liaison – DBNPS Joint Information Center (JIC)	Debra Schneck	DHS/FEMA
Ohio – ODNr – DC Briefing / KI Distribution	Carl Bebrich	DHS/FEMA
Ohio – ODNr – Primary A&N Interview	Brian Reinhart	DHS/FEMA

Ottawa County		
Ottawa County – EOC – MARCS Check / Area Dosimetry	Brian Reinhart	DHS/FEMA
Ottawa County – EOC – Executive Room	David Persaud	DHS/FEMA
Ottawa County – EOC – Public Information	Meg Swearingen	ICFI
Ottawa County – EOC – INP / Assessment Room / TACP / Impediments	Todd Gemske	DHS/FEMA
Ottawa County – EOC – Assessment Room	Angela Cloutier	DHS/FEMA
Ottawa County – EOC – Radiological Briefing / Emergency Worker Interview	James King	DHS/FEMA
Ottawa County – EOC – A&N	Gary Goldberg	ICFI

Lucas County		
Lucas County – EOC – MARCS / INP	Curtis Williams	DHS/FEMA
Lucas County – EOC – Assessment Room	Reggie Rodgers	ICFI
Lucas County – EOC – Operations Room	Rosemary Samsel	ICFI
Lucas County – EOC – Evacuation Impediment / A&N	Michael Burris	ICFI
Lucas County – EOC – Radiological Briefing / Emergency Worker Interview	Todd Lawson	DHS/FEMA
Lucas County – EOC – Executive Room	William McDougall	ICFI

APPENDIX D: Acronyms

ACRONYM	DESCRIPTION
A&N	Alert and Notification
AAR	After Action Report
ARES	Amateur Radio Emergency Services
CFR	Code of Federal Regulations
COVID-19	Coronavirus Disease 2019 (COVID-19) - an infectious disease caused by severe acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2)
DA	Dose Assessment
DBNPS	Davis-Besse Nuclear Power Station
DHS	Department of Homeland Security
EAS	Emergency Alert System
ED	Exercise Director
EDT	Eastern Daylight Time
EMA	Emergency Management Agency
ENDEX	End of Exercise
EOC	Emergency Operation Center
EOF	Emergency Operations Facility
EoPA	Extent-of-Play Agreement
EPZ	Emergency Planning Zone
ESF	Emergency Support Functions
EW	Emergency Worker
FEMA	Federal Emergency Management Agency
GE	General Emergency
ICFI	ICF International
INP	Initial Notification Point
IP	Improvement Plan
JIC	Joint Information Center
KI	Potassium Iodide
MARCS	Multi-Agency Radio Communications System
NIMS	National Incident Management System
No.	Number
NRC	Nuclear Regulatory Commission
ODH	Ohio Department of Health
ODNR	Ohio Department of Natural Resources
ODA	Ohio Department of Agriculture
ODH	Ohio Department of Health
ODAT	Ohio Dose Assessment Team
ODOT	Ohio Department of Transportation
ODPS	Ohio Department of Public Safety
OPS	Operations

ACRONYM	DESCRIPTION
ORO	Offsite Response Organization
OSHP	Ohio State Highway Patrol
OSU	Ohio State University
Ohio EMA	Ohio Emergency Management Agency
OEPA	Ohio Environmental Protection Agency
OHNG	Ohio National Guard
OCAP	Ohio Civil Air Patrol
ORO	Offsite Response Organizations
OSLD	Optically Stimulated Luminescence Dosimeter
PAD	Protective Action Decision
PAG	Protective Action Guide
PAR	Protective Action Recommendation
PIO	Public Information Officer
RAC	Regional Assistance Committee
REP	Radiological Emergency Preparedness
RERP	Radiological Emergency Response Plan
RO	Radiological Officer
RRA	Resident Radiological Analyst
SAE	Site Area Emergency
TACP	Traffic and Access Control Point
TEDE	Total Effective Dose Equivalent
U.S.	United States
USCG	United States Coast Guard
Vol.	Volume

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APPENDIX E: Extent-of-Play Agreements

STATE OF OHIO OTTAWA COUNTY AND LUCAS COUNTY

DAVIS-BESSE NUCLEAR POWER STATION RADIOLOGICAL EMERGENCY PREPAREDNESS FULL PARTICIPATION PLUME EXPOSURE PATHWAY EXERCISE

MAY 4, 2021

2021

DAVIS-BESSE NUCLEAR POWER STATION

EVALUATED EXERCISE



State of Ohio

Extent of Play Agreement

Exercise Date: May 4, 2021

Revision Date: April 5, 2021

Overview

Introduction

This document constitutes the State of Ohio's Extent of Play Agreement for the 2021 Davis-Besse Nuclear Power Station (DBNPS) Radiological Emergency Preparedness (REP) Plume Pathway Exercise to be conducted on Tuesday, May 4, 2021. The exercise will be a Full Participation demonstration for the State of Ohio. This Extent of Play Agreement was developed in accordance with the January 2016 edition of the Federal Emergency Management Agency (FEMA) REP Program Manual.

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Acronyms

COVID-19	Coronavirus Disease 2019
DBNPS	Davis-Besse Nuclear Power Station
DRD	Direct Reading Dosimeter
ECL	Emergency Classification Level
EDT	Eastern Daylight Time
EMA	Emergency Management Agency
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EPA	Environmental Protection Agency
EPZ	Emergency Planning Zone
ESF	Emergency Support Function
FEMA	Federal Emergency Management Agency
FMT	Field Monitoring Team
INP	Initial Notification Point
IPX	Ingestion Pathway Exercise
JIC	Joint Information Center
KI	Potassium Iodide
MARCS	Multi-Agency Radio Communication System
MS	Microsoft
MSEL	Master Scenario Events List
N/A	Not Applicable
N/S	Not Selected
OCAP	Ohio Civil Air Patrol
ODA	Ohio Department of Agriculture
ODH	Ohio Department of Health
ODNR	Ohio Department of Natural Resources
OFCA	Ohio Fire Chiefs Association
ORO	Offsite Response Organization
OSHP	Ohio State Highway Patrol
PAD	Protective Action Decision
PAG	Protective Action Guide
PAR	Protective Action Recommendation
PIO	Public Information Officer
PRD	Permanent Reading Dosimeter
REP	Radiological Emergency Preparedness
RRA	Resident Radiological Analyst
SAE	Site Area Emergency
SSP	Sample Screening Point
USCG	United States Coast Guard

General Information

Background

Due to the COVID-19 Public Health Emergency, the Ohio State Emergency Operations Center (EOC) was activated March 9, 2020. During the initial three months of response, the Operations Floor, Executive Room, Dose Assessment Room, State Joint Information Center (JIC), and every available meeting space were occupied.

While the rooms housing Dose Assessment and the State JIC were returned to their normally inactive state at the end of May 2020, the Operations Floor and Executive Room remained partially active with many Emergency Support Functions (ESFs). By the end of June, the Operations Floor and Executive Room had transitioned to a virtual response.

With parts of the State EOC unavailable and the situation fluid, the State chose to partially participate in all exercises in 2020, demonstrating activities virtually. Therefore, the DBNPS exercise will be a full participation exercise for the State. All state activities will be demonstrated virtually.

While the State EOC eventually transitioned to a mostly virtual posture, a travel freeze state government employees was issued by the Governor in early 2020. At the time of revision, the freeze is still in effect and is unlikely to be lifted prior to the 2021 DBNPS exercise. The State of Ohio will mostly provide virtual support for this exercise.

The COVID-19 Public Health Emergency also resulted in a travel freeze for federal employees that is unlikely to be lifted in time for the DBNPS exercise. As a result, FEI will evaluate the exercise virtually.

In-Sequence Activities

The State of Ohio will fully participate in this exercise. In-sequence State Plume Phase activities will be conducted on Tuesday May 4, 2021, at the following locations:

- State Emergency Operations Center (EOC) including:
 - Executive Room (virtual)
 - Ohio EMA/ODH/Ohio EPA/DPS – virtual
 - Dose Assessment Room
 - Ohio EMA – in person
 - Ohio EMA/ODH/Ohio EPA – virtual
 - Assessment Room (in person)
 - Ohio EMA - virtual
 - State Joint Information Center (JIC)
 - Ohio EMA/ODH – virtual
 - Operations Floor
 - State agencies representing participating Emergency Support Functions (ESFs) – virtual
- DBNPS Emergency Operations Facility (EOF)

- Ohio EMA/ODH – in person
- DBNPS JIC
 - Ohio EMA/ODH – virtual
- Ottawa County EOC
 - Ohio EMA – in person
 - ODH/Ohio EPA – virtual

Out-of-Sequence Activities

On Thursday, May 6, 2021, the Ohio Department of Natural Resources (ODNR) Parks & Watercraft will demonstrate by virtual interview Alert and Notification and the clearing of Lake Erie at the Sandusky Watercraft Office at 10:00 am Eastern Daylight Time (EDT).

5.b.1 Partial Incident Credit

On July 22, 2020, FEMA approved the State's request for Incident Credit for Evaluation Criteria 5.b.1. The State provided detailed information for the public inquiry hotline operated by ODH during the early months of the COVID-19 response. The hotline remains in use at this time.

Disclaimer

All demonstration activities will be conducted in accordance with the January 2016 FEMA REP Program Manual except as noted in this agreement.

Exercise Scope

With the exception of the evaluation of public inquiry, the State will be evaluated for all criterion typically evaluated for a full participation plume exposure pathway exercise. Exceptions, simulations and changes from procedure are listed below and under the Evaluation Criteria section of this extent-of-play agreement.

Virtual Play

The Executive Room, Dose Assessment Room, Assessment Room, and State JIC will utilize Microsoft (MS) Teams to facilitate virtual play. Channels have been developed for each location.

The Public Information Officers (PIOs) from the State and the counties will be participating at the DBNPS JIC using MS Teams. The DBNPS JIC will have one computer in the work area. The State's JIC-JIS Channel will be open with both the camera and microphone on when news briefings are not in progress. Pre-briefing discussions amongst DBNPS personnel, the State PIO, the Lucas County PIO, and the Ottawa County PIO will be done in the presence of this computer. During media briefings, the computer will be muted.

Either a second computer will be located in the DBNPS JIC media area or the one from the work area will be carried to the media area. It will be located on the table where the PIOs would normally sit. The camera and microphone will be on during

press briefings. When press briefings are not in progress, this computer will be muted. To keep the “media” from seeing the PIOs or the work area, the screen and speakers will also need to be turned off.

The State EOC will be fully activated virtually with the exception of the ESFs listed in the “Simulation & Evaluation Notes” section.

ODNR Parks & Watercraft will be evaluated using MS Teams. However, instead of utilizing the channel structure, a meeting will be set up with the MS Teams link information and call in number attached.

**Evaluation -
Postponed**

On March 17, 2021, FEMA Region V approved the postponement of the evaluation of the Field Monitoring Team Operations, including Field Monitoring Team Coordination, Field Monitoring Teams, Sample Courier, and Sample Screening Team until later in 2021.

On March 24, 2021, FEMA Region V approved the postponement of the evaluation of the State Initial Notification Point (INP) staffed by the Ohio State Highway Patrol (OSHP) Dispatch Center. Evaluation of the INP will be postponed until later in 2021.

**Simulation,
Pre-
positioning &
Evaluation
Notes**

With special travel permissions, the Ohio EMA EOF Liaison and ODH EOF Liaison at the DBNPS Emergency Operations Facility (EOF) will be physically pre-positioned in the area to eliminate excessive drive time. Two Ohio EMA County EOC Liaisons will be present at the Ottawa County EOC. As it is a normal workday, they will be in their office at the Ottawa County EMA when the exercise starts.

The Assessment Room is responsible for the eNotify phone call and email to the 50-mile counties at Site Area Emergency (SAE). The notifications will not be simulated, provided the exercise proceeds to SAE. All further communications with the 50-mile counties will be simulated.

FMT data will be simulated utilizing Virtual Plume software. Data will be provided by a State of Ohio Controller acting as the FMT Coordinator. No “injects” will be created for review before the exercise as the data is provided from the software in “real time” with the exercise. As FMTs will not be demonstrated in-sequence during the exercise, the State of Ohio Controller will simulate management of the FMTs when communicating with the FMT Communicator. Postponement of the evaluation of Field Monitoring Activities to later in 2021 was approved by FEMA Region V on March 17, 2021.

All communications with the Governor’s Office will be simulated.

The primary and support agencies for ESF-6 at the State EOC will not be participating in the exercise due to COVID-19 related duties and other responsibilities. If an agency requires interaction with the ESF-6 agencies, it will be addressed by the SimCell.

ODH will support its ESF-10 responsibilities for this exercise. Ohio EPA will be unable to provide support to ESF-10. While Ohio EPA is the Primary Agency for ESF-10, ODH is the lead agency for the radiological event.

ESF-14, Recovery will not be participating at the State EOC for the exercise.

A SimCell will provide injects to the various ESFs. It will also receive all communications from the ESFs that would normally be made to outside the State EOC. For example if a call to restrict air traffic were necessary, ESF-1 Transportation would contact the ESF-1 SimCell Controller instead of calling the Federal Aviation Administration (FAA). A SimCell Controller will be provided for each ESF that is participating, with the exception of ESF-5, ESF-13, and ESF-15. The injects for these ESFs will be provided as pre-scheduled emails to the Ohio EMA Watch, OSHP Hub, and the State JIC Manager.

**Master
Scenario
Events List**

The State of Ohio will develop and implement a Master Scenario Events List (MSEL) sufficient to drive actual and simulated state play. Sufficient Controllers will be on hand to provide injects to drive the scenario. The State of Ohio will provide Controller injects and the MSEL to FEMA for review at least 30 days prior to the exercise.

**Off-Site
Timeline**

See the Off-site Timeline for anticipated state and county response.

**Re-
demonstration
Criteria**

Of the criteria the State will demonstrate, the following can be re-demonstrated immediately for credit, at the decision of the evaluator, include the following: 3.a.1.

Of the criteria the State will demonstrate, the following can be re-demonstrated as approved on a case-by-case basis by the Chairman of the Radiological Preparedness Coordinating Committee: 1.c.1, 2.a.1, 2.b.1, 2.b.2, 5.a.1, and 5.b.1.

Controllers may suspend play to address safety concerns, technical issues, confer with evaluators and players to address re-demonstration questions, schedule re-demonstration activities, with the approval of the Evaluator, and perform player retraining in support of re-demonstration.

Participating Organizations Off-Site Response Organizations (OROs) providing players and/or controllers in this exercise include:

- Michigan Department of Environment, Great Lakes, and Energy (EGLE)
- Ohio Amateur Radio Emergency Services (ARES)
- Ohio Civil Air Patrol (OCAP)
- Ohio Department of Agriculture (ODA)
- Ohio Department of Health (ODH)
- Ohio Department of Natural Resources (ODNR)
- Ohio Department of Transportation (ODOT)
- Ohio Department of Youth Services (DYS)
- Ohio Emergency Management Agency (Ohio EMA)
- Ohio Emergency Management Services (Ohio EMS)
- Ohio Environmental Protection Agency (Ohio EPA)
- Ohio Fire Chiefs Association (OFCA)
- Ohio Geographically Referenced Information Program (OGRIP)
- Ohio National Guard (OHNG)
- Ohio State University (OSU) Extension
- Public Utilities Commission of Ohio (PUCO)
- State Fire Marshal (SFM)
- US Coast Guard (USCG)

Controllers A SimCell will provide support to the Operations Floor ESFs. The SimCell will operate in its own channel. Controllers will contact their ESF through a Teams call to provide injects. For ESFs with multiple persons staffing it, instructions will be provided to include all member and any observers on the call. A SimCell Coordinator will be available to provide support and manage the SimCell Controllers.

Each location with a State of Ohio participant will be assigned a Controller whose function will be to ensure that exercise activities are conducted safely and remain on track relative to the scenario and exercise timeline. The Ottawa County EOC and the DBNPS EOF will be the exceptions.

The Ohio EMA Resident Radiological Analysts (RRAs) are the Ohio EOC/EOF Liaisons located at the Ottawa County EOC and the DBNPS EOF. Although players, they will be available to field questions from the FEMA evaluators. They are not “trusted agents.” If an issue arises, the Ohio EMA Lead Controller will be available by phone.

Controllers will provide injects to drive exercise play in concert with the MSEL and this extent-of-play agreement.

Public Notice The public notice will be published in the Toledo Blade on Sunday, April 25, 2021 and the Port Clinton News Herald on April 27, 2021.

Evaluation Area 1 – Emergency Operations Management

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

Locations/ Positions **In-sequence:** Assessment Room, Executive Room, State JIC, Dose Assessment Room, State EOC Operations Floor, Ottawa County EOC, DBNPS EOF, DBNPS JIC

Postponed: Postponement of the evaluation of Field Operations was approved by FEMA Region V on March 17, 2021. Postponement of the INP evaluation was approved by FEMA Region V March 24, 2021.

Extent of Play 1.a.1 **In-sequence** The State INP is the OSHP Dispatch Center. The Dispatch Center is not available for evaluation by FEMA. Postponement of the INP evaluation was approved by FEMA Region V March 24, 2021.

The Dispatch Center receives the initial notification over the DBNPS 4-Way Conference Bridge that is passcode protected. Phone communications will be assumed by the Formal Line Communicator in Dose Assessment once the position is staffed.

The agencies that have responsibilities in the State EOC will be activated at different Emergency Classification Levels (ECLs). Typically, the State JIC, Executive Room, Dose Assessment, and Assessment will activate at the Alert ECL. Note: The Assessment Room is always staffed.

All partner agencies are notified of an event at DBNPS beginning at Alert. For DBNPS, certain Emergency Support Functions (ESF) will be requested to staff the State EOC. However, any agency who has responsibilities at the State EOC may arrive and staff the Operations Floor at any time. Typically, the State EOC will be “officially” activated at Site Area Emergency. Different initiating events may trigger an activation of the State EOC at an earlier ECL.

The County EOCs, Utility JIC and EOF typically activate at Alert. Two Ohio EMA State Liaisons for the Ottawa County EOC will be on location before the exercise begins as it is their normal place of work. The State Liaisons assigned to the DBNPS EOF will be prepositioned in the area and arrive 10-20 minutes after they receive notification of an Alert to simulate travel time.

If a State Emergency Declaration is required, communication with the Governor’s Office will be simulated.

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Davis-Besse Nuclear Power Station

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

Locations **Not Selected (N/S):** State EOC facilities were successfully demonstrated during the 2018 Beaver Valley Power Station 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.

Locations **In-sequence:** Executive Room, Dose Assessment Room, Assessment Room, State EOC Operations Floor, Ottawa County EOC, DBNPS EOF
Out-of-sequence: N/A

In-sequence Extent of Play 1.c.1 **The Executive Director of Ohio EMA, acting as the EOC Director, is the Governor's Designee and will coordinate decisions on behalf of the Governor's Office from the Executive Room.**
The Ohio Department of Health (ODH) is responsible for the determining state Protective Action Recommendations (PARs) in the Dose Assessment Room and will provide periodic briefings to the Executive Group.
The State EOC Operations Floor activities and information will be coordinated by the Operations Section Chief and the EOC Manager. All ESFs will be represented except for ESF-6, Mass Care and ESF-14, Recovery, due to COVID-19 related activities.
ODH will support its ESF-10 responsibilities for this exercise. Ohio EPA will be unable to provide support to ESF-10. While Ohio EPA is the Primary Agency for ESF-10, ODH is the lead agency for the radiological event.
The Ohio EMA EOC Liaisons will provide guidance to the Ottawa County EOC Director and Commissioners.

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

Locations/Positions **In-sequence:** State JIC, Dose Assessment Room, Assessment Room, State EOC Operations Floor, Ottawa County EOC, DBNPS EOF, DBNPS JIC

Out-of-sequence: ODNR Parks & Watercraft

Postponed: Postponement of the evaluation of Field Operations was approved by FEMA Region V on March 17, 2021. Postponement of the INP evaluation was approved by FEMA Region V March 24, 2021.

**In-sequence
Extent of
Play
1.d.1** **The primary means of communications between the State EOC, the Ottawa County EOC, DBNPS JIC, and DBNPS EOF is by commercial telephone. Cell phones and MARCs radios are available as backup communications.**

A MARCs radio test will be scheduled for 8:00 am where the Assessment Room contacts both Lucas and Ottawa Counties.

**Out-of-sequence
Extent of
Play
1.d.1** ODNR Parks & Watercraft will discuss the different communication capabilities available both inland and on the boats.

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

Locations/Positions **In sequence:** State JIC, Dose Assessment Room, Assessment Room, ESF-10, State EOC Operations Floor, Ottawa County EOC, DBNPS EOF, DBNPS JIC

Out-of-sequence: ODNR Parks & Watercraft

Postponed: Postponement of the evaluation of Field Operations was approved by FEMA Region V on March 17, 2021. Postponement of the INP evaluation was approved by FEMA Region V March 24, 2021.

**In-sequence
Extent of
Play
1.e.1** **For most participants, documents such as maps will be available electronically. Most state employee accessing MS Teams for the exercise is connected using state laptops at their residences. Equipment, at locations where participants are physically present, may be viewed through MS Teams.**

Out-of-sequence ODNR Parks & Watercraft equipment will be available to view using MS Teams.

Extent of Play

1.e.1

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.

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.

Locations **In-sequence:** Dose Assessment Room, ESF-10 Desk
Out-of-sequence: N/A

In-sequence **Extent of Play** **2.a.1** **The Dose Assessment Room will consider US EPA Protective Action Guidelines (PAGs) and Administrative Limits to develop Protective Action Recommendations (PARs), including the administration of KI, based on their technical evaluation of the available data. PARs will be briefed to the Executive Room. Once approved the PAR will be relayed to the county EOCs. The state and counties will disseminate recommendations to their emergency workers.**

Field monitoring data will be provided to the FMT Communicator from a Controller acting as the FMT Coordinator. The data will be read from a Virtual Plumes software scenario provided by DBNPS.

Any use of KI will be simulated.

ESF-10 will demonstrate the authorization process for radiation exposure in excess of administrative limits. If the scenario does not drive the need for authorization, this will be demonstrated near or after the exercise is terminated. The time will be coordinated with the Controller and the Evaluator.

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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.
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Locations	In-sequence: Executive Room, Dose Assessment Room Out-of-sequence: N/A
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In-sequence Extent of Play 2.b.1	The Dose Assessment Room will evaluate the information from DBNPS and complete independent dose projections, as appropriate, based on that information and field monitoring data. ODH will evaluate the data and forward PARs to the Executive Room. Approved PARs will then be relayed to the county EOCs via a conference line.
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Criterion 2.b.2	A decision-making process involving consideration of appropriate factors and necessary coordination is used to make protective action decisions (PADs) for the general public (including the recommendation for the use of KI, if ORO policy).
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Locations	In-sequence: Executive Room Out-of-sequence: N/A
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In-sequence Extent of Play 2.b.2	The Governor, or his designee, will demonstrate the ability to approve or reject PARs based on technical information from the Dose Assessment Room. Recommendations concerning the use of KI for the general public, institutionalized individuals, and emergency workers are the responsibility of ODH. This recommendation is determined in the Dose Assessment Room in accordance with the ODH KI policy and will accompany the PAR.
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Coordination will take place in the Executive Room with Ottawa and Lucas Counties to inform them of the State PAR and ensure consideration of local needs. The counties are responsible for determining their PADs and its implementation.

Criterion 2.c.1	Protective action decisions are made, as appropriate, for groups of persons with disabilities and those with access/functional needs.
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Locations **In-sequence:** Dose Assessment Room, Executive Room
Out-of-sequence: N/A

In-sequence The recommendation to take KI is determined in the Dose Assessment Room in
Extent of accordance with the ODH KI policy and will accompany the PAR. Upon being briefed
Play to the Executive Room and approved by the EOC Director, it is then relayed to Ottawa
2.c.1 and Lucas Counties for consideration. The counties are responsible for making and
 implementing their own PADs.

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

Locations **Not Selected (N/S):** This criterion was successfully demonstrated during the 2019
 DBNPS Ingestion Pathway Exercise (IPX).

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

Locations **N/S:** This criterion was successfully demonstrated during the 2019 DBNPS IPX.

Evaluation Area 3 – Protective Action Implementation

Criterion The OROs issue appropriate dosimetry, KI, and procedures, and manage radiological
3.a.1 exposure to emergency workers in accordance with the plans/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. OROs maintain appropriate
 record-keeping of the administration of KI to emergency workers.

Locations/ Positions	In-sequence: Ottawa County EOC Out-of-sequence: ODNR Parks & Watercraft Postponed: Postponement of the evaluation of Field Operations was approved by FEMA Region V on March 17, 2021.
In-sequence Extent of Play 3.a.1	Direct Reading Dosimeters (DRDs), Permanent Record Dosimeters (PRDs) and KI will be issued to State of Ohio workers who have assignments in the 10-mile EPZ or could travel through a plume. Ingestion of KI, if recommended, will be simulated.
Out-of- sequence Extent of Play 3.a.1	The ODNR Parks & Watercraft Supervisor will issue dosimetry and KI to a crew member. Players will discuss the procedures for reading dosimeters and recording readings. They will also discuss the record-keeping for the administration of KI to emergency workers.
Criterion 3.b.1	KI and appropriate instructions are available if a decision to recommend use of KI is made. Appropriate record-keeping of the administration of KI for institutionalized individuals and the general public is maintained.
Locations	N/A: This is a county function.
Criterion 3.c.1	Protective action decisions are implemented for persons with disabilities and access/functional needs other than schools within areas subject to protective actions.
Locations	N/A: This is a county function.
Criterion 3.c.2	OROs/school officials implement protective actions for schools.
Locations	N/A: This is a county function.

Criterion 3.d.1	Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel.
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Locations	In-sequence: Assessment Room Out-of-sequence: N/A
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In-sequence Extent of Play 3.d.1	<p>Missions will be created for the Public Utilities Commission of Ohio (PUCO) to notify rail of the event and any restrictions on traffic.</p> <p>A mission will be created for ESF-1, Transportation to notify the Federal Aviation Administration to restrict air traffic within the 10-mile EPZ.</p> <p>With direction from the Executive Room, a mission will be created for ODNR to restrict boating traffic on navigable waterways and to clear Lake Erie of boating traffic within the 10-mile Emergency Planning Zone (EPZ).</p> <p>OSHP Sandusky Post would coordinate directly with County law enforcement to provide State resources for county Traffic and Access Control Point (T/ACP) support. (See county extent of play agreements to see the Sandusky Post will be participating.)</p>
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Criterion 3.d.2	Impediments to evacuation are identified and resolved.
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Locations	N/A: This is a county function.
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Criterion 3.e.1	The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk and agricultural production within the ingestion exposure pathway emergency planning zone for implementation of protective actions.
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Locations	N/S: This criterion was successfully demonstrated during the 2019 DBNPS IPX.
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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.
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Locations **N/S:** This criterion was successfully demonstrated during the 2019 DBNPS IPX.

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

Locations **N/S:** This criterion was successfully demonstrated during the 2019 DBNPS IPX.

Evaluation Area 4 – Field Measurement and Analysis

Criterion 4.a.1 [RESERVED]

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

Locations **Postponed:** Postponement of the evaluation of Field Operations was approved by FEMA Region V on March 17, 2021.

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.

**Locations/
Positions** **In-sequence:** Simulated field monitoring data will be provided by Controller inject.
Postponed: Postponement of the evaluation of Field Operations was approved by FEMA Region V on March 17, 2021.

**In-sequence
Extent of
Play 4.a.3** **Because the demonstration of FM Operations activities is postponed to later in 2021, simulated field monitoring data will be provided to the FMT Communicator from a State of Ohio Controller acting as the FMT Coordinator. The data will be provided from a Virtual Plumes software scenario provided by DBNPS.**

Criterion 4.b.1	Field teams (2 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.
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Locations	N/S: This criterion was successfully demonstrated during the 2019 DBNPS IPX.
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Criterion 4.c.1	The laboratory is capable of performing required radiological analyses to support protective action decisions.
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Locations	N/S: This criterion was successfully demonstrated during the 2019 DBNPS IPX.
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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 off-site 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.
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1. Identification of the state or local government organization and the official with the authority for providing the alert signal and instructional message
 2. Identification of the commercial nuclear power plant and a statement that an emergency situation exists at the plant
 3. Reference to REP-specific emergency information (e.g., brochures and information in telephone books) for use by the general public during an emergency
 4. A closing statement asking the affected and potentially affected population to stay tuned for additional information.
-

Locations	In-sequence: N/A: This is a county function. Out-of-sequence: ODNR Parks & Watercraft
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Out-of-sequence Extent of Play 5.a.1	The State will simulate notification of the public on Lake Erie (within the 10-mile EPZ) through the USCG, supported by ONDR Parks & Watercraft.
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Criterion 5.a.2	[RESERVED]
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Criterion 5.a.3	Backup alert and notification of the public is completed within a reasonable time following the detection by the ORO of a failure of the primary alert and notification system.
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Locations	N/A: This is a county function.
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Criterion 5.a.4	Activities associated with FEMA-approved exception areas (where applicable) are completed within 45 minutes of the initial decision by authorized offsite emergency officials to notify the public of an emergency situation.
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Locations	N/A: The State of Ohio has no FEMA-approved Exception Areas at this time.
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Criterion 5.b.1	OROs provide accurate subsequent emergency information and instructions to the public and the news media in a timely manner.
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Locations	In-sequence: State JIC, DBNPS JIC Out-of-sequence: N/A
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In-sequence Extent of Play 5.b.1	<p>On July 22, 2020, FEMA approved Actual Incident Credit for the Public Inquiry portion of 5.b.1 and it will not be evaluated.</p> <p>The staff at the State JIC will develop news releases, providing them to the State PIO at the DBNPS JIC, where they will be released to the news media and public. The State JIC will coordinate with the State PIO at the DBNPS JIC to provide accurate information clarifying trending rumors identified through Public Inquiry.</p>
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Evaluation Area 6 – Support Operation/Facilities

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Criterion 6.a.1	The reception center has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees and/or emergency workers.
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Locations	N/A: This is a county function.
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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.
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Locations	N/A: This is a county function.
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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.
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Locations	N/A: This is a county function.
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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.
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Locations	N/A: This is a county function.
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**State Emergency
Operations
Center**

Physically Present?	No
Contact	Chris Salz
Cell Phone	614-398-8811
Date	May 4, 2021

**Assessment
Room**

Physically Present?	Partial (Information Section Chief, Situation Unit Leader)
Physical Address	Ohio EMA 2855 West Dublin-Granville Road Columbus, Ohio 43235
Contact	Chris Salz
Cell Phone	614-398-8811
Date	May 4, 2021

**Dose
Assessment
Room**

Physically Present?	Partial (Formal Line Communicator, Radiological Assessment Branch Director)
Physical Address	Ohio EMA 2855 West Dublin-Granville Road Columbus, Ohio 43235
Contact	Chris Salz
Cell Phone	614-398-8811
Date/Time	May 4, 2021

Executive Room

Physically Present?	No
Contact	Chris Salz
Cell Phone	614-398-8811
Date	May 4, 2021

**State Joint
Information
Center**

Physically Present?	No
Contact	Chris Salz
Cell Phone	614-398-8811
Date	May 4, 2021

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**DBNPS Joint
Information
Center**

Physically Present?	No
Contact	Chris Salz
Cell Phone	614-398-8811
Date	May 4, 2021

DBNPS EOF

Physically Present?	Yes
Address	Lindsey Emergency Response Facility 1240 South Main Street Lindsey, Ohio 43442
Contact	Ed Filppi
Cell Phone	440-622-4751
Date	May 4, 2021

**Ottawa County
EOC**

Physically Present?	Yes
Address	315 Madison Street Port Clinton, OH 43452
Contact	John Woycitzky
Cell Phone	419-205-0969
Date	May 4, 2021

**ODNR – Division
of Parks &
Watercraft**

Physically Present?	Yes
Physical Address	ODNR Division of Parks and Watercraft 1407 Cleveland Road W Sandusky, OH 44870
Contact	John Woycitzky
Cell Phone	419-205-0969
Date/Time	May 6, 2021 10:00 am EDT

Davis-Besse Nuclear Power Station Radiological Emergency Response, Full Participation Plume Exposure Pathway Exercise 2021



Ottawa County, Ohio Extent of Play Agreement

Due to the Public Health Emergency in effect at the time of its development, this Extent of Play Agreement represents the minimal activities and staffing required to demonstrate the selected Evaluation Criteria.

This agreement will only be utilized if the County's Request for Exercise Exemption is not approved by the NRC and/or FEMA.

1. Introduction

This document constitutes Ottawa County's Extent of Play Agreement (EoPA) for the 2021 Davis-Besse Nuclear Power Station Full-Scale Radiological Emergency Preparedness Plume Exposure Pathway Exercise for Ottawa County and a Partial Participation Exercise for the State of Ohio to be conducted on May 4, 2021. This EoPA was developed by the Exercise Planning Team in consultation with FEMA and the January 2016 edition of FEMA REP Program Manual.

In order to comply with federal, state, and local guidance concerning the COVID-19 Public Health Emergency, Ottawa County will limit the number of Exercise Players who physically participate in EOC demonstration activities. The EOC will be treated as operational when key positions have been filled and the operational status of the EOC has been declared by the County Emergency Management Director. Some Players may participate virtually via computer-based systems, such as Microsoft Teams, or by landline telephones, and cellular telephones.

Federal evaluation of exercise activities will be conducted virtually by DHS/FEMA and Contractor personnel. Ottawa County will facilitate evaluation activities using Teams, telephonic, and audio/video equipment in key areas of the EOC, as negotiated with DHS/FEMA Region V.

Ottawa County will coordinate with Lucas County in accordance with plans and procedures to the extent feasible on the day of the exercise. Coordination activities may be simulated, if necessary, and will be explained to the applicable Evaluators during the course of the exercise.

The enumerated items below address the overall concept and conduct of the exercise and are followed by the Assessment Area-specific elements of the EoPA.

2. General Concepts

An emergency plan is drafted to address the generally expected conditions of an emergency. Not everything in the emergency plan may be applicable for a given scenario. The main purpose of an emergency plan is to assemble sufficient expertise and officials so as to properly respond to the events as they occur. The responders should not be so tied to a plan that they cannot take actions that are more protective of the public. Therefore, if, by not following the plan, the responders protect the public equally as well as provided in the plan, it should be noted for possible modification of the plan, but not classified as a negative incident. Furthermore, if by following the plan there is a failure to protect the public health and safety, it should be noted so that the appropriate assessment can be applied, and the plan can be modified.

3. Exercise Scope

The scope of the exercise is limited to demonstrations at the Ottawa County Emergency Operations Center (EOC), the Utility Joint Public Information Center/Joint Public Information System (JPIC/JIS), as described in this EoPA and the EoPA for the State of Ohio.

Except for *ad hoc* activities on the day of the exercise, the exercise has only In- Sequence demonstration activities.

In-Sequence Activities will occur during the day of the exercise, May 4, 2021, from approximately 0800-1500 Eastern Standard Time (EST). Ottawa County will participate in this exercise, sufficient to support the demonstrations described in this EoPA. The State of Ohio will partially participate sufficient to support Ottawa County response operations. (See State of Ohio Extent-of-Play Agreement).

In-Sequence activities will be conducted in Ottawa County at the following locations:

- County Initial Warning Point (at the County EOC)
- Emergency Operations Center (EOC)

Out of Sequence Activities: None – See Table 1 below.

4. Demonstration Windows

Demonstration windows are those periods of time designated in the exercise during which specified demonstrations will be accomplished.

The schedule of activities [including OROs, locations, dates, and times for In- Sequence, Field and Out-of-Sequence Play activities] are summarized in Table 1 below. Additional information is provided in Attachment 1.

Due to the pandemic, **there will be no out-of-sequence demonstrations.** All of the following ORO activities have met the requirements within the appropriate demonstration cycle.

Table 1 – Schedule of Activities

Activity	ORO / Location	Date / Time
MS-1 Hospital Exercise		Demonstration Later in 2021
Initial Notification	EOC – In Sequence	Tuesday May 4, 2021 8:00 a.m. – 9:00 a.m. EST
Ottawa County EOC Operations	Ottawa County EMA – In Sequence	Tuesday May 4, 2021 8:00 a.m. – 3:00 p.m.
Traffic/Access Control	EOC	Tuesday, May 4, 2021 - End of Exercise

Table 2 – Activities Successfully Demonstrated Successfully During the Current 8-Year Cycle

Activity	ORO / Location	Date / Time
Protective Action Decisions are Implemented for Persons with Disabilities and Access/Functional Needs other than Schools – Interview		Successfully Demonstrated April, 2019
EV-2 School Interview		Successfully Demonstrated April, 2019
Backup Alert and Notification of the Public		Successfully Demonstrated April, 2019
Reception Center – Evacuee & Evacuee Vehicle Mon / Decon		Successfully Demonstrated May, 2017
Emergency Worker Mon/Decon Center		Successfully Demonstrated May, 2017
Congregate Care Center		Successfully Demonstrated May, 2017

FEMA NOTE: Due to the virtual conduct of this exercise, the demonstration window for some activities will be conducted *ad hoc* by Controller-facilitated Evaluator/Player interviews so as to avoid interference with other Player response actions. These activities may include Communications, Dosimetry Coordinator Briefings, Media Briefings, and Impediment Interviews. In addition, Evaluators may need to conduct specific Player interviews to clarify actions taken during the exercise. These interviews will be coordinated with the County Evaluation Team Leader and the Controller to schedule interview windows on the day of the exercise.

5. Re-demonstrations

During the week of exercise play, ORO Participants may re-demonstrate for credit any applicable activity that the ORO or FEMA determines was not performed satisfactorily. To the extent feasible, such redemonstrations will be conducted on May 4, 2021, as follows:

Criteria that can be demonstrated during this exercise and that can be re-demonstrated immediately for credit, at the decision of the Evaluator, include the following:

3.a.1 and 3.b.1

Criteria that may be re-demonstrated, as approved on a case-by-case basis by the Chairman of the DHS/FEMA Region 5 Radiological Assistance Committee, include the following:

2.a.1, 2.b.2, 3.d.2, 5.a.1 and 5.b.1.

Re-demonstrations will be negotiated between the Lead Controller, Lead FEMA Evaluator and the ORO and conducted only when the corrective action would not interfere with the flow of the exercise. Refresher training may be provided by ORO personnel and/or Controllers.

It is permissible to extend the evaluation time to accommodate re-demonstration. Issues resolved as the result of a re-demonstration will be noted as findings resolved through re-demonstration.

6. Offsite Response Functions, Ottawa County:

Emergency Operations Center

- Emergency Operations Management
- Protective Action Decision-Making
- Protective Action Implementation - limited
- Emergency Notification & Public Information
- Support Operations/Facilities

7. Participating Organizations

County and local Offsite Response Organizations that will participate in this exercise may include but are not limited to the following:

<u>Organization</u>	<u>Participation Mode</u>
• Ottawa County Emergency Management Agency	P / V
• Ottawa County Board of Commissioners	P
• Ottawa County Sheriff's Office	P
• Ottawa County Engineer's Office	P
• Ottawa County Public Information	P

P = Physical

V = Virtual [telephone]

FEMA NOTE: Contact by EOC Players with other OROs listed above in "Participating Organizations" may be actual [via routine communications channels] or simulated. Contact will be in accordance with plans and procedures, and, to the extent feasible, times of contact will be noted in position checklists and activity logs, copies of which will be provided to the FEMA Evaluation Team following the exercise.

8. Coordination between Ottawa and Lucas Counties.

- To the extent possible, Protective Action Decisions will be discussed by the affected counties and the State of Ohio.
- Protective Action Decisions will be reached by each county.
- To the extent possible, EAS messages and siren soundings will be coordinated by the affected counties.

9. Exercise Controllers:

Davis-Besse Nuclear Power Station will coordinate with the Ohio EMA Resident Radiological Analyst, a trusted agent, who will assist Evaluators and provide necessary injects. The Trusted Agent may interact with Players to the extent necessary to fulfill their responsibilities, but coaching of Players is not permitted, except to provide training to Players awaiting a re-demonstration. Re-demonstration can only occur with FEMA approval [see #5 above].

10. FEMA Evaluators:

Federal Evaluators will NOT be present at the Ottawa County EOC. Evaluation of Player response to the actual and simulated events in the exercise scenario will be conducted virtually. FEMA will provide a list of Evaluators and identify lead personnel.

11. Players

Whether participating physically or virtually, Players are encouraged to use and share any available resources (e.g., written plans, procedures and checklists and/or consult with co-workers) in providing responses to Evaluators.

12. Demonstration Criteria impacted by No/Minimal Release and/or Limited EAL Escalations:

A no/minimal release scenario would not necessarily require Protective Action Recommendations and Protective Action Decisions (PARs/PADs), including the use of KI, to limit the exposure of the public and/or emergency workers. These Evaluation Criteria will be met as long as the decision-making process is adequately demonstrated in accordance with plans and procedures and the result is consistent with the exercise scenario. Demonstration Criteria impacted by this type of scenario will be demonstrated per guidance provided in the January 2016, REP Program Manual, Part IV, Section G.

13. Termination

The Lead Controller in the Ottawa County EOC will coordinate termination of the Exercise with the FEMA Exercise Director and Evaluation Team Leader, the DBNPS EOF and any other participating DBNPS components, the State of Ohio EOC, and the Lucas County EOC. If necessary, exercise play may continue beyond termination by the DBNPS in order to accommodate completion of ORO demonstration/re-demonstration activities.

ASSESSMENT AREA 1 – EMERGENCY OPERATIONS MANAGEMENT

Sub-element 1.a – Mobilization

Criterion 1.a.1: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner. (NUREG-0654/FEMA-REP-1, A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; H.3, 4)

EXTENT OF PLAY

- Demonstrate the capability to receive notification of an emergency situation from the Licensee.
- Demonstrate the activation of facilities for immediate use by mobilized personnel when they arrive to begin emergency operations. (See attachment)

- Activation of facilities will be completed in accordance with the plan and/or procedures.

Sub-element 1.b – Facilities

Criterion 1.b.1: Facilities are sufficient to support the emergency response. (NUREG-0654/FEMA-REP-1, H.3; G.3.a; J.10.h; J.12; K.5.b)

EXTENT OF PLAY

Not Selected – Previously demonstrated in accordance with FEMA guidance.

Sub-element 1.c – Direction and Control

Criterion 1.c.1: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible. (NUREG-0654/FEMA-REP-1, A.1.d; A.2.a, b; A.3; C.4, 6)

EXTENT OF PLAY

- Leadership personnel will demonstrate the ability to carry out essential functions of the response effort, for example: keeping the staff informed through periodic briefings and/or other means, coordinating with other appropriate response organizations, and ensuring timely completion of requirements and requests.
- To the extent possible, EAS messages and siren soundings will be coordinated with Lucas County.

Sub-element 1.d – Communications Equipment

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. (NUREG-0654/FEMA-REP-1, F.1, 2)

EXTENT OF PLAY

- Demonstrate the availability and operability of a primary and at least one backup system at the beginning of an exercise.
- Telephone and radio communications will be available at the EOC throughout the demonstration. At least one means of communication will be operable throughout all other demonstrations.
- Demonstrate the capability to manage the communication systems and ensure that all message traffic is handled timely without undue delays that might

disrupt the conduct of emergency operations.

Sub-element 1.e – Equipment and Supplies to Support Operations

Criterion 1.e.1: Equipment, maps, displays, monitoring instruments, dosimetry, potassium iodide (KI) and other supplies are sufficient to support emergency operations (NUREG- 0654/FEMA-REP-1, H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b)

EXTENT OF PLAY

- Dosimetry and KI have been pre-distributed to ORO's in Ottawa County. An extension letter for KI should be present at each facility. If not, a copy will be made available to the FEMA Evaluation Team by the Ottawa County EMA.
- The FEMA RAC Chair has granted Ohio permission to defer annual equipment exchange through 2021. Therefore, inspection of all equipment will not be demonstrated as a time saving measure.
- Sufficient quantities of direct-reading and permanent record dosimetry are available for issuance to additional emergency workers, if needed.
- Radiation Monitoring Kits and Dosimetry are exchanged annually. Documentation was included in the 2020 Annual Letter of Certification. and will also be made available electronically by the Ottawa County EMA.

The FEMA Evaluation Team will not be physically present at the Ottawa County EOC to inspect radiological equipment records. If the records have been updated since the ALC was submitted, Ottawa County will electronically provide a copy of the updated records to FEMA at least 30 days prior to the exercise.

- The Ohio Department of Health (ODH), through local health departments, makes KI available to the general public. KI for the General Public is also stockpiled at the County Health Department. An extension letter for KI should be present at each facility. If not, a copy is available at Ottawa County EMA and Ottawa County Health Department.

ASSESSMENT AREA 2 – PROTECTIVE ACTION DECISION- MAKING

Sub-element 2.a – Emergency Worker Exposure Control

Criterion 2.a.1: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for emergency workers, including provisions to authorize radiation exposure in excess of administrative limits or protective action guides. (NUREG-0654/FEMA-REP-1, C.6; J.10. e, f; K.4)

EXTENT OF PLAY

- The capability to make decisions concerning the authorization of Emergency Worker exposure levels in excess of pre-authorized levels will be procedurally discussed.
- Dosimeter packets that include KI are pre-distributed to OROs yearly, the packets are given to emergency workers as per the organization's SOG, as needed.
- The Ohio Department of Health is responsible for recommending the taking of KI.
- Should the scenario dictate a Direct-Reading Dosimeter (DRD) correction factor for the emergency workers, the reduction factors will be limited to emergency workers within the 10-mile EPZ. DRD correction factors are established by the Ohio Department of Health. (See the State of Ohio Extent-of-Play Agreement for details concerning the State's role regarding this criterion.)
- The decision to ingest or to not ingest KI will be driven by the scenario.
- This criterion will be met as long as the appropriate decision-making process is demonstrated, and the result is consistent with the exercise scenario.
- Area dosimetry will be utilized in the Ottawa County EOC [see Criterion 3.a.1 for additional information].

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

Criterion 2.b.1: Appropriate protective action recommendations (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. (NUREG-0654/FEMA-REP-1, I.10 and Supplement 3)

EXTENT OF PLAY

N/A – This criterion is a State function. The county relies on the State of Ohio and Davis-Besse Nuclear Power Station.

Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make protective action decisions (PADs) for the general public (including the recommendation for the use of KI, if ORO policy). (NUREG-0654/FEMA- REP-1,A.3; C.4, 6; D.4; J.9; J.10.f, m)

EXTENT OF PLAY

- Utility and State Protective Action Recommendations will be received and assessed by the county.
- A decision-making process involving “consideration of appropriate factors and necessary coordination” will be used to make Protective Action Decisions “as appropriate” for the general public (including the recommendation for the use of KI).
- The County will demonstrate the capability to communicate the contents of decisions to the affected jurisdictions.
- To the extent possible, Protective Action Decisions will be coordinated with the affected counties and states.
- The Ohio Department of Health (ODH) makes KI available to the general public through local health departments. KI for the General Public is also stockpiled at the County Health Department.
- The County will demonstrate the capability to implement ODH’s KI Protective Action Recommendations for the general public. This action is scenario driven. If the scenario utilized for the exercise does not drive the process, this criterion

may be demonstrated by Controller-facilitated discussion. State and county representatives will participate in this discussion together and/or via conference line (as appropriate) to allow for fuller exploration of the topic.

- This criterion will be met as long as an appropriate decision-making process is demonstrated, and the result is consistent with the exercise scenario.

Sub-element 2.c – PAD Consideration for the Protection of Persons with Disabilities and Access/Functional Needs

Criterion 2.c.1: Protective action decisions are made, as appropriate, for groups of persons with disabilities and access/functional needs. (NUREG-0654/FEMA-REP-1, D.4; J.9; J.10.d, e)

EXTENT OF PLAY

- A list of people with access/functional needs (mobility impaired, hearing impaired, etc.) is maintained by the Ottawa County Health Department, in coordination with the Ottawa County EMA, for use in an emergency.
- A Functional Needs List will be provided to Ottawa County EMA since the Ottawa County Health Department Liaison and Fire/EMS Liaison will not be present in the EOC.
- This criterion will be met as long as the decision-making process is demonstrated, and the result is consistent with the exercise scenario.

Sub-element 2.d. – Radiological Assessment and Decision Making for the Ingestion Exposure Pathway.

Criterion 2.d.1: Radiological consequences for the ingestion pathway are assessed and appropriate protective action decisions are made based on the ORO's planning criteria. (NUREG-0654/FEMA-REP-1, A.3; C.1, 4; D.4; J.9,11)

EXTENT OF PLAY

N/A –This criterion is a State function and is not applicable to this plume exposure pathway exercise.

Sub-element 2.e. – Radiological Assessment and Decision Making Concerning Post- Plume Phase Relocation, Reentry, and Return

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. (NUREG-0654/FEMA- REP-1, I.10; J.9; K.3.a; M.1)

EXTENT OF PLAY

N/A –This criterion is a state function and is not applicable to this plume exposure pathway exercise.

ASSESSMENT AREA 3 – PROTECTIVE ACTION IMPLEMENTATION

Sub-element 3.a – Implementation of Emergency Worker Exposure Control

Criterion 3.a.1: The OROs issue appropriate dosimetry, KI, and procedures and manages radiological exposure to emergency workers in accordance with the plans/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. OROs maintain appropriate record-keeping of the administration of KI to emergency workers. (NUREG-0654/FEMA-REP-1,J.10.e; K.3.a, b; K.4)

EXTENT OF PLAY

- The County RO will issue dosimetry and conduct a radiological briefing to representatives in the Ottawa County EOC.
- By interview, the Radiological Officer will demonstrate the actions described in the procedures to determine whether to replace a worker, authorize a worker to incur additional exposure or to take other actions.
- If the scenario does not require the taking of KI the Radiological Officer will describe the procedure to maintain a list of emergency workers who have ingested KI, including the date(s), time(s) they were instructed to ingest KI. Players will not actually ingest KI as part of their demonstration.
- The County Radiological Officer will coordinate with Dosimetry Coordinators to monitor radiological exposure by county emergency workers.
- Should the scenario dictate a reduction factor for the emergency worker exposure limit, the reduction will be limited to emergency workers within the EPZ
- Area dosimetry will be utilized in the Ottawa County EOC according to Plans and SOG's.
- Emergency workers who are deployed within the 10-Mile EPZ will receive dosimetry and a radiological briefing in accordance with State and Ottawa

County emergency plans/procedures.

Sub-element 3.b – Implementation of KI Decision for Institutionalized Individuals and the General Public

Criterion 3.b.1: KI and appropriate instructions are available if a decision to recommend use of KI is made. Appropriate record-keeping of the administration of KI for institutionalized individuals and the general public is maintained. (NUREG- 0654/FEMA-REP-1, J.10.e, f)

EXTENT OF PLAY

- When KI is distributed, the package insert is included. These instructions list the recommended doses for KI, potential side-effects, and conditions under which KI should not be taken.
- The Ohio Department of Health makes the recommendation to take KI.
- This criterion will be met as long as the implementation process is demonstrated, and the result is consistent with the exercise scenario.

Sub-element 3.c – Implementation of Protective Actions for Persons with Disabilities and Access/Functional Needs

Criterion 3.c.1: Protective action decisions are implemented for persons with disabilities and access/functional needs other than schools within areas subject to protective actions. (NUREG-0654/FEMA-REP-1, J.10.c, d, e, g)

EXTENT OF PLAY

Not Selected. This criterion is required not less than once per 8-year cycle. This criterion was successfully demonstrated in April 2019. Preparation for implementation of a decision under 2.c.1 will be demonstrated.

Criterion 3.c.2: OROs/School officials implement protective actions for schools. (NUREG-0654/FEMA-REP-1, J.10.c, d, e, g)

EXTENT OF PLAY

Not Selected. This criterion is required not less than once per 8-year cycle. This criterion was successfully demonstrated in April 2019.

The EOC will demonstrate this criterion per the biennial exercise requirement.

Sub-element 3.d. – Implementation of Traffic and Access Control

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to implement protective action plans/procedures, including relocation and restriction of access to evacuated/sheltered areas. This

Sub-element focuses on selecting, establishing, and staffing of traffic and access control points, and removal of impediments to the flow of evacuation traffic.

Criterion 3.d.1: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel. (NUREG- 0654/FEMA-REP-1, A.3; C.1,4; J.10.g, j)

EXTENT OF PLAY

- In accordance with the RERP and SOGs, major traffic intersections are controlled by the Ottawa County Sheriff's Office, with support from the Ohio State Highway Patrol, local police departments and the Ohio National Guard.
- If assistance is required to perform traffic control, clearing roads, or removing stalled vehicles, it is requested from the State through the Ohio EMA.
- Those pre-designated access control points necessary to control access to an affected area will be activated (SIMULATED). Personnel from the Sheriff's Office, Ohio State Highway Patrol, local police departments, Ohio National Guard, and/or ODNR – supported by access control equipment from the County Engineer Highway Garage and Ohio Department of Transportation – ensure that unauthorized vehicles do not enter the evacuated areas.
- Remaining Traffic Control and Access Control Points shall be demonstrated virtually at the Ottawa County EOC by:
 - ◆ Ottawa County Sheriff Liaison
 - ◆ Ottawa County Engineer Liaison
 - ◆ Ohio Department of Transportation Liaison
 - ◆ Ohio State Highway Patrol Liaison
- The Ottawa County Engineer will be available for interview following the exercise at the Ottawa County EOC on Tuesday, May 4, 2021.

Criterion 3.d.2: Impediments to evacuation are identified and resolved. (NUREG-0654/FEMA-REP-1, J.10.k)

EXTENT OF PLAY

- Ottawa County Sheriff's Office, Ottawa County Engineer's Office, will demonstrate in the Ottawa County EOC the capability to:
 - ◆ Identify impediments to evacuation.
 - ◆ Implement appropriate actions to remove or otherwise deal with impediments and reroute traffic.

- ◆ Coordinate with Public Information Liaison for public notification regarding rerouting.
- Controller injects will identify impediment(s) that will impact evacuation routes necessitating re-routing traffic and drive further discussion. Actual resources will not be utilized.

Sub-element 3.e – Implementation of Ingestion Pathway Decisions

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. (NUREG-0654/FEMA-REP-1, A.3; C.1, 4; J.11)

EXTENT OF PLAY

N/A – This criterion is a State function and is not applicable to this plume exposure pathway 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. (NUREG-0654/FEMA-REP-1, G.1, J.9, 11)

EXTENT OF PLAY

N/A – This criterion is a State function and is not applicable to this plume exposure pathway exercise.

Sub-element 3.f – Implementation of Post-Plume Phase Relocation, Reentry, and Return Decisions

Criterion 3.f.1: Decisions regarding controlled reentry of emergency workers and relocation and return of the public during the post-plume phase are coordinated with appropriate organizations and implemented. (NUREG-0654/FEMA-REP-1, E.7; J.10.j; J.12; K.5.b; M.1, 3)

EXTENT OF PLAY

N/A – This criterion is a state function and is not applicable to this plume exposure pathway exercise.

ASSESSMENT AREA 4: FIELD MEASUREMENTS AND ANALYSIS

Sub-element 4.a – Plume Phase Field Measurements and Analyses

Criterion 4.a.1: [RESERVED]

Criterion 4.a.2: Field teams (2 or more) are managed to obtain sufficient information to help characterize the release and to control radiation exposure. (NUREG-0654/FEMA-REP-1, C.1; H.12; I.7, 8, 11; J.10.a)

EXTENT OF PLAY

N/A – This criterion is a State function

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. (NUREG-0654/FEMA-REP-1, C.1; H.12; I.8, 9; J.10.a)

EXTENT OF PLAY

N/A – This criterion is a State function.

Sub-element 4.b – Post-Plume Phase Field Measurements and Sampling

Criterion 4.b.1: The field teams (2 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. (NUREG-0654/FEMA-REP-1, C.1; I.8; J.11)

EXTENT OF PLAY

N/A – This criterion is a State function.

Sub-element 4.c – Laboratory Operations

Criterion 4.c.1: The laboratory is capable of performing required radiological analyses to support protective action decisions. (NUREG-0654/FEMA-REP-1, C.1, 3; J.11)

EXTENT OF PLAY

N/A – This criterion is a State function.

ASSESSMENT AREA 5 – EMERGENCY NOTIFICATION AND PUBLIC INFORMATION

Sub-element 5.a – Activation of the Prompt Alert and Notification System

Criterion 5.a.1: Activities associated with primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized off-site emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include as a minimum the elements required by current FEMA REP guidance. (NUREG-0654/FEMA-REP-1, E.5, 6, 7)

EXTENT OF PLAY

- Identification of the state or local government organization and the official with the authority for providing the alert signal and instructional message.
- Identification of the commercial nuclear power plant and a statement that an emergency situation exists at the plant.
- Reference to REP-specific emergency information (e.g., brochures and information in telephone books) for use by the general public during an emergency.
- A closing statement asking the affected and potentially affected population to stay tuned for additional information.

EXTENT OF PLAY

- Siren activation will be simulated.
- EAS messages will be prepared and provided to the LP 1 Station in accordance with the RERP and SOG. EAS Messages are transmitted electronically from the Ottawa County EOC to the LP-1 Station via telephone lines utilizing the SAGE ENDEC encoder. The Ottawa County ENDEC encoder provides a printout verifying that the message was sent.

- A copy of each EAS message generated during the exercise will be provided electronically to the FEMA Evaluation Team Leader. The LP-1 ENDEC encoder provides a printout verifying receipt of the message. A copy of the verified message will be provided to the Evaluator. EAS messages will be recorded but not actually broadcast. The designated LP-1 EAS Station is as follows:

◆ WRVF 101.5 FM Radio Tuesday, May 4, 2021

Criterion 5.a.2: [RESERVED]

Criterion 5.a.3: Backup alert and notification of the public is completed within a reasonable time following the detection by the ORO of a failure of the primary alert and notification system. (NUREG-0654/FEMA-REP-1, E.6, Appendix 3.B.2.c)

EXTENT OF PLAY

Not Selected. This criterion is required not less than once per 8-year cycle. This criterion was last demonstrated in April 2019.

Criterion 5.a.4: Activities associated with FEMA-approved exception areas (where applicable) are completed in a timely manner following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. (NUREG-0654/FEMA-REP-1, E.6; Appendix 3.B.2.c)

EXTENT OF PLAY

N/A – Exception Areas do not exist in Ottawa County.

Sub-element 5.b – Subsequent Emergency Information and Instructions for the Public and the Media

Criterion 5.b.1: OROs provide accurate subsequent emergency information and instructions to the public and the news media in a timely manner. (NUREG- 0654/FEMA-REP-1, E.5, 7; G.3.a, G.4.a, c)

EXTENT OF PLAY

- In accordance with the RERP and SOGs, the DBNPS JIC will be activated (virtually) and virtually staffed by PIOs from Ottawa County, Lucas County, the State, Federal Agencies and the Utility upon declaration of an ALERT.
- The Ottawa County PIO will serve as the primary contact point for all public information related matters within the Ottawa County EOC.
- The Ottawa County PIO will be available for media briefings and participate virtually, as appropriate.

- A public inquiry telephone will be used to allow public inquiry staff to demonstrate the capability to identify trends in rumors (e.g., frequently expressed false or misleading information). The Public Inquiry staff will demonstrate the capability to provide or obtain accurate information for callers or refer them to an appropriate source. Information from the hotline staff, including information that corrects false or inaccurate information when trends are noted, will be included as appropriate in emergency information provided to the public, media briefings and/or media releases.
- Social Media will not be evaluated.
- The County will ensure that emergency information and instructions are consistent with protective action decisions made by appropriate officials. The emergency information will contain necessary and applicable instructions to assist the public in carrying out protective action decisions provided to them.

ASSESSMENT AREA 6 – SUPPORT OPERATIONS FACILITIES

Sub-element 6.a – Monitoring, Decontamination, and Registration of Evacuees

Criterion 6.a.1: The reception center facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees. (NUREG-0654/FEMA-REP-1, A.3; C.4; J.10.h; J.12)

EXTENT OF PLAY

Not Selected. This criterion is required not less than once per 8-year exercise cycle. This criterion was last demonstrated in May 2017.

Sub-element 6.b – Monitoring and Decontamination of Emergency Workers and their Equipment and Vehicles

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.(NUREG-0654/FEMA-REP-1, K.5.a, b)

EXTENT OF PLAY

Not Selected. This criterion is required not less than once per 8-year exercise cycle. This criterion was last demonstrated in May 2017.

Sub-element 6.c – Temporary Care of Evacuees

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. (NUREG- 0654/FEMA-REP-1, J.10.h, J.12)

EXTENT OF PLAY

Not Selected. This criterion is required not less than once per 8-year exercise cycle. This criterion was last demonstrated in May 2017.

Sub-element 6.d – Transportation and Treatment of Contaminated Injured Individuals

Criterion 6.d.1: The facility/ORO has the appropriate space, adequate resources, and trained personnel to provide transport, monitoring, decontamination, and medical services to contaminated injured individuals. (NUREG-0654/FEMA-REP-1, F.2; H.10; K.5.a, b; L.1, 4)

Extent of Play:

Out of sequence. Ottawa County will demonstrate Criterion 6.d.1 on a later date in Calendar Year 2021, with the date, time, and extent-of-play details to be coordinated with FEMA Region V.

Demonstration Locations

EMERGENCY OPERATIONS CENTER	
Address	Ottawa County Emergency Management Agency 315 Madison Street Port Clinton, OH 43452
Telephone	419-734-6900

Termination of Exercise Play

- The Lead Controller in the Ottawa County EOC will coordinate the Emergency Phase termination with the DBNPS EOF and any other participating DBNPS components, FEMA Exercise Director, the State of Ohio EOC, and the Lucas County EOC. If necessary, exercise play may continue beyond termination by the DBNPS in order to accommodate completion of ORO demonstration/re-demonstration.
- Lead Controllers at any location can suspend activities for health and safety reasons and real world events.

Attachment: Mobilization

The following positions will be notified/mobilized in accordance with SOG

- Ottawa County EMA
- Ottawa County Sheriff
- Ottawa County Engineer
- Ottawa County Commissioner
- Ottawa County 4-Way Communicator
- Ottawa County Public Information Staff
- Ottawa County Support Staff
- Resident Radiological Analyst

Davis-Besse Nuclear Power Station Radiological Emergency Response, Plume Exposure Pathway Exercise 2021



Lucas County, Ohio Extent of Play Agreement 4/5/2021

Due to the Public Health Emergency in effect at the time of its development, this Extent of Play Agreement represents the minimal activities and staffing required to demonstrate the selected Evaluation Criteria.

This agreement will only be utilized if the County's Request for Exercise Exemption is not approved by the NRC and/or FEMA.

1. Introduction

This document constitutes Lucas County's Extent of Play Agreement (EoPA) for the 2021 Davis-Besse Nuclear Power Station Full-Scale Radiological Emergency Preparedness Plume Exposure Pathway Exercise for Lucas County and a Partial Participation Exercise for the State of Ohio to be conducted on May 4, 2021. This EoPA was developed by the Exercise Planning Team in consultation with FEMA and the January 2016 edition of FEMA REP Program Manual.

In order to comply with federal, state, and local guidance concerning the COVID-19 Public Health Emergency, Lucas County will limit the number of Exercise Players who physically participate in EOC demonstration activities. The EOC will be treated as operational when key positions have been filled and the operational status of the EOC has been declared by the County Emergency Management Director. Some Players may participate virtually via computer-based systems, such as Microsoft Teams, Basecamp, and Zoom, or by landline telephones, and cellular telephones. At times, players may deviate from the communication method listed in the Lucas County REP plan as they adapt to the virtual environment.

Federal evaluation of exercise activities will be conducted virtually by DHS/FEMA and Contractor personnel. Lucas County will facilitate evaluation activities using Teams, Basecamp, telephonic, and audio/video equipment in key areas of the EOC, as negotiated with DHS/FEMA Region V.

Lucas County will coordinate with Ottawa County in accordance with plans and procedures to the extent feasible on the day of the exercise. Coordination activities may be simulated, if necessary, and will be explained to the applicable Evaluators during the course of the exercise.

The enumerated items below address the overall concept and conduct of the exercise and are followed by the Assessment Area-specific elements of the EoPA.

2. General Concepts

An emergency plan is drafted to address the generally expected conditions of an emergency. Not everything in the emergency plan may be applicable for a given scenario. The main purpose of an emergency plan is to assemble sufficient expertise and officials so as to properly respond to the events as they occur. The

responders should not be so tied to a plan that they cannot take actions that are more protective of the public. Therefore, if, by not following the plan, the responders protect the public equally as well as provided in the plan, it should be noted for possible modification of the plan, but not classified as a negative incident. Furthermore, if by following the plan there is a failure to protect the public health and safety, it should be noted so that the appropriate assessment can be applied, and the plan can be modified.

3. Exercise Scope

The scope of the exercise is limited to demonstrations at the Lucas County Emergency Operations Center (EOC), the Utility Joint Public Information Center/Joint Public Information System (JPIC/JIS), as described in this EoPA and the EoPA for the State of Ohio.

Except for *ad hoc* activities on the day of the exercise, the exercise has only In-Sequence demonstration activities.

In-Sequence Activities will occur during the day of the exercise, May 4, 2021, from approximately 0800-1500 Eastern Standard Time (EST). Lucas County will participate in this exercise, sufficient to support the demonstrations described in this EoPA. The State of Ohio will partially participate sufficient to support Lucas County response operations. (See State of Ohio Extent-of-Play Agreement).

In-Sequence activities will be conducted in Lucas County at the following locations:

- County Initial Warning Point (at the County EOC)
- Emergency Operations Center (EOC)

Out of Sequence Activities: None.

4. Demonstration Windows

Demonstration windows are those periods of time designated in the exercise during which specified demonstrations will be accomplished.

The schedule of activities [including OROs, locations, dates, and times for In-Sequence, Field and Out-of-Sequence Play activities] are summarized in Table 1 below. Additional information is provided in Attachment 1.

Due to the pandemic, **there will be no out-of-sequence demonstrations**. All of the ORO activities listed in Table 2 have met the requirements within the current 8-Year demonstration cycle.

Table 1 – Schedule of Activities

Activity	ORO / Location	Date / Time
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Initial Notification	EOC – In Sequence	Tuesday May 4, 2021 8:00 a.m. – 9:00 a.m. EST
Lucas County EOC Operations	Lucas County EMA – In Sequence	Tuesday May 4, 2021 8:00 a.m. – 3:00 a.m.

Table 2 –Activities Successfully Demonstrated During the Current 8-Year Cycle

Activity	ORO / Location	Date / Time
EV-2 School Interview		Successfully Demonstrated May, 2019
Protective Action Decisions are Implemented for Persons with Disabilities and Access/Functional Needs other than Schools – Interview		Successfully Demonstrated April, 2019
Backup Alert and Notification of the Public		Successfully Demonstrated April, 2019
Traffic / Access Control		Successfully Demonstrated May, 2019
Reception Center – Evacuee & Evacuee Vehicle Mon / Decon		Successfully Demonstrated May, 2019
Emergency Worker Mon/Decon Center		Successfully Demonstrated May, 2017
Congregate Care Center		Successfully Demonstrated May, 2019
MS-1 Hospital Exercise		Successfully Demonstrated September, 2019

FEMA NOTE: Due to the virtual conduct of this exercise, the demonstration window for some activities will be conducted *ad hoc* by Controller-facilitated Evaluator/Player interviews so as to avoid interference with other Player response actions. These activities may include Communications, Dosimetry Coordinator Briefings, Media Briefings, and Impediment Interviews. In addition, Evaluators may need to conduct specific Player interviews to clarify actions taken during the exercise. These interviews will

be coordinated with the County Evaluation Team Leader and the Controller to schedule interview windows on the day of the exercise.

5. Re-demonstrations

During the week of exercise play, ORO Participants may re-demonstrate for credit any applicable activity that the ORO or FEMA determines was not performed satisfactorily. To the extent feasible, such redemonstrations will be conducted on

FEMA NOTE: Contact by EOC Players with other OROs listed above in “Participating Organizations” may be actual [via routine communications channels] or simulated. Contact will be in accordance with plans and procedures, and times of contact will be noted in position checklists and activity logs to the extent feasible and activity logs copies of which will be provided to the FEMA Evaluation Team following the exercise.

May 4, 2021, as follows:

Criteria that can be demonstrated during this exercise and that can be re-demonstrated immediately for credit, at the decision of the Evaluator, include the following:

3.a.1 and 3.b.1

Criteria that may be re-demonstrated, as approved on a case-by-case basis by the Chairman of the DHS/FEMA Region 5 Radiological Assistance Committee, include the following:

2.a.1, 2.b.2, 3.d.2, 5.a.1 and 5.b.1.

Re-demonstrations will be negotiated between the Lead Controller, Lead FEMA Evaluator and the ORO and conducted only when the corrective action would not interfere with the flow of the exercise. Refresher training may be provided by ORO personnel and/or Controllers.

It is permissible to extend the evaluation time to accommodate the re-demonstration. Issues resolved as the result of a re-demonstration will be noted as Findings resolved through re-demonstration.

6. Offsite Response Functions, Lucas County:

Emergency Operations Center

- Emergency Operations Management
- Protective Action Decision-Making
- Protective Action Implementation - limited
- Emergency Notification & Public Information
- Support Operations/Facilities

7. Participating Organizations

County and local Offsite Response Organizations that will participate in this exercise may include but are not limited to the following:

<u>Organization</u>	<u>Participation Mode</u>
• Lucas County Emergency Management Agency	P / V
• Lucas County Board of Commissioners	P
• Lucas County Sheriff's Office	P
• Lucas County Fire/EMS Liaison	P
• Lucas County Public Information	P / V

P = Physical
V = Virtual – telephone,
Basecamp, Zoom, etc.

8. Coordination between Lucas and Ottawa Counties.

- To the extent possible, Protective Action Decisions will be discussed by the affected counties and the State of Ohio.
- Protective Action Decisions will be reached by each county.
- To the extent possible, EAS messages and siren soundings will be coordinated by the affected counties.

9. Exercise Controllers:

Davis-Besse Nuclear Power Station will coordinate with the Ohio EMA Resident Radiological Analyst, a trusted agent, who will assist Evaluators and provide necessary injects. The Trusted Agent may interact with Players to the extent necessary to fulfill their responsibilities, but coaching of Players is not permitted, except to provide training to Players awaiting a re-demonstration. Re-demonstration can only occur with FEMA approval [see #5 above].

Lucas County EMA will have a trusted agent serving as a sim cell that can be reached by phone (419-213-6509) in order to increase the realism of the exercise.

10. FEMA Evaluators:

Federal Evaluators will NOT be present at the Lucas County EOC. Evaluation of Player response to the actual and simulated events in the exercise scenario will be conducted virtually. FEMA will provide a list of Evaluators and identify lead personnel.

11. Players

Whether participating physically or virtually, Players are encouraged to use and share any available resources (e.g., written plans, procedures and checklists and/or consult with co-workers) in providing responses to Evaluators. Not all players listed in the Lucas County REP plan will be participating due to the ongoing pandemic. Players may be covering multiple positions in order to limit the number of participants.

12. Demonstration Criteria impacted by No/Minimal Release and/or Limited EAL Escalations:

A no/minimal release scenario would not necessarily require Protective Action Recommendations and Protective Action Decisions (PARs/PADs), including the use of KI, to limit the exposure of the public and/or emergency workers. These Evaluation Criteria will be met as long as the decision-making process is adequately demonstrated in accordance with plans and procedures and the result is consistent with the exercise scenario. Demonstration Criteria impacted by this type of scenario will be demonstrated per guidance provided in the January 2016, REP Program Manual, Part IV, Section G.

13. Termination

The Lead Controller in the Ottawa County EOC will coordinate Termination of the Exercise with the FEMA Exercise Director and Evaluation Team Leader, the DBNPS EOF and any other participating DBNPS components, the State of Ohio EOC, and the Lucas County EOC in Lucas County. If necessary, exercise play may continue beyond Termination by the DBNPS in order to accommodate completion of ORO demonstration/re-demonstration activities.

ASSESSMENT AREA 1 – EMERGENCY OPERATIONS MANAGEMENT

Sub-element 1.a – Mobilization

Criterion 1.a.1: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner. (NUREG-0654/ FEMA-REP-1, A.1.a, e; A.3, 4; C.1,4, 6; D.4; E.1, 2; H.3, 4)

EXTENT OF PLAY

- Demonstrate the capability to receive notification of an emergency situation from the Licensee.
- Demonstrate the activation of facilities for immediate use by mobilized personnel when they arrive to begin emergency operations. (See attachment)
- Activation of facilities will be completed in accordance with the plan and/or procedures.

Sub-element 1.b – Facilities

Criterion 1.b.1: Facilities are sufficient to support the emergency response. (NUREG-0654/FEMA-REP-1, H.3; G.3.a; J.10.h; J.12; K.5.b)

EXTENT OF PLAY

Not Selected – Previously demonstrated in accordance with FEMA guidance.

Sub-element 1.c – Direction and Control

Criterion 1.c.1: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible. (NUREG-0654/FEMA-REP-1, A.1.d; A.2.a, b; A.3; C.4, 6)

EXTENT OF PLAY

NOTE: Pursuant to COVID-19 response documentation provided to FEMA Region V, Lucas County requested, and the FEMA RAC Chair granted, Full Actual Incident Credit for Criterion 1.c.1. To support the exercise:

- Leadership personnel will demonstrate but not be evaluated for the ability to carry out essential functions of the response effort, for example: keeping the staff informed through periodic briefings and/or other means, coordinating with other appropriate response organizations, and ensuring timely completion of requirements and requests.
- To the extent possible, EAS messages and siren soundings will be coordinated with Ottawa County in accordance with plans/procedures.

Sub-element 1.d – Communications Equipment

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. (NUREG-0654/FEMA-REP-1, F.1, 2)

EXTENT OF PLAY

NOTE: Pursuant to COVID-19 response documentation provided to FEMA Region V, Lucas County requested, and the FEMA RAC Chair granted, Full Actual Incident Credit for Criterion 1.d.1. To support the exercise:

- Lucas County will demonstrate but not be evaluated for Criterion 1.d.1, including the availability and operability of a primary and at least one backup system at the beginning of an exercise.
- Telephone and radio communications will be available at the EOC throughout the demonstration. At least one means of communication will be operable throughout all other demonstrations.
- Demonstrate the capability to manage the communication systems and ensure that all message traffic is handled timely without undue delays that might disrupt the conduct of emergency operations.

Sub-element 1.e – Equipment and Supplies to Support Operations

Criterion 1.e.1: Equipment, maps, displays, monitoring instruments, dosimetry, potassium iodide (KI) and other supplies are sufficient to support emergency operations (NUREG-0654/FEMA-REP-1, H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b)

EXTENT OF PLAY

NOTE: Pursuant to COVID-19 response documentation provided to FEMA Region V, Lucas County requested, and the FEMA RAC Chair granted, Full Actual Incident Credit for Criterion 1.e.1. To support the exercise:

- Lucas County will demonstrate but not be evaluated for Criterion 1.e.1.
- Dosimetry and KI have been pre-distributed to ORO's in Lucas County. An extension letter for KI should be present at each facility. If not, a copy will be made available to the FEMA Evaluation Team by the Lucas County EMA.

- Pursuant to correspondence dated May 28, 2020, and Enclosure 18 of the State of Ohio's 2020 ALC submittal, the FEMA RAC Chair has granted Ohio permission to defer annual equipment exchange through Calendar Year 2021. Therefore, inspection of all equipment will not be demonstrated as a time saving measure.
- Sufficient quantities of direct-reading and permanent record dosimetry are available for issuance to additional emergency workers if needed.
- Pursuant to the Lucas County plan/procedures, Radiation Monitoring Kits and Dosimetry are exchanged annually. The Lucas County inventory of dosimetry was documented in the 2020 Annual Letter of Certification and will also be made available electronically to the Evaluators by the Lucas County EMA if requested.
- Pursuant to the Lucas County plan/procedures, the Ohio Department of Health (ODH), through local health departments, makes KI available to the general public. KI for the General Public is also stockpiled at the County Health Department. A shelf-life extension letter for KI should be present at Lucas County EMA and Lucas County Health Department, and an electronic copy of the letter will be made available electronically to FEMA Evaluators upon request.
- All Lucas County Players will have access to copy of the County RERP and applicable SOGs during the exercise.

ASSESSMENT AREA 2 – PROTECTIVE ACTION DECISION- MAKING

Sub-element 2.a – Emergency Worker Exposure Control

Criterion 2.a.1: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for emergency workers, including provisions to authorize radiation exposure in excess of administrative limits or protective action guides. (NUREG-0654/FEMA-REP-1, C.6; J.10. e, f; K.4)

EXTENT OF PLAY

The capability to make decisions concerning the authorization of Emergency Worker exposure levels in excess of pre-authorized levels will be procedurally discussed.

Dosimeter packets that include KI are pre-distributed to OROs yearly, the packets are given to emergency workers as per the organization's SOG, as needed.

- The Ohio Department of Health is responsible for recommending the taking of KI.
- Should the scenario dictate a Direct-Reading Dosimeter (DRD) correction factor for the emergency workers, the reduction factors will be limited to emergency workers within the 10-mile EPZ. DRD correction factors are established by the Ohio Department of Health. (See the State of Ohio Extent-of-Play Agreement for details concerning the State's role regarding this criterion.)
- The decision to ingest or to not ingest KI will be driven by the scenario.
- This criterion will be met as long as the appropriate decision-making process is demonstrated, and the result is consistent with the exercise scenario.

**Sub-element 2.b. – Radiological Assessment and Protective Action
Recommendations and Decisions for the Plume Phase of the Emergency**

Criterion 2.b.1: Appropriate protective action recommendations (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. (NUREG-0654/FEMA-REP-1, I.10 and Supplement 3)

EXTENT OF PLAY

N/A – This criterion is a State function. The county relies on the State of Ohio and Davis-Besse Nuclear Power Station.

Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make protective action decisions (PADs) for the general public (including the recommendation for the use of KI, if ORO policy). (NUREG-0654/FEMA-REP-1, A.3; C.4, 6; D.4; J.9; J.10.f, m)

EXTENT OF PLAY

- Utility and State Protective Action Recommendations will be received and assessed by the county.
- A decision-making process involving “consideration of appropriate factors and necessary coordination” will be used to make Protective Action Decisions “as

appropriate” for the general public (including the recommendation for the use of KI).

- The County will demonstrate the capability to communicate the contents of decisions to the affected jurisdictions.
- To the extent possible, Protective Action Decisions will be coordinated with the affected counties and states.
- The Ohio Department of Health (ODH) makes KI available to the general public through local health departments. KI for the General Public is also stockpiled at the County Health Department.
- The County will demonstrate the capability to implement ODH’s KI Protective Action Recommendations for the general public. This action is scenario driven. If the scenario utilized for the exercise does not drive the process, this criterion may be demonstrated by Controller-facilitated discussion. State and county representatives will participate in this discussion together and/or via conference line (as appropriate) to allow for fuller exploration of the topic.
- This criterion will be met as long as an appropriate decision-making process is demonstrated, and the result is consistent with the exercise scenario.

Sub-element 2.c – PAD Consideration for the Protection of Persons with Disabilities and Access/Functional Needs

Criterion 2.c.1: Protective action decisions are made, as appropriate, for groups of persons with disabilities and access/functional needs. (NUREG-0654/FEMA-REP-1, D.4; J.9; J.10.d, e)

EXTENT OF PLAY

- A list of people with access/functional needs (mobility impaired, hearing impaired, etc.) is maintained by the Lucas County Health Department, in coordination with the Lucas County EMA, for use in an emergency.
- A Functional Needs List will be sent to the appropriate players since a Lucas County Health Department representative will not be present in the EOC.
- This criterion will be met as long as the decision-making process is demonstrated, and the result is consistent with the exercise scenario.

Sub-element 2.d. – Radiological Assessment and Decision Making for the Ingestion Exposure Pathway

Criterion 2.d.1: Radiological consequences for the ingestion pathway are assessed and appropriate protective action decisions are made based on the ORO’s planning criteria. (NUREG-0654/FEMA-REP-1, A.3; C.1, 4; D.4; J.9,11)

EXTENT OF PLAY

N/A –This criterion is a State function and is not applicable to this plume exposure pathway exercise.

Sub-element 2.e. – Radiological Assessment and Decision Making Concerning Post-Plume Phase Relocation, Reentry, and Return

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. (NUREG-0654/FEMA-REP-1, I.10; J.9; K.3.a; M.1)

EXTENT OF PLAY

N/A –This criterion is a State function and is not applicable to this plume exposure pathway exercise.

ASSESSMENT AREA 3 – PROTECTIVE ACTION IMPLEMENTATION

Sub-element 3.a – Implementation of Emergency Worker Exposure Control

Criterion 3.a.1: The OROs issue appropriate dosimetry, KI, and procedures and manages radiological exposure to emergency workers in accordance with the plans/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. OROs maintain appropriate record-keeping of the administration of KI to emergency workers. (NUREG-0654/FEMA-REP-1, J.10.e; K.3.a, b; K.4)

EXTENT OF PLAY

- By interview, the Radiological Officer or the Dosimetry Coordinator will demonstrate the actions described in the procedures to determine whether to replace a worker, authorize a worker to incur additional exposure or to take other actions.
- If the scenario does not require the taking of KI the Radiological Officer will describe the procedure to maintain a list of emergency workers who have ingested KI, including the date(s), time(s) they were instructed to ingest KI. Players will not actually ingest KI as part of their demonstration.
- The County Radiological Officer will coordinate with Dosimetry Coordinators to monitor radiological exposure by county emergency workers.

- Should the scenario dictate a reduction factor for the emergency worker exposure limit, the reduction will be limited to emergency workers within the EPZ
- The County RO will conduct a radiological briefing to representatives in the Lucas County EOC. Dosimetry will not be issued as the Lucas County EOC is not within the EPZ. If necessary, the County RO will show via interview the process of conducting an emergency worker dosimetry briefing after the exercise is completed.

Sub-element 3.b – Implementation of KI Decision for Institutionalized Individuals and the General Public

Criterion 3.b.1: KI and appropriate instructions are available if a decision to recommend use of KI is made. Appropriate record-keeping of the administration of KI for institutionalized individuals and the general public is maintained. (NUREG-0654/FEMA-REP-1, J.10.e, f)

EXTENT OF PLAY

- When KI is distributed, the package insert is included. These instructions list the recommended doses for KI, potential side-effects, and conditions under which KI should not be taken.
- The Ohio Department of Health makes the recommendation to take KI.
- This criterion will be met as long as the implementation process is demonstrated, and the result is consistent with the exercise scenario.

Sub-element 3.c – Implementation of Protective Actions for Persons with Disabilities and Access/Functional Needs

Criterion 3.c.1: Protective action decisions are implemented for persons with disabilities and access/functional needs other than schools within areas subject to protective actions. (NUREG-0654/FEMA-REP-1, J.10.c, d, e, g)

EXTENT OF PLAY

Not Selected. This criterion is required not less than once per 8-year cycle. This criterion was successfully demonstrated in April 2019.

Preparation for decision under 2.c.1 will be demonstrated.

Criterion 3.c.2: OROs/School officials implement protective actions for schools. (NUREG-0654/FEMA-REP-1, J.10.c, d, e, g)

EXTENT OF PLAY

Not Selected. This criterion is required once per 8-year cycle – it was successfully demonstrated in May 2019.

The EOC will demonstrate this criterion per the biennial exercise requirement.

Sub-element 3.d. – Implementation of Traffic and Access Control

This Sub-element is derived from NUREG-0654/FEMA-REP-1, which requires that OROs have the capability to implement protective action plans/procedures, including relocation and restriction of access to evacuated/sheltered areas. This Sub-element focuses on selecting, establishing, and staffing of traffic and access control points, and removal of impediments to the flow of evacuation traffic.

Criterion 3.d.1: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel. (NUREG-0654/FEMA-REP-1, A.3; C.1,4; J.10.g, j)

EXTENT OF PLAY

NOTE: Pursuant to COVID-19 response documentation provided to FEMA Region V, Lucas County requested, and the FEMA RAC Chair granted, Full Actual Incident Credit for Criterion 3.d.1. To support the exercise:

- Traffic and Access Control procedures will be demonstrated in accordance with the Lucas County RERP/SOGs by the Law Enforcement Coordinator but will not be evaluated.
- A Controller inject will be communicated to the Lucas County Radiological Officer/Dosimetry Coordinator to issue dosimetry and give a radiological briefing to a Lucas County Sheriff's Road Patrol Deputy.

NOTE: Under Criterion 3.a.1, the Lucas County Sheriff's Road Patrol Deputy will receive dosimetry and the dosimetry briefing from the Lucas County Radiological Officer and be interviewed by the FEMA Evaluator.

Criterion 3.d.2: Impediments to evacuation are identified and resolved. (NUREG-0654/FEMA-REP-1, J.10.k)

EXTENT OF PLAY

- The Lucas County EOC staff will demonstrate in the Lucas County EOC the capability to:

- ◆ Identify impediments to evacuation.
- ◆ Implement appropriate actions to remove or otherwise deal with impediments and reroute traffic
- ◆ Coordinate with Public Information Liaison for public notification and media briefing at the DBNPS JIC.

- Controller injects will drive discussion, decision-making, and coordination regarding impediments in accordance the County RERP/SOGs.
- Actual resources will not be utilized.

Sub-element 3.e – Implementation of Ingestion Pathway Decisions

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. NUREG-0654/FEMA-REP-1, A.3; C.1, 4; J.11)

EXTENT OF PLAY

N/A – This criterion is a State function and will not be evaluated 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. (NUREG-0654/FEMA-REP-1, G.1, J.9, 11)

EXTENT OF PLAY

N/A – This criterion is a State function and is not applicable to this plume exposure pathway exercise.

Sub-element 3.f – Implementation of Post-Plume Phase Relocation, Reentry, and Return Decisions Intent

Criterion 3.f.1: Decisions regarding controlled reentry of emergency workers and relocation and return of the public during the post-plume phase are coordinated with appropriate organizations and implemented. (NUREG-0654/FEMA-REP-1, E.7; J.10.j; J.12; K.5.b; M.1, 3)

EXTENT OF PLAY

N/A – This criterion is a State function and is not applicable to this plume exposure pathway exercise.

ASSESSMENT AREA 4: FIELD MEASUREMENTS AND ANALYSIS

Sub-element 4.a – Plume Phase Field Measurements and Analyses

Criterion 4.a.1: [RESERVED]

Criterion 4.a.2: Field teams (2 or more) are managed to obtain sufficient information to help characterize the release and to control radiation exposure. (NUREG-0654/FEMA-REP-1, C.1; H.12; I.7, 8, 11; J.10.a)

EXTENT OF PLAY

N/A – This criterion is a State function.

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. (NUREG-0654/FEMA-REP-1, C.1; H.12: I.8, 9; J.10.a)

EXTENT OF PLAY

N/A – This criterion is a State function.

Sub-element 4.b – Post-Plume Phase Field Measurements and Sampling

Criterion 4.b.1: The field teams (2 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. (NUREG-0654/FEMA-REP-1, C.1; I.8; J.11)

EXTENT OF PLAY

N/A – This criterion is a State function.

Sub-element 4.c – Laboratory Operations

Criterion 4.c.1: The laboratory is capable of performing required radiological analyses to support protective action decisions. (NUREG-0654/FEMA-REP-1, C.1, 3; J.11)

EXTENT OF PLAY

N/A – This criterion is a State function.

ASSESSMENT AREA 5 – EMERGENCY NOTIFICATION AND PUBLIC INFORMATION

Sub-element 5.a – Activation of the Prompt Alert and Notification System

Criterion 5.a.1: Activities associated with primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized off-site emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include as a

minimum the elements required by current FEMA REP guidance. (NUREG-0654/FEMA-REP-1, E.5, 6, 7)

EXTENT OF PLAY

1. Identification of the state or local government organization and the official with the authority for providing the alert signal and instructional message.
2. Identification of the commercial nuclear power plant and a statement that an emergency situation exists at the plant.
3. Reference to REP-specific emergency information (e.g., brochures) for use by the general public during an emergency.
4. A closing statement asking the affected and potentially affected population to stay tuned for additional information.

EXTENT OF PLAY

- Siren activation will be simulated.
- EAS messages will be prepared and provided to the LP 1 Station in accordance with the RERP and SOG. EAS Messages are transmitted electronically from the Ottawa County EOC to the LP-1 Station via telephone lines utilizing the SAGE ENDEC encoder. The Ottawa County ENDEC encoder provides a printout verifying that the message was sent.
- A copy of each EAS message generated during the exercise will be provided electronically to the FEMA Evaluation Team Leader. The LP-1 ENDEC encoder provides a printout verifying receipt of the message. A copy of the verified message will be provided to the Evaluator. EAS messages will be recorded but not actually broadcast. The designated LP-1 EAS Station is as follows:

◆ WRVF 101.5 FM Radio
Tuesday, May 4, 2021

Criterion 5.a.2: [RESERVED]

Criterion 5.a.3: Backup alert and notification of the public is completed within a reasonable time following the detection by the ORO of a failure of the primary alert and notification system. (NUREG-0654/FEMA-REP-1, E.6, Appendix 3.B.2.c)

EXTENT OF PLAY

Not Selected. This criterion is required not less than once per 8-year cycle. This criterion was last demonstrated in April 2019.

Criterion 5.a.4: Activities associated with FEMA-approved exception areas (where applicable) are completed in a timely manner following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. (NUREG-0654/FEMA-REP-1, E.6; Appendix 3.B.2.c)

EXTENT OF PLAY

Not Selected – Exception Areas do not exist in Lucas County.

Sub-element 5.b – Subsequent Emergency Information and Instructions for the Public and the Media

Criterion 5.b.1: OROs provide accurate subsequent emergency information and instructions to the public and the news media in a timely manner. (NUREG-0654/FEMA-REP-1, E.5, 7; G.3.a, G.4.a, c)

EXTENT OF PLAY

NOTE: Pursuant to COVID-19 response documentation provided to FEMA Region V, Lucas County requested, and the FEMA RAC Chair granted, Partial Actual Incident Credit for Criterion 5.b.1. Consequently:

- Public Inquiry will not be evaluated.
- Social Media will not be evaluated.

Lucas County will demonstrate and be evaluated for radiological components of Criterion 5.b.1 as follows:

- ◆ In accordance with the RERP and SOGs, the DBNPS JIC will be virtually staffed by a PIO upon declaration of an ALERT ECL.
- ◆ The Lucas County PIO will serve as the primary contact point for all public information related matters within the Lucas County EOC.
- ◆ The Lucas County PIO will be available for media briefings virtually and participate as appropriate.
- ◆ The County will ensure that emergency information and instructions are consistent with protective action decisions made by appropriate officials. The emergency information will contain necessary and applicable instructions to assist the public in carrying out protective action decisions provided to them, including any decision made regarding any impediments that could adversely impact public health and safety due to radiological events at the DBNPS.

ASSESSMENT AREA 6 – SUPPORT OPERATIONS FACILITIES

Sub-element 6.a – Monitoring, Decontamination, and Registration of Evacuees

Criterion 6.a.1: The reception center facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees. (NUREG-0654/FEMA-REP-1, A.3; C.4; J.10.h; J.12)

EXTENT OF PLAY

Not Selected. This criterion is required not less than once per 8-year exercise schedule. This criterion was last demonstrated in May 2019.

Sub-element 6.b – Monitoring and Decontamination of Emergency Workers and their Equipment and Vehicles

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. (NUREG-0654/FEMA-REP-1, K.5.a, b)

EXTENT OF PLAY

Not Selected. This criterion is required not less than once per 8-year exercise schedule. This criterion was last demonstrated in May 2017.

Sub-element 6.c – Temporary Care of Evacuees

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. (NUREG-0654/FEMA-REP-1, J.10.h, J.12)

EXTENT OF PLAY

Not Selected. This criterion is required not less than once per 8-year exercise schedule. This criterion was last demonstrated in May 2019.

NOTE: Pursuant to COVID1-19 response documentation provided to FEMA Region V, Lucas County requested, and the FEMA RAC Chair granted, Full Actual Incident Credit for Criterion 5.b.1. [see Lucas County 2021 Actual Incident Credit Documentation].

Sub-element 6.d – Transportation and Treatment of Contaminated Injured Individuals

Criterion 6.d.1: The facility/ORO has the appropriate space, adequate resources, and trained personnel to provide transport, monitoring, decontamination, and medical services to contaminated injured individuals. (NUREG-0654/FEMA-REP-1, F.2; H.10; K.5.a, b; L.1, 4)

Extent of Play:

Postponed. Lucas County will postpone demonstration of Criterion 6.d.1 to a later date in Calendar Year 2021, with the date, time, and extent-of-play details to be coordinated with FEMA Region V.

Demonstration Locations

EMERGENCY OPERATIONS CENTER	
Address	Lucas County Emergency Management Agency
	2144 Monroe Street
	Toledo, OH 43604
Telephone	419-213-6503

Termination of Exercise Play

- The Lead Controller in the Lucas County EOC will coordinate the Emergency Phase Termination with the DBNPS EOF and any other participating DBNPS components, FEMA Exercise Director, the State of Ohio EOC, and the Ottawa County EOC. If necessary, exercise play may continue beyond Termination by the DBNPS in order to accommodate completion of ORO demonstration/re-demonstration.
- Lead Controllers at any location can suspend activities for health and safety reasons and real-world events.

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APPENDIX F: Onsite/Offsite Scenario Timeline

Davis-Besse Nuclear Power Station Evaluated Exercise

May 4, 2021

The following is a summary of the postulated events for the Davis-Besse Nuclear Power Station 2021 Evaluated Exercise. These events did NOT occur. All times are approximate.

Initial Conditions

The plant is running at 100% power.

The plant has been operating at or above 90% power for the last 400 days.

Plant chemistry is in specification and stable.

The CTMT Spray Pump is out of service for cyclone separator Preventative Maintenance,

Fuel reconstitution of Spent Fuel Assemblies is being performed in the Spent Fuel Pool.

Protected Train is Train 2

Meteorological Conditions

Winds at 8-10 mph from 85 degrees

Stability Class D

Other Conditions

Schools are in session

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Color Key:**BLUE – DBNPS Actions / Events / ECLs** **RED – State Actions** **PURPLE – Ottawa County Actions** **GREEN – Lucas County Actions****Note: The State's and Counties' expected actions, as listed, may not be performed in the order shown.**

Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
7:45 AM	StartEx at DPBNS		
7:50 AM	Damage occurs to a fuel rod being withdrawn during fuel reconstitution. High alarms on Spent Fuel Pool (SFP) local area radiation monitors due to damage to a fuel rod during fuel reconstitution. There are visible bubbles on the surface of the pool and elevated dose rates.		
8:00 AM	Watch Office performs MARCs radio test with Lucas and Ottawa Counties.	Ottawa County replies to MARCs radiotest.	Lucas County replies to radio MARCs test.
8:05 AM	DBNPS declares an ALERT based on EAL RA2.2 "Damage to irradiated fuel resulting in a release of radioactivity as indicated by a high radiation alarm."		
8:07 AM	Station Air Compressor #2 trips on faulted high temperature		
8:20 AM	Offsite response agencies notified of ALERT declaration.		
> 8:20 AM	Dispatch notifies the Radiological Branch.		
	Coordination call with Ohio EMA leadership discusses possible actions.		
	Partially activate State Emergency Operations Center (EOC). Executive Room (ER), Assessment, Dose Assessment (DA) and Joint Information Center (JIC) are activated. Emergency Support Function (ESF) 1 (Transportation), ESF-9 (Search & Rescue) are also activated.	Activate County EOC, as warranted	Activate County EOC as warranted.
		Activate and staff EOC communications center.	

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Note: The State's and Counties' expected actions, as listed, may not be performed in the order shown.

Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
> 8:20 AM	Watch Office sends eNotify notifications to DA members, Ohio EMA staff, State EOC partner agencies, contiguous governments, FEMA, and NRC. ESF-1 and ESF-9 are asked to staff the State EOC. All other ESFs are invited to staff, if necessary, for their operations.	Notify key response personnel.	Notify key response personnel.
	Complete actions under UNUSUAL EVENT.	Complete actions under UNUSUAL EVENT.	Complete actions under UNUSUAL EVENT.
	State agencies alert and mobilize staff to support response.		
		Establish EOC security.	Establish EOC security.
		Establish communications with Lucas County.	Establish communications with Ottawa County.
	Public Information Officer (PIO) dispatched to the DBNPS JIC.	Dispatch PIO to DBNPS JIC.	Dispatch PIO to DBNPS JIC.
	State Liaisons dispatched to the DBNP Emergency Operations Facility (EOF).	Consider sending Liaison to Emergency Operations Facility.	Consider sending Liaison to Emergency Operations Facility.
		Mobilize Fire/EMS departments as warranted.	Mobilize Fire/EMS departments as warranted.

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Note: The State's and Counties' expected actions, as listed, may not be performed in the order shown.

Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
> 8:20 AM		Mobilize bus drivers as warranted	
			Buckeye State Sheriff Association Mobile Communication Unit 8 (BSSA 8) is placed on stand-by at the Jerusalem Twp. Substation.
	Federal Aviation Administration is requested to restrict air traffic 10-miles, 10,000 feet around DBNPS.		
	Norfolk-Southern is advised of the Alert.		
	Dose Assessment begins to monitor plant conditions and run dose projections.		
	ER discusses closing State parklands with the Counties.	Discuss closing the Magee Marsh Wildlife Area with State and Lucas County. If closed, notify public.	Discuss closing the Magee Marsh Wildlife Area with State and Ottawa County. If closed, notify public.
	ER discusses closing Ottawa Wildlife Refuge with the Counties.	Discuss closing the Ottawa Wildlife Refuge with State and Lucas County. If closed, notify public.	Discuss closing the Ottawa Wildlife Refuge with State and Ottawa County. If closed, notify public.
	ESF-9 contacts the Refuge regarding closure, closes State properties.		

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Note: The State's and Counties' expected actions, as listed, may not be performed in the order shown.

Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
> 8:20 AM	ER discusses clearing Lake Erie with the Counties.	Discuss restricting boating in Sub-Area 12 with State and Lucas County.	Discuss restricting boating in Sub-Area 12 with State and Ottawa County.
	ESF-9 contacts US Coast Guard to coordinate clearing Lake Erie, tells Sandusky Office to mobilize staff & watercraft to clear Lake Erie & navigable waterways.		
			Consider relocation of Jerusalem Elementary.
	Field Monitoring Teams (FMTs) are put on stand-by or mobilized, then dispatched to staging area.		
	Public Inquiry begins taking calls from the public.	Public Inquiry begins taking calls from the public.	Public Inquiry begins taking calls from the public.
	News releases are issued. Press briefings occur at the DBNPS JIC.	Provide news statements and information to the public.	Provide news statements and information to public.
8:50 AM	Crew receives indication of a Dropped Control Rod. Crew begins power reduction to <50% RTP at 3%/minute. The dropped rod triggers fuel damage, Containment radiation levels begin rising slowly as power lowers below 70%.		
9:15 AM	Plant is stabilized for dropped rod at approximately 50% power.		

Radiological Emergency Preparedness (REP) Program

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Davis Besse Nuclear Power Station

Note: The State's and Counties' expected actions, as listed, may not be performed in the order shown.

Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
9:30 AM	Annunciator 2-1-A, LETDOWN RAD HI, is received (due to postulated fuel damage due to the dropped Control Rod).		
9:35 AM	Annunciator 2-1-B, "MU PMP 1 LUBE OIL PRESS LO" is received in the Control Room Simulator. Approximately 20 seconds later, Make Up Pump #1 trips on low lube oil pressure.		
9:40 AM	Containment radiation levels begin rising and RE 4596 A/B (CTMT Accident Range Radiation Monitors) begin to rise. Several area radiation monitor alarms received in Aux. Bldg. in areas adjacent to Containment due to shine from elevated radiation levels in Containment.		
9:45 AM	Containment radiation levels exceed 15 R/hr on RE 4596 A and B (17 R/hr).		
9:55 AM	Group 1 Rods drop. Crew will manually trip the reactor, in accordance with DB-OP-02516, CRD Malfunctions. It is postulated the dropped group will cause mechanical shock resulting in additional fuel failure and Containment radiation levels begin increasing significantly.		
10:07 AM	Containment radiation levels exceed 3,100 R/hr on RE 4596 A/B (Containment Accident Range Radiation Monitor).		
10:22 AM	DBNPS declares a Site Area Emergency based on EAL FS1 "Loss or potential loss of ANY two barriers."		
10:37 AM	Offsite response agencies notified of Site Area Emergency declaration.		
> 10:37 AM	If not already completed, State EOC is fully activated.	Fully activate the EOC.	Fully activate the EOC.

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Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
> 10:37 AM	Watch Office sends eNotify notifications to DA members, Ohio EMA staff, State EOC partner agencies, contiguous governments, FEMA, and NRC. All ESFs are requested to staff State EOC.	Notify and mobilize all EOC staff and response agencies.	Notify and mobilize all EOC staff response agencies.
	Complete actions under ALERT.	Complete actions under ALERT.	Complete actions under ALERT.
	Governor may declare a state of emergency.	Consider declaring a "State of Emergency" in Ottawa County.	Declare a local "State of Emergency" in Lucas County.
	Department of Administrative Services (DAS) suspends purchasing and contracting requirements during the period of the emergency.		
		Establish background radiation levels.	Establish background radiation levels.
	Ag advisory issued placing livestock and poultry within 10-mile radius on stored feed and protected water.		
	PAR issued by State to for 10-mile Emergency Planning Zone (EPZ) to monitor Emergency Alert System (EAS).		
		Develop Protective Action Decisions (PADs), if necessary.	Develop Protective Action Decisions (PADs), if necessary.

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Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
> 10:37 AM		Notify State, appropriate facilities, agencies, and personnel of PADs, if necessary.	Notify State, appropriate facilities, agencies, and personnel of PADs, if necessary.
		Activate sirens and EAS/NOAA for public alert and notification, if necessary.	Note: Ottawa County will activate sirens and EAS/NOAA for public alert and notification, if necessary.
		Notify industries located within the 10-mile EPZ.	
			Notify special needs and transportation dependent individuals.
	ER discusses closing State parklands with the Counties.	Close State parks/wildlife areas, and Federal wildlife refuge, if not already done.	Close State parks/wildlife areas, and Federal wildlife refuge, if not already done.
	ER discusses closing Ottawa Wildlife Refuge with the Counties.		
	ESF-9 contacts the Refuge regarding closure, closes State properties.		

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Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
> 10:37 AM	ER discusses clearing Lake Erie with the Counties, if not already done.	Initiate restriction of boating traffic in Subarea 12, if not already done.	Initiate restriction of boating traffic in Subarea 12, if not already done.
	ESF-9 contacts US Coast Guard to coordinate clearing Lake Erie, tells Sandusky Office to mobilize staff & watercraft to clear Lake Erie & navigable waterways, if not already done.		
		Ensure the public has been notified through route verification.	Conduct Route Verification.
			Mobilize bus drivers.
		Ensure relocation of EPZ schools.	Relocate Jerusalem Elementary School, if necessary.
	DA continues to monitor plant conditions and run dose projections.		
	Norfolk-Southern is requested to restrict trains from entering the 10-mile EPZ.		
	50-mile counties are notified.		
	FMTs may be dispatched to staging area or begin traversing area where a plume could potentially be based on met data.		

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Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
> 10:37 AM		Activate Emergency Worker Monitoring & Decontamination Monitoring facilities.	Staff emergency worker contamination monitoring station.
			Staff reception center and evacuee contamination monitoring station.
			Staff primary Care Center.
	USDOE assistance is requested.		
	Radiological emergency information made available to farmers, food processors, and distributors through the local OSU Extension.		
		Consider activating Traffic and Access Control Points (T/ACPs).	Consider activating T/ACPs.
		Maintain evacuation routes.	Maintain evacuation routes.
> 10:37 AM	Public inquiry continues to field calls at the SEOC.	Public inquiry continues to field calls.	Public inquiry continues to field calls.
	News releases are issued. Press briefings occur at the DBNPS JIC.	Provide news statements and public information.	Provide news statements and public information.

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Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
11:00 AM	A significant RCS leak occurs. Crew will not readily identify the source of the leak.		
11:02 AM	Spent Fuel Pool local radiation monitors trend downward as debris from damaged fuel rod settles to bottom of SPF.		
11:10 AM	High Pressure Injection Pump #1 starts but trips on overload 2 minutes after start.		
11:15 AM	Safety Features Actuation System (SFAS) initiation – SA2 (low RCS pressure) and SA3 (High CTMT pressure) due to the RCS leak. Following the SFAS initiation, the following anomaly is noted: <ul style="list-style-type: none"> • The Train 1 CT Vacuum Breaker isolation valve fails to close. NOTE: A check valve (CV5070) prevents release of radioactive material from Containment into the Annulus at this time.		
11:20 AM	CV5080 (Check Valve upstream of CV5070) in Train 1 CT Vacuum Breaker isolation valve path fails open, allowing a pathway from Containment into the Annulus. Non-Routine Release via the Station Vent begins. The flowpath will be Containment into the Annulus, into MPR-3 and MPR-4, then drawn by Emergency Ventilation System to the Station Vent. The following indications are noted: <ul style="list-style-type: none"> • Containment pressure begins to lower • Local area radiation monitors in MPR-3 and MPR-4 begin to noticeably increase. • Control Room Simulator receives UNIT VENT RAD HI (9-3-A) annunciator alarm • Station Vent radiation monitor (RE 4598AA/BA) begins to increase 		
11:21 AM	Offsite dose projections indicate doses greater than Protective Action Guideline limits at the Site Boundary.		

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Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
11:35 AM	DBNPS could declare General Emergency on either EAL: <ul style="list-style-type: none"> ● FG1 “Loss of ANY two barriers AND Loss or Potential Loss of third barrier.” Or, ● RG1.2 “Release of gaseous radioactivity resulting in offsite dose greater than 1,000 mrem TEDE or 5,000 mrem thyroid CDE.” 		
11:50 AM	Offsite response agencies notified of General Emergency declaration.		
> 11:50 AM	PAR issued by State to evacuate 2-mile 360, 10-mile downwind. Remainder of EPZ stay tuned to EAS.		
	State issues PAR for public, institutionalized, and emergency workers within the evacuated areas ingest KI.		
	SEOC representatives are advised of the escalation to a General Emergency.		
	SEOC representatives are advised of the State PAR, including Sub-Areas to evacuate and take KI by emergency workers, institutionalized individuals, and the public.		

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Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
> 11:50 AM		Consider recommending administration of KI to emergency workers, institutionalized individuals and the general public.	Consider recommending administration of KI to emergency workers, institutionalized individuals and the general public.
		Determine protective action decisions.	Determine protective action decisions.
		Notify State, appropriate facilities, agencies, and personnel of PADs, if necessary.	Notify State, appropriate facilities, agencies, and personnel of PADs, if necessary.
		Activate sirens and EAS/NOAA for public alert and notification.	Note: Ottawa County will activate sirens and EAS/NOAA for public alert and notification, if necessary.
		Disseminate recommendation to take KI to emergency workers, institutionalized individuals, and the general public, as appropriate.	Disseminate recommendation to take KI to emergency workers, institutionalized individuals, and the general public, as appropriate.
		Notify industries located within the 10-mile EPZ.	
	Complete actions under ALERT and SITE AREA EMERGENCY.	Complete actions under ALERT and SITE AREA EMERGENCY.	Complete actions under ALERT and SITE AREA EMERGENCY.

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Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
> 11:50 AM		Activate T/ACPs.	Activate T/ACPs.
	State may request implementation of the NRF and a Presidential Emergency Declaration. State may consider requesting a Federal Major Disaster Declaration, dependent upon contamination and extent of event.		
	Additional notifications to be performed by Assessment, including contiguous governments, 50-mile counties, FEMA V, NRC III.		
	Dose Assessment continues to monitor plant conditions and run dose projections.		
		Conduct backup route alerting, if necessary.	Conduct backup route alerting, if necessary.
		Ensure the public has been notified through route verification.	Conduct Route Verification.
	FMTs begin taking air samples in the plume. Samples are screened and sent to the lab.		

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Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
> 11:50 AM			Activate emergency worker contamination monitoring station.
			Activate reception center and evacuee contamination monitoring station.
			Activate primary care center.
			If shelter or evacuation is recommended, retain students who live within the EPZ at school.
		Provide transportation for institutionalized individuals, special populations, and transportation dependent individuals if an evacuation is recommended	If an evacuation is recommended, relocate special populations and transportation dependent individuals to reception center or appropriate receiving facilities.
		Provide security for evacuated areas.	Provide security for evacuated areas.
		Monitor emergency worker exposures.	Monitor emergency worker exposures.
	Radiological emergency information made available to farmers, food processors, and distributors through the local OSU Extension.		

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Approximate Time	State of Ohio Expected Actions	Ottawa County Expected Actions	Lucas County Expected Actions
> 11:50 AM	Public inquiry continues to field calls at the SEOC.	Public inquiry continues to field calls.	Public inquiry continues to field calls.
	News releases are issued. Press briefings occur at the DNBPS JIC.	Provide news statements and public information.	Provide news statements and public information.
~12:45:00 PM	OSC repair teams are successful in trouble shooting electrical breaker panel failure for CV5070 (Train 1 CT Vacuum Breaker isolationvalve). CV5070 is shut, isolating the release path to the environment. This terminates the source of the release. Station Vent radiationmonitors (RE4598) begin to trend down.		
~12:45:00 PM	EndEx (with concurrence of DNBPS, State of Ohio, and Ottawa and Lucas Counties)		